



**ROYAL CANADIAN AIR CADETS**

**PROFICIENCY LEVEL TWO  
QUALIFICATION STANDARD AND PLAN**

(ENGLISH)

Cette publication est disponible en français sous le numéro A-CR-CCP-802/PG-002.

**Issued on Authority of the Chief of the Defence Staff**





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**Contact Officer: D Cdts 3-2-6 – Air Cadet Program Development Staff Officer**

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## FOREWORD AND PREFACE

1. **Issuing Authority.** This Qualification Standard and Plan (QSP) A-CR-CCP-802/PG-001 was developed under the authority of the Director Cadets and Junior Canadian Rangers in accordance with CATO 11-03, *Cadet Program Mandate*, CATO 11-04, *Cadet Program Outline* and CATO 51-01, *Air Cadet Program Outline*, and issued on the authority of the Chief of Defence Staff.
2. **Development.** Development of this QSP was in accordance with the performance oriented concept of training outlined in the A-P9-050 Series, Canadian Forces Individual Training and Education System, with modifications to meet the needs of the Cadet Organization.
3. **Purpose of the QSP.** The QSP is to be used by Royal Canadian Air Cadet Squadrons to conduct the Proficiency Level Two Training Program, as outlined in CATO 11-04, *Cadet Program Outline*, and CATO 51-01, *Air Cadet Program Outline*.
4. **Effective Date.** This publication is effective upon receipt. Subsequent changes are effective upon receipt.
5. **Suggested Changes.** Suggested changes to this document shall be forwarded through the normal chain of command to National Defence Headquarters (NDHQ) Attention: Air Cadet Program Development Staff Officer (D Cdts 3-2-6) or by email to [air.dev@cadets.net](mailto:air.dev@cadets.net).

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## CHAPTER 1

### GENERAL

#### AIMS

1. The aim of the Cadet Program is to develop in youth the attributes of good citizenship and leadership, promote physical fitness and stimulate the interest of youth in the sea, land and air activities of the Canadian Forces (CF).
2. The aim of the Proficiency Level Two Program is to provide an air cadet with the basic theoretical knowledge and practical experience required to participate in cadet squadron activities as a flight member.

#### PROGRAM MISSION AND PARTICIPANT OUTCOMES

3. The mission of the Cadet Program is to contribute to the development and preparation of youth for the transition from adolescence to adulthood, enabling cadets to meet the challenges of modern society, through a dynamic, community-based program.
4. Cadet Program participant outcomes are the benefits for the cadet during and/or after their involvement with the program that relate to knowledge, skills, attitudes, values, behaviour, condition and status. The five outcomes of the Cadet Program are:
  - a. emotional and physical well-being;
  - b. social competence;
  - c. cognitive competence;
  - d. proactive citizenship; and
  - e. understanding the CF.
5. The program mission and participant outcomes are explained in greater detail in CATO 11-03, *Cadet Program Mandate*.

#### OUTLINE OF TRAINING

6. The Proficiency Level Program is a directed program carried out at the cadet squadron focused on giving all cadets instruction and opportunities to develop knowledge and skills in a variety of subject areas while introducing them to specialized activities. This program is divided into five levels of training. Normally a cadet will only attempt one level in a given training year.
7. Each proficiency level is composed of performance objectives (POs) subdivided into enabling objectives (EOs).

#### PROGRAM DESIGN

8. The Proficiency Level Two Program has been designed:
  - a. assuming that the majority of second year cadets are between 13 and 14 years of age;
  - b. assuming that the majority of cadets have successfully completed Proficiency Level One;
  - c. using age-appropriate learning strategies;
  - d. using 30 minutes as a standard period of instruction;

- e. by providing a programming mix consisting of fixed mandatory and flexible complementary training;
- f. to include training which is experiential and skill-based, with a lesser focus on theoretical knowledge; and
- g. assuming that learning will take place through a combination of programmed periods of instruction, unstructured discussions, teachable moments, and coaching/mentoring opportunities.

## PERFORMANCE OBJECTIVES

9. The following are summaries of the POs common to all elements of the Cadet Program (allocated POs numbered 201 to 219) and the POs specific to the Proficiency Level Two Program:

- a. **Citizenship.** PO 201 – Identify the Role of an Environmentally Conscious Canadian Citizen:
  - (1) The aim of Proficiency Level Two citizenship is to provide a basic understanding of the role of a good citizen in practicing environmental stewardship.
  - (2) Proficiency Level Two citizenship contributes directly to the achievement of the program aim of developing the attributes of good citizenship and the participant outcome of proactive citizenship.
- b. **Community Service.** PO 202 – Perform Community Service:
  - (1) The aim of Proficiency Level Two community service is to encourage the cadet to become a more active citizen through participation in a local community service activity as a flight member.
  - (2) Proficiency Level Two community service contributes directly to the achievement of the program aim of developing the attributes of good citizenship, and the participant outcome of proactive citizenship.
- c. **Leadership.** PO 203 – Demonstrate Leadership Attributes Within a Peer Setting:
  - (1) The aim of Proficiency Level Two leadership is introduce the cadet to the ways peer leaders are able to influence the behaviour of their group.
  - (2) Proficiency Level Two leadership contributes directly to the achievement of the program aim of developing the attributes of leadership and the participant outcome of social competence.
- d. **Personal Fitness and Healthy Living.** PO 204 – Update Personal Activity Plan:
  - (1) The aim of Proficiency Level Two personal fitness and healthy living is to encourage the cadet to set and pursue personal goals that contribute to active living and cardiovascular fitness.
  - (2) Proficiency Level Two personal fitness and healthy living contributes directly to the achievement of the program aim of promoting physical fitness and the participant outcome of physical well-being.

- e. **Recreational Sports.** PO 205 – Participate in Recreational Sports:
- (1) The aim of Proficiency Level Two recreational sports is to encourage the cadet to actively participate in recreational sports activities.
  - (2) Proficiency Level Two recreational sports contribute directly to the achievement of the program aim of promoting physical fitness and the participant outcome of physical well-being.
- f. **Air Rifle Marksmanship.** PO 206 – Fire the Cadet Air Rifle During Recreational Marksmanship:
- (1) The aim of Proficiency Level Two air rifle marksmanship is to develop the cadet's marksmanship abilities through participation in recreational marksmanship.
  - (2) Proficiency Level Two air rifle marksmanship contributes indirectly to the achievement of the program aim of developing the attributes of good citizenship and leadership through the use of competitive marksmanship as a network for the development of self-discipline and teamwork. It also contributes indirectly to the participant outcome of emotional and physical well-being through building self-esteem and promoting an active lifestyle.
- g. **General Cadet Knowledge.** PO 207 – Serve in an Air Cadet Squadron:
- (1) The aim of Proficiency Level Two general cadet knowledge is to provide the cadet with information on the opportunities inherent in the Air Cadet Program, and provide them with skills and knowledge that allow them to integrate successfully within the cadet organization.
  - (2) Proficiency Level Two general cadet knowledge contributes directly to the achievement of the program aim of stimulating an interest in the air activities of the CF and the participant outcomes of social competence and understanding the CF.
- h. **Drill.** PO 208 – Execute Drill as a Member of a Squad:
- (1) The aim of Proficiency Level Two drill is to provide the cadet with drill movements designed to improve the efficiency of a squad on the march.
  - (2) Proficiency Level Two drill contributes directly to the achievement of the program aim of stimulating an interest in the air activities of the CF and the participant outcome of social competence through participation in a team activity.
- i. **Biathlon.** PO C211 – Participate in Competitive Summer Biathlon Activities:
- (1) The aim of Proficiency Level Two biathlon is to provide the cadet with an opportunity to enhance individual marksmanship skills and personal fitness while introducing cadets to the sport of biathlon.
  - (2) Proficiency Level Two biathlon contributes directly to the achievement of the program aim of promoting physical fitness and the participant outcome of physical well-being.
- j. **Aviation History.** PO 230 – Discuss Canadian Aviation History:
- (1) The aim of Proficiency Level Two aviation history is to engage the cadet in specific aspects of the history of aviation in Canada.
  - (2) Proficiency Level Two aviation history contributes directly to the achievement of the program aim of stimulating an interest in the air activities of the CF and the participant outcome of understanding the CF.

- k. **Principles of Flight.** PO 231 – Explain Principles of Flight:
  - (1) The aim of Proficiency Level Two principles of flight is to ensure the cadet understands the rudiments of how aircraft fly.
  - (2) Proficiency Level Two principles of flight contributes indirectly to the achievement of the program aim of stimulating an interest in the air activities of the CF and the participant outcome of cognitive competence.
- l. **Propulsion.** PO 232 – Identify Characteristics of Piston-Powered Aircraft:
  - (1) The aim of Proficiency Level Two propulsion is to introduce the cadet to propulsion systems used in aviation.
  - (2) Proficiency Level Two propulsion contributes indirectly to the achievement of the program aim of stimulating an interest in the air activities of the CF and the participant outcome of cognitive competence.
- m. **Aerospace.** PO 240 – Participate in Aerospace Activities:
  - (1) The aim of Proficiency Level Two aerospace is to augment the cadet's notions of aerospace.
  - (2) Proficiency Level Two aerospace contributes to the achievement of the participant outcomes of social competence, cognitive competence and proactive citizenship.
- n. **Aerodrome Operations.** PO 260 – Participate in Aerodrome Operations Activities:
  - (1) The aim of Proficiency Level Two aerodrome operations is to augment the cadet's knowledge of the operations necessary at most aerodromes and to further stimulate an interest in ground-based aviation opportunities.
  - (2) Proficiency Level Two aerodrome operations contributes to the achievement of the program aim of stimulating an interest in the air activities of the CF and the participant outcomes of social competence, cognitive competence, proactive citizenship and CF familiarization.
- o. **Aircraft Manufacturing and Maintenance.** PO 270 – Discuss Aircraft Manufacturing and Maintenance:
  - (1) The aim of Proficiency Level Two aircraft manufacturing and maintenance is to introduce the cadet to specialized aspects of the aviation industry.
  - (2) Proficiency Level Two aircraft manufacturing and maintenance activities contribute to the achievement of the program aim of stimulating an interest in the air activities of the CF and the participant outcomes of social competence, cognitive competence and proactive citizenship.
- p. **Aircrew Survival.** PO 290 – Participate in a Field Exercise:
  - (1) The aim of Proficiency Level Two aircrew survival is to further develop the cadet's survival skills.
  - (2) Proficiency Level Two aircrew contributes to the achievement of all three program aims and all five participant outcomes.



## **METHOD OF ACHIEVING OBJECTIVES**

10. The majority of Proficiency Level Two POs are skill-related. Skills are acquired through practical periods of instruction and practice. In order to achieve these POs, a hands-on learning approach is essential. The following guidance may assist in the implementation of the Proficiency Level Two Program:

- a. Some theory is required for safety purposes and for introducing new material. However, most material can be taught using hands-on practical methods.
- b. Encourage active participation in classroom lessons and activities.
- c. Ensure training sessions are well organized and planned in advance to allow instructors adequate time to prepare for the delivery/conduct of training. This includes reviewing lesson specifications and instructional guides and creating instructional materials as required.
- d. Schedule training such that the material is presented in a manner that ensures a smooth flow from one activity to the next.
- e. Take adequate time to allow cadets to reflect upon and be debriefed on experiential training activities, to include future applications of the experience.

## **TRAINING PREREQUISITES**

11. To participate in the Proficiency Level Two Program, youths must be members of a cadet squadron, as specified in A-CR-CCP-950/PT-001, *Queen's Regulations and Orders for the Canadian Cadet Organization* Article 4.01.

12. Cadets participating in the Proficiency Level Two Program shall normally be between 13 and 14 years of age.

## **USE OF THE QSP**

13. This QSP shall be used as the primary authority governing the development, implementation, conduct and evaluation of the training and standards to qualify a cadet as Proficiency Level Two. This QSP shall also be used by the Director Cadets and Junior Canadian Rangers as the primary reference for validation of Proficiency Level Two qualification training.

14. The Proficiency Level Two Program shall be conducted using this QSP as the training control document in conjunction with A-CR-CCP-802/PF-001, *Royal Canadian Air Cadets Proficiency Level Two – Instructional Guides*.

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## CHAPTER 2

### TRAINING MANAGERMENTS DETAILS

#### RESPONSIBLE AGENCY AND TRAINING ESTABLISHMENTS

1. The Managing Authority for the Air Cadet Proficiency Level Program is the Director Cadets and Junior Canadian Rangers (D Cdts and JCR). The conduct of said program is the responsibility of the Regional Cadet Support Units (RCSUs) through authorized Training Establishments (TEs). These TEs include:

- a. Royal Canadian Air Cadet Squadrons (RCACS); and
- b. Technical TEs, such as:
  - (1) Regional Cadet Air Operations (RCAOPS); and
  - (2) other zone, detachment or regional TEs as authorized by the RCSU Commanding Officer (CO).

#### TRAINING DETAILS

2. In accordance with CATO 11-04, *Cadet Program Outline* and CATO 51-01, *Air Cadet Program Outline*, the Proficiency Level Program is conducted between 1 September and 30 June of each training year through a combination of training sessions and supported training days/weekends. The Proficiency Level Program is divided into two compulsory components that must be completed by all cadets. These components are:

- a. **Mandatory Training.** Mandatory training is a scheme of activities that is requisite for squadrons, and in some instances, specialized TEs to conduct and for cadets to accomplish in order to complete the Proficiency Level Program.
- b. **Complementary Training.** Complementary training is a scheme of activities that is requisite for squadrons, and in some instances specialized TEs to conduct and for cadets to accomplish in order to complete the Proficiency Level Program. These activities complement mandatory activities and form an integral part of the Proficiency Level Program. COs have the discretion to choose activities from a range of possibilities, thus allowing them flexibility to tailor the Proficiency Level Program to match the squadrons' interests and resources.

3. **Proficiency Level Two Program Outline.** The distribution of mandatory and complementary training in Proficiency Level Two is as follows:

- a. Mandatory Training:
  - (1) 60 periods of instruction to be conducted during training sessions (3 periods per session);
  - (2) 18 periods of instruction to be conducted during mandatory training days (9 periods per day) for a total of two days;
  - (3) one day for a familiarization flight and elemental training;
  - (4) one day for an inter-squadron "Cadet/Air Skills" competition; and
  - (5) one weekend (12 periods allocated training) for an aircrew survival (ACS) exercise.

## b. Complementary Training:

- (1) 30 periods of instruction to be conducted during training sessions (3 periods per session);
- (2) 18 periods of instruction to be conducted during complementary training days (9 periods per day) for a total of two days; and
- (3) Choice of additional field training, day for inter-squadron “Cadet/Air Skills” competition and/or an elemental training day (total of two days).

4. **Period Allocation.** Periods are 30 minutes in duration. A detailed period allocation is located at [Annex A](#). Total period allocation by PO is as follows:

Topic	PO	Performance Objective	Mandatory Periods	Specific Mandatory Training Days	Specific Mandatory Training Weekends	Complementary Periods	Specific Complementary Training Weekends
Citizenship	201	Identify the Role of an Environmentally Conscious Canadian Citizen	2	–	–	11	–
Community Service	202	Perform Community Service	9	–	–	12	–
Leadership	203	Demonstrate Leadership Attributes Within a Peer Setting	10	–	–	11	–
Personal Fitness and Healthy Living	204	Update Personal Activity Plan	6	–	–	4	–
Recreational Sports	205	Participate in Recreational Sports	9	–	–	27	–
Air Rifle Marksmanship	206	Fire the Cadet Air Rifle During Recreational Marksmanship	3	–	–	10	–
General Cadet Knowledge	207	Serve in an Air Cadet Squadron	4	–	–	10	–
Drill	208	Execute Drill as a Member of a Squad	3	–	–	16	–
Biathlon	211	Participate in Competitive Summer Biathlon Activities	0	–	–	9	–
Aviation History	230	Discuss Canadian Aviation History	2	–	–	14	–
Principles of Flight	231	Explain Principles of Flight	9			18	
Propulsion	232	Identify Characteristics of Piston-Powered Aircraft	6			6	
Aerospace	240	Participate in Aerospace Activities	4			10	
Aerodrome Operations	260	Participate in Aerodrome Operations Activities	2			18	
Aircraft Manufacturing and Maintenance	270	Discuss Aircraft Manufacturing and Maintenance	6			8	
Aircrew Survival	290	Participate in a Field Exercise			12		14
Annual Ceremonial Review (ACR)	N/A	N/A	3	–	–	–	–
<b>Total</b>			<b>78</b>		<b>12</b>	<b>184</b>	<b>14</b>

5. **Training Capacity.** The training capacity is limited to the capacity of the cadet squadrons to meet supervision requirements in accordance with CATO 13-12, *Supervision of Cadets*, and in some cases, to established quotas.

## 6. Training Staff Requirements

### a. Squadron Training Officer (Trg O):

Rank	MOSID	Number	Qualification
Lt/Capt	00232-03	1	Minimum: Captain Qualification; or DP2 Junior Officer CIC Qualification  Preferred: Senior Instructor Course; and CIC Training Officer Course

### b. Proficiency Level Two Course Officer (Level Two Crse O):

Rank	MOSID	Number	Qualification
2Lt/Lt	00232-03	1	Minimum: Basic Officer Qualification; or Basic Military Officer Qualification (CIC Common)  Preferred: Military Occupation Course (Air); or Basic Military Officer Qualification (CIC Air)

**Note:** This position may also be filled by an OCdt, should circumstances warrant.

### c. Instructors:

Rank	MOSID	Number	Qualification
Cadet F/Sgt and Above	N/A	1 per 10 Cadets	Minimum: Completion of Proficiency Level Four Program  Preferred: CSTC specialties appropriate for activity requirements (e.g. Air Rifle Marksmanship Instructor to instruct PO 206 Air Rifle Marksmanship)

7. **Technical Specialists.** Technical specialists possess specific specialty qualifications. The number of technical specialists required is influenced by policy documentation specific to the activity (e.g. CATOs, *Water Safety Orders*, etc.) and by local circumstances, which will also influence the structure for instructional or training support cadre(s). The technical specialists required in support of Proficiency Level Two are:

### a. Fitness and Sports Instructor(s) in support of PO 204 and PO 205 as required;

- b. Range Safety Officer (RSO) (Air Rifle) in support of PO 206 and PO C211. as required;
- c. Air Rifle Marksmanship Instructor(s) in support of PO 206 as required;
- d. Drill and Ceremonial Instructor(s) in support of PO 208 as required;
- e. Aircrew Survival Instructor(s) in support of PO 290 as required; and
- f. Guest Speaker(s) as required.

8. **Resource Requirements.** RCSU COs are responsible for ensuring that required equipment and supplies are available. A detailed list of material, audiovisual equipment and training/learning aids required to conduct the training is located at [Annex C](#).

## TRAINING ADMINISTRATION

9. **Cadet Evaluation.** Details on cadet evaluation are found in Chapter 3.

10. **Reports.** The Trg O should maintain a training file on each cadet to record their progress during the training year. The training file should consist of, as a minimum, a Proficiency Level Two Program Qualification Record (Chapter 3, [Annex B](#)). Training files are temporary documents which may be disposed of upon migration of Proficiency Level Two Program Qualification Record to the Cadet Personnel Record (DND 2399).

## QUALIFICATION

11. Upon completion of the Proficiency Level Two Program, the cadet is qualified for promotion to the rank of Corporal (Cpl). However, completion of Proficiency Level Two training does not ensure promotion. Cadets must meet all other promotion criteria as stipulated in CATO 51-02, *Air Cadet Promotions*.

## RELATED DOCUMENTS

12. This QSP is to be used in conjunction with:
- a. Cadet Administration and Training Orders (CATOs); and
  - b. A-CR-CCP-802/PF-001.

## SPECIAL INSTRUCTIONS

13. **Scheduling.** When planning training, Trg Os are to be familiar with the lesson specifications found in Chapter 4. While a sample schedule is located at [Annex B](#), it does not account for the many variables squadrons face when developing annual training plans. Some things to consider when developing the annual training plan are:

- a. the training environment required for each activity:
  - (1) some activities will require an outdoor environment which requires consideration for seasonal climate; and
  - (2) some activities will require the use of a special facility, such as a gymnasium or sports field;
- b. the availability of a technical specialist to conduct the activity, if required to conduct the activity;
- c. the logical grouping and sequencing of EOs to take advantage of interrelationships that exist within the instructional material; and
- d. the scheduling of training during sessions relative to weekend training, e.g. identifying EOs that must be delivered just prior to a training day or weekend to prepare the cadets for the event.

**14. Training Days/Weekends**

- a. The planning and conduct of training days is the responsibility of the cadet squadron. Day training shall be conducted at the cadet squadron parade location or, where suitable facilities do not exist or are not available at the cadet squadron parade location, within the local community.
- b. The conduct of the familiarization flight and elemental day are normally the responsibility of Technical TEs. The planning of these activities is to be done in conjunction with the Area Cadet Detachment/RCSU and the applicable Technical TE.
- c. In accordance with CATO 11-04, *Cadet Program Outline*, weekend training shall normally be conducted within three hundred kilometres of the cadet squadron parade location.
- d. Where support of mandatory or complementary days/weekends is required, requests shall be forwarded to the appropriate RCSU. Refer to CATO 51-01, *Air Cadet Program Outline*, and regional orders for amplified information on support available from RCSUs.
- e. Training days and weekends shall be structured, unless otherwise specified in the individual proficiency level QSP, to include cadets from all levels of the Proficiency Level Program.

**REFERENCES**

15. A list of references used in this QSP is located at [Annex D](#).

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**PROFICIENCY LEVEL TWO TRAINING SUMMARY AND TIME ALLOCATION**

**PERIOD ALLOCATION**

<b>PO</b>	<b>Performance Objective</b>	<b>EO</b>	<b>Enabling Objective</b>	<b>No. of Pd</b>	
201	Identify the Role of an Environmentally Conscious Canadian Citizen	M201.01	Discuss the Rights and Responsibilities of a Canadian Citizen	1	
		M201.02	Discuss the Principles of Environmental Stewardship	1	
		C201.01	Discuss Environmental Issues Relative to Canada	1	
		C201.02	Tour a Local, Municipal, Provincial or National Political Institution	3	
		C201.03	Tour a Local, Municipal, Provincial or National Environmental Facility	3	
		C201.04	Participate in a Presentation Given by an Environmental Guest Speaker	2	
		C201.05	Participate in a Presentation Given by a Government Representative	2	
		<b>PO 201 – Total Mandatory</b>			<b>2</b>
		<b>PO 201 – Total Complementary</b>			<b>11</b>
202	Perform Community Service	M202.01	Perform Community Service	9	
		C102.01	Participate in a Ceremonial Parade	3	
		C102.02	Perform Community Service	9	
		<b>PO 202 – Total Mandatory</b>			<b>9</b>
		<b>PO 202 – Total Complementary</b>			<b>12</b>
203	Demonstrate Leadership Attributes Within a Peer Setting	M203.01	Discuss Leadership Within a Peer Setting	1	
		M203.02	Discuss the Principles of Leadership	1	
		M203.03	Discuss Effective Communication in a Peer Setting	1	
		M203.04	Demonstrate Positive Group Dynamics	2	
		M203.05	Discuss Influence Behaviours	1	
		M203.06	Employ Problem Solving	2	
		M203.07	Discuss Personal Integrity as a Quality of Leadership	1	
		M203.08	Participate in Team-Building Activities	1	
		C203.01	Record Entries in a Reflective Journal	3	
		C203.02	Employ Problem Solving	2	
		C203.03	Discuss Characteristics of a Leader	2	
		C203.04	Participate in a Presentation Given by a Leader	2	
		C203.05	Participate in Trust-Building Activities	1	
		C203.06	Participate in Problem-Solving Activities	1	
		<b>PO 203 – Total Mandatory</b>			<b>10</b>
<b>PO 203 – Total Complementary</b>			<b>11</b>		
204	Update Personal Activity Plan	M204.01	Perform the PACER (Beginning Year)	2	

PO	Performance Objective	EO	Enabling Objective	No. of Pd
		M204.02	Identify Healthy Food Choices	1
		M204.03	Identify Benefits of a Healthy Lifestyle	1
		M204.04	Update Personal Activity Plan	1
		M204.05	Perform the PACER (End Year)	1
		C204.01	Perform the PACER (Mid Year)	1
		C204.02	Develop a Personal Nutrition Plan	2
		C104.01	Create Team Goals	1
		<b>PO 204 – Total Mandatory</b>		<b>6</b>
		<b>PO 204 – Total Complementary</b>		<b>4</b>
205	Participate in Recreational Sports	M205.01	Participate in Organized Recreational Team Sports	9
		C105.01	Participate in an Organized Sports Tabloid	9
		C105.02	Participate in an Organized Intramural Sports Event	9
		C105.03	Participate in an Orienteering Event	9
		<b>PO 205 – Total Mandatory</b>		<b>9</b>
		<b>PO 205 – Total Complementary</b>		<b>27</b>
206	Fire the Cadet Air Rifle During Recreational Marksmanship	M206.01	Participate in a Recreational Marksmanship Activity	3
		C206.01	Practice Holding Techniques	1
		C206.02	Practice Aiming Techniques	2
		C206.03	Practice Firing Techniques	1
		C106.01	Participate in Recreational Air Rifle Marksmanship	6
		<b>PO 206 – Total Mandatory</b>		<b>3</b>
		<b>PO 206 – Total Complementary</b>		<b>10</b>
207	Serve in an Air Cadet Squadron	M207.01	Identify Proficiency Level Two Training Opportunities	1
		M207.02	Recognize Historical Aspects of the Royal Canadian Air Cadets (RCAC)	1
		M207.03	Recognize the Role and Responsibilities of the Local Sponsor	1
		M207.04	Identify Year Two CSTC Training Opportunities	1
		C207.01	Identify the Rank Structure of the Royal Canadian Sea and Army Cadets	1
		C207.02	Visit a Royal Canadian Sea/Army Cadet Corps or an Air Cadet Squadron	3
		C207.03	Describe the Affiliated Unit	1
		C207.04	Tour the Affiliated Unit	3
		C107.04	Participate in an Activity About the History of the Squadron	2
		<b>PO 207 – Total Mandatory</b>		<b>4</b>
		<b>PO 207 – Total Complementary</b>		<b>10</b>

PO	Performance Objective	EO	Enabling Objective	No. of Pd	
208	Execute Drill as a Member of a Squad	M208.01	Execute Left and Right Turns on the March	2	
		M208.02	Form Single File From the Halt	1	
		C208.01	Practice Ceremonial Drill as a Review	2	
		C208.02	Execute Drill With Arms	8	
		C108.01	Execute Supplementary Drill Movements	6	
		<b>PO 208 – Total Mandatory</b>			<b>3</b>
		<b>PO 208 – Total Complementary</b>			<b>16</b>
211	Participate in Competitive Summer Biathlon Activities	C211.01	Identify Civilian Biathlon Opportunities	1	
		C211.02	Run on Alternating Terrain	1	
		C211.03	Fire the Cadet Air Rifle Using a Sling Following Physical Activity	1	
		C211.04	Participate in a Competitive Summer Biathlon Activity	6	
		<b>PO 211 – Total Mandatory</b>			<b>0</b>
		<b>PO 211 – Total Complementary</b>			<b>9</b>
230	Discuss Canadian Aviation History	M230.01	Discuss Aircraft Flown During WWI and WWII	1	
		M230.02	Discuss Significant Events in 20 <sup>th</sup> Century Canadian Military History	1	
		C230.01	Participate in a Presentation Given by a Member of the Memory Project Speakers Bureau	2	
		C230.02	Tour a Local Aviation Museum	3	
		C230.03	Discuss Significant Canadian Historical Events Relative to Aviation	1	
		C130.03	Watch <i>On Canadian Wings</i> Video	8	
		<b>PO 230 – Total Mandatory</b>			<b>2</b>
		<b>PO 230 – Total Complementary</b>			<b>14</b>
231	Explain Principles of Flight	M231.01	Identify the Four Forces That Act Upon an Aircraft	2	
		M231.02	Describe the Production of Lift by an Aircraft Wing	2	
		M231.03	Describe the Types of Drag That Act Upon an Aircraft	2	
		M231.04	Describe the Axial Movements of an Aircraft	1	
		M231.05	Describe Aircraft Control Surfaces	2	
		C231.01	Operate an Experimental Wing	2	
		C231.02	Fly a Paper Colditz Glider	2	
		C231.03	Tour a Flight School	3	
		C231.04	Participate in a Presentation Given by a Guest Speaker from the Local Aviation Community	2	
		C231.05	Tour a Flight Simulator	3	

PO	Performance Objective	EO	Enabling Objective	No. of Pd
		C231.06	Tour a Local Air Show	6
		<b>PO 231 – Total Mandatory</b>		<b>9</b>
		<b>PO 231 – Total Complementary</b>		<b>18</b>
232	Identify Characteristics of Piston-Powered Aircraft	M232.01	Identify Types of Aircraft Engines	1
		M232.02	Identify the Components of Piston-Powered Internal Combustion Engines	2
		M232.03	Explain the Cycles of a Four-Stroke Piston-Powered Engine	2
		M232.04	Recognize the Functions of Oil in a Four-Stroke Piston-Powered Engine	1
		C232.01	Identify the Characteristics of Gas Turbine Engines	2
		C232.02	Identify the Characteristics of Rocket Engines	2
		C232.03	Identify the Characteristics of Helicopter Engines	2
		<b>PO 232 – Total Mandatory</b>		<b>6</b>
		<b>PO 232 – Total Complementary</b>		<b>6</b>
240	Participate in Aerospace Activities	M240.01	Explore Current Advancements in Aerospace Technology	1
		M240.02	Invent a Space Technology Item	2
		M240.03	Participate in a Space Survival Scenario	1
		C240.01	Participate in a Non-Verbal Communication Activity	1
		C240.02	Invent a Communication System for Space	2
		C240.03	Identify Parts of a Rocket	1
		C240.04	Navigate With a Global Positioning System (GPS)	3
		C240.05	Simulate Survival in Space	2
		C240.06	Determine Direction Using Constellations on a Field Exercise	1
		<b>PO 240 – Total Mandatory</b>		<b>4</b>
<b>PO 240 – Total Complementary</b>		<b>10</b>		
260	Participate in Aerodrome Operations Activities	M260.01	Explain Aspects of Air Traffic Control (ATC)	1
		M260.02	Identify Aspects of Basic Aerodrome Operations	1
		C260.01	Tour an Aerodrome Security Facility	3
		C260.02	Tour an Air Traffic Control (ATC) Tower	3
		C260.03	Participate in a Presentation Given by an Employee of an Aerodrome	2
		C260.04	Perform Marshalling	1
		C260.05	Tour an Aerodrome	3
<b>PO 260 – Total Mandatory</b>		<b>2</b>		

PO	Performance Objective	EO	Enabling Objective	No. of Pd	
		<b>PO 260 – Total Complementary</b>		<b>18</b>	
270	Discuss Aircraft Manufacturing and Maintenance	M270.01	Identify Aspects of Aircraft Manufacturing	2	
		M270.02	Identify Requirements for Aircraft Maintenance	2	
		M270.03	Discuss Education and Employment Opportunities in Aircraft Manufacturing and Maintenance	2	
		C270.01	Participate in a Presentation Given by an Employee in the Aircraft Manufacturing or Maintenance Industry	2	
		C270.02	Identify Canadian Aviation Maintenance Council (CAMC) Interactive Multimedia Learning Tool (IMLT) Activities	1	
		C270.03	Tour an Aircraft Manufacturing or Maintenance Facility	3	
		C270.04	Watch <i>World's Biggest Airliner: The Airbus A380 – Coming Together</i>	2	
		<b>PO 270 – Total Mandatory</b>			<b>6</b>
		<b>PO 270 – Total Complementary</b>			<b>8</b>
290	Participate in a Field Exercise	M290.01	Construct, Light, Maintain and Extinguish a Signal Fire	2	
		M290.02	Construct a Lean-to-Style Shelter	3	
		M290.03	Construct a Simple Snare	2	
		M290.04	Construct Ground-to-Air Signals	2	
		M290.05	Identify Hiking Techniques	2	
		M290.06	Operate a Hand-Held Radio	1	
		C290.01	Participate in a Presentation Given by a Member of a Survival Organization	2	
		C290.02	Discuss Skinning and Cooking a Small Animal	1	
		C290.03	Construct a Snow Cave	3	
		C290.04	Collect Drinking Water Using a Solar Still	2	
		C290.05	Participate in a Hike	6	
		<b>PO 290 – Total Mandatory</b>			<b>12</b>
		<b>PO 290 – Total Complementary</b>			<b>14</b>
N/A	Annual Ceremonial Review (ACR)			3	
<b>Total Mandatory</b>			<b>78</b>		
<b>Total Mandatory Field</b>			<b>12</b>		
<b>Total Complementary</b>			<b>198</b>		

### TRAINING DAY/WEEKEND ALLOCATION

#### MANDATORY

Activity	Description	Time
Mandatory Training Periods	18 periods of instruction (9 per day) chosen from the mandatory EOs to be delivered during a full day of training. POs 202, 205 and/or 206 are best suited for delivery during training days; however, the flexibility does exist for squadrons to deliver the POs that best suit their circumstances (i.e. infrastructure, resource availability, etc.).	2 Days
Familiarization Flight/ Elemental Day	Every Proficiency Level Two cadet will be given an opportunity to experience a familiarization flight in an aircraft determined by RC Air Ops O. In addition to each familiarization flight, squadrons should maximize the training value of this allocated day by providing additional "air" experiences which could include participating in a number of complementary training activities.	1 Day
Inter-squadron "Cadet/ Air Skills" Competition Day	A one-day competition, or two-day if combined with a complementary day, in support of common POs 203, 206, 208 and elemental POs 240, 260, 270 and 290.	1 Day
Field Exercise	One weekend of mandatory support will be provided for cadet squadrons to participate in an overnight exercise to include delivery of PO 290.	1 Weekend
<b>Total Mandatory</b>		<b>6 Days</b>

#### COMPLEMENTARY

Activity	Description	Time
Complementary Training Periods	18 periods of instruction (9 per day) chosen from the complementary EOs to be delivered during a full day of training. POs 202, 205 and/or 206 are best suited for delivery during training days; however, the flexibility does exist for squadrons to deliver the POs that best suit their circumstances (i.e. infrastructure, resource availability, etc.).	2 Days
<b>Plus Combination of Two Days From the Following</b>		
Field Exercise	One or two days, conducted either in conjunction with the mandatory weekend or separately, can be provided for cadet squadrons to participate in additional field training that can include delivery of PO/EOs C290.01 to C290.05 and practical experience in support of PO 290.	1 or 2 Days or 1 Weekend
Inter-squadron "Cadet/ Air Skills" Competition Day	An additional day of competition added to the mandatory one-day competition in support of common POs 203, 206, 208 and elemental POs 240, 260, 270 and 290.	1 Day

<b>Activity</b>	<b>Description</b>	<b>Time</b>
Elemental Day	One day to provide additional complementary elemental training not previously conducted.	1 Day
<b>Total Complementary</b>		<b>4 Days</b>

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**SAMPLE TRAINING SCHEDULE**

<b>TRAINING SESSIONS</b>		<b>Period 1</b>	<b>Period 2</b>	<b>Period 3</b>
<b>Session 1</b>	EO	M232.01	M230.01	M207.01
	Instructor			
	Location			
<b>Session 2</b>	EO	M204.01	M204.01	M201.01
	Instructor			
	Location			
<b>Session 3</b>	EO	M230.02	M231.01	M231.01
	Instructor			
	Location			
<b>Session 4</b>	EO	M204.02	M203.01	M260.01
	Instructor			
	Location			
<b>Session 5</b>	EO	M231.02	M231.02	M204.04
	Instructor			
	Location			
<b>Session 6</b>	EO	M207.02	M201.01	M203.02
	Instructor			
	Location			
<b>Session 7</b>	EO	M232.02	M232.02	M240.01
	Instructor			
	Location			
<b>Session 8</b>	EO	M203.03	M231.03	M231.03
	Instructor			
	Location			
<b>Session 9</b>	EO	M260.02	M240.02	M240.02
	Instructor			
	Location			
<b>Session 10</b>	EO	M270.01	M270.01	M231.04
	Instructor			
	Location			
<b>Session 11</b>	EO	CHAP	CHAP	CHAP
	Instructor			
	Location			
<b>Session 12</b>	EO	M203.04	M203.04	M207.03
	Instructor			
	Location			
<b>Session 13</b>	EO	M232.03	M232.03	M203.05
	Instructor			
	Location			
<b>Session 14</b>	EO	C207.01	M270.02	M270.02
	Instructor			
	Location			
<b>Session 15</b>	EO	M207.04	C201.04	C201.04
	Instructor			
	Location			

TRAINING SESSIONS		Period 1	Period 2	Period 3
Session 16	EO	C270.04	C270.04	C240.03
	Instructor			
	Location			
Session 17	EO	C231.01	C231.01	C203.05
	Instructor			
	Location			
Session 18	EO	M232.04	C203.01	C260.04
	Instructor			
	Location			
Session 19	EO	M205.01	M205.01	M205.01
	Instructor			
	Location			
Session 20	EO	M203.06	M203.06	C240.01
	Instructor			
	Location			
Session 21	EO	C232.02	C232.02	C201.01
	Instructor			
	Location			
Session 22	EO	M240.03	C203.03	C203.03
	Instructor			
	Location			
Session 23	EO	C207.02	C207.02	C207.02
	Instructor			
	Location			
Session 24	EO	M203.07	M270.03	M270.03
	Instructor			
	Location			
Session 25	EO	C270.02	C260.03	C260.03
	Instructor			
	Location			
Session 26	EO	M203.08	C230.01	C230.01
	Instructor			
	Location			
Session 27	EO	C240.05	C240.05	C203.01
	Instructor			
	Location			
Session 28	EO	M204.05	C208.02	M205.01
	Instructor			
	Location			
Session 29	EO	C208.01	C208.01	C207.03
	Instructor			
	Location			
Session 30	EO	ACR	ACR	ACR
	Instructor			
	Location			

<b>TRAINING DAYS</b> <b>Mandatory EOs</b> <b>(Period Allocation)</b>		<b>Period 1</b>	<b>Period 2</b>	<b>Period 3</b>	<b>Period 4</b>	<b>Period 5</b>	<b>Period 6</b>	<b>Period 7</b>	<b>Period 8</b>	<b>Period 9</b>
<b>Day 1</b>	EO	M290.02	M290.02	M290.03	M290.01	M290.01	M290.03	M290.03	C290.04	C290.04
	Instructor									
	Location									
<b>Day 2</b>	EO	M290.04	M290.04	M290.06	M290.05	M290.05	C290.03	C290.03	C290.03	C290.02
	Instructor									
	Location									

<b>TRAINING DAYS</b> <b>Complementary EOs</b> <b>(Period Allocation)</b>		<b>Period 1</b>	<b>Period 2</b>	<b>Period 3</b>	<b>Period 4</b>	<b>Period 5</b>	<b>Period 6</b>	<b>Period 7</b>	<b>Period 8</b>	<b>Period 9</b>
<b>Day 1</b>	EO	M202.01	M202.01	M202.01	M202.01	M202.01	M202.01	M202.01	M202.01	M202.01
	Instructor									
	Location									
<b>Day 2</b>	EO	M205.01	M205.01	M205.01	M205.01	M205.01	M206.01	M206.01	M206.01	C206.03
	Instructor									
	Location									

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**RESOURCE REQUIREMENTS**

**MANDATORY TRAINING**

Item	Quantity	EO
Pens/pencils	1 per cadet	M204.01 to M204.05
CD/cassette player	1	M204.01 and M204.05
DVD player	1	M204.01 and M204.05
Fitnessgram 8.0 Stand-Alone Test Kit	1	M204.01 and M204.05
Measuring Tape	1	M204.01 and M204.05
Pylons	4 per lane	M204.01 and M204.05
TV	1	M204.01 and M204.05
Stopwatch	1	M204.01 and M205.01
Baseball	3	M205.01
Baseball Base	4	M205.01
Baseball Bat	2	M205.01
Baseball Glove (right and left handed)	12	M205.01
Basketball	2	M205.01
Basketball Net	2	M205.01
Batter's Helmet	2	M205.01
Field Crosse	24	M205.01
First Aid Kit	1	M205.01
Flag/Ribbon	18	M205.01
Football	2	M205.01
Goalie Equipment	2 sets	M205.01
Goalie Stick	2	M205.01
Goalkeeper's Crosse	2	M205.01
Goalkeeper's Face Mask (Lacrosse)	2	M205.01
Goalkeeper's Face Mask (Ringette)	2	M205.01
Goalkeeper's Helmet (Lacrosse)	2	M205.01
Goalkeeper's Stick (Ringette)	2	M205.01

Item	Quantity	EO
Goalkeeper's Throat and Chest Protector (Lacrosse)	2	M205.01
Hockey Ball	2	M205.01
Hockey Net	2	M205.01
Hockey Stick	12	M205.01
Lacrosse Ball	2	M205.01
Lacrosse Net	2	M205.01
Mouthguard	1 per cadet	M205.01
Plastic Disk (Frisbee)	2	M205.01
Ringette Net	2	M205.01
Rubber Ring (Ringette)	2	M205.01
Soccer Ball	2	M205.01
Soccer Net	2	M205.01
Softball	3	M205.01
Volleyball	2	M205.01
Volleyball Net	1	M205.01
Whistle	1	M205.01
Stopwatch	1	M207.01
Model of a Fixed wing aircraft with wing struts, fixed gear and control surface detail.	1	M231.01 to M231.05
Bamboo Skewers	2 Packages (2 per 4 cadets)	M231.02
Electric Fan	5 (1 per 4 cadets)	M231.02
Index cards	2 Packages (1 per cadet)	M231.02
Balloons	1 Bag (2 per class)	M231.02 and C232.02
String	1 Roll (6 metres per class)	M231.02 and C232.02
8.5 x 11 inch paper	1 Package	M231.02 and C232.03
Large Dice	2	M232.02
Masking Tape	1 Box	M232.02
Hand Cream	1 Container	M232.04

<b>Item</b>	<b>Quantity</b>	<b>EO</b>
Radios (Talkabout FRS&GMRS Recreational Two-Way Models)	10	M240.05 and C290.06
Camping Knife	4	M290
Groundsheets	1 Per four cadets	M290
Shovel	6	M290
Twine	3 balls	M290
Fire Exstinguishing Equipment	3 Small extinguishers	M290.01
Camping Pegs (Tent Pegs)	1 Box of 100	M290.02
Non-Ferrous Snare Wire - Rabbit	1 Spool - 200 Ft	M290.03
Batteries	10 Boxes	M290.06
Flagging Tape	2 Boxes – 10 Rolls	M290.07
Flip Chart Pads	1	All
OHP Markers	1 Box	All
OHP Sheets	2 Boxes	All
Pencil Crayons/Felt Markers	4 Boxes Per Class	All
Tape	10 Rolls	All
White Board Markers	4 Boxes	All

**COMPLEMENTARY TRAINING**

<b>Item</b>	<b>Quantity</b>	<b>EO</b>
CD/cassette player	1	C204.01
DVD player	1	C204.01
Fitnessgram 8.0 Stand-Alone Test Kit	1	C204.01
Measuring Tape	1	C204.01
Pylons	4 per lane	C204.01
TV	1	C204.01
Pens/pencils	1 per cadet	C204.01 to C204.04
Scissors	1 per cadet	C204.02
Tape/Glue	1 per every 2 cadets	C204.02

Item	Quantity	EO
Cadet air rifle	1 per lane	C206.01 to C206.03 and C211.03 to C211.04
Cadet air rifle sling	1 per cadet air rifle	C206.01 to C206.03 and C211.03 to C211.04
Shooting mat (if available)	1 per lane	C206.01 to C206.03 and C211.03 to C211.04
CCT2000GRTD Grouping Target	1 per lane	C206.02
Suitable target	as required	C206.03
Tape	1 roll	C207.01
Construction Paper	2 Packages	C207.03
Bristol Board	3 Packages	C207.03, M231.03 and M232.02
Whistle	1	C211.02
Shooting mat	2 per firing point	C211.03
BART	1 per firing point	C211.03 and C211.04
Safety glasses/goggles	1 per firing point	C211.03 and C211.04
Target Frame	1 per firing point	C211.03 and C211.04
.177 Air Rifle Pellets	Minimum of 700	C211.04
Stopwatch	5	C211.04
Box Cutter	2	C231.01
File Folders (Letter size)	1 Box	C231.01
Stapler	1	C231.01
Duct tape	Two rolls per class	C231.01 and C232.02
Card Stock (4x5 inch)	2 Boxes (2 per cadet)	C231.02
Electric Fan	6 (1 per 4 cadets)	C231.02
Glue Stick	2 Boxes (1 per 4 cadets)	C231.02
Pencils	4 Boxes (1 per cadet)	C231.02
Ruler	1 per cadet	C231.02
Scissors	30 (1 per cadet)	C231.02
Nails	1 Box	C232.01



Item	Quantity	EO
Drinking Straws	1 Box	C232.02
Styrofoam Cup/paper Cup	1 small box	C232.02
Model Helicopter with Tail Rotor (e.g. Jet Ranger)	1	C232.03
Paper Clip	2 Boxes	C232.03
GPS Handheld	5	C240.04
Fire Blanket	5	C240.05
Magnetic Compass	5	C240.05
Map of Training Area	5	C240.05
Nylon Rope	10 Metres	C240.05
Stellar Map of the Moon	5	C240.05
Two-Litre Plastic Bottles	4	C240.05
Jerry cans	6	C240.05 and C290.05
Matches	2 Boxes	C240.05 and M290.01
Marshalling Wands	4 Pairs	C240.06
World's largest Airliner: The Airbus 380 DVD	1	C270.04
1 Litre Metal or Plastic Cans	20	C290.04
Clear Heavy Plastic	1 Med Roll	C290.04
Whistles	50	C290.05

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## REFERENCES

### TEXTS HELD BY SQUADRON

- A0-001 A-AD-265-000/AG-001 DHH 3-2 (2003). *Canadian Forces Dress Instructions*. Ottawa, ON: Department of National Defence.
- A0-002 A-PD-201-000/PT-000 DHH 3-2 (2003). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: Department of National Defence.
- A0-027 A-CR-CCP-177/PT-001 D Cdts (2001). *Canadian Cadet Movement: Cadet Marksmanship Programme Reference Manual*. Ottawa, ON: Department of National Defence.
- C0-001 (ISBN 0-88011-807-5) Hanlon, T. (1998). *The Sports Rules Book: Essential Rules for 54 Sports*. USA: Human Kinetics Publishers, Inc.
- C0-012 Heritage Canada (1995). *Government of Canada: Symbols of Canada*. Ottawa, ON: Government of Canada.
- C0-020 (ISBN 0-662-32899) Minister of Health (2002). *Canada's Physical Activity Guide to Healthy Active Living*. Ottawa, ON: Health Canada.
- C0-030 Historica Foundation of Canada (nd). *Historica Minutes*. Toronto, ON: Historica Foundation of Canada.
- C3-017 C C (C). *Fabulous Paper Gliders*. New York, NY: Sterling Publishing.

### ADDITIONAL TEXTS REFERENCED DURING DEVELOPMENT

- A0-009 A-AA-100-000/AA-003 Canadian-Forces (2006). *Queen's Regulations and Orders (QR&Os) Volume One*. Ottawa, ON: Department of National Defence.
- A0-010 CATO 11-03 D Cdts (2006). *Cadet Program Mandate*. Ottawa, ON: Department of National Defence.
- A0-028 CATO 14-41 D Cdts (2005). *Annex E Appendix 1 Marksmanship, Rifles, and Ammunitions (Vol. 1)*. Ottawa, ON: Department of National Defence.
- A3-003 CATO 54-20 D Cdts (2000). *Royal Canadian Air Cadets*. Ottawa, ON: Department of National Defence.
- A3-004 CATO 51-02 D Cdts 4 (2007). *Air Promotions*. Ottawa, ON: Department of National Defence.
- A3-029 CATO 51-01 D Cdts (2006). *Air Cadet Program Outline*. Ottawa, ON: Department of National Defence.
- A3-042 (ISBN 0-92102-204-2) Larry Milberry and Hugh Halliday (1990). *The Royal Canadian Air Force at War 1939-1944*. Toronto: Canav Books.
- C0-002 (ISBN 0-88962-630-8) Leblanc, J. and Dickson, L. (1997). *Straight Talk About Children and Sport: Advice for Parents, Coaches and Teachers*. Oakville, ON and Buffalo, NY: Mosaic Press.
- C0-003 (ISBN 0-943210-44-5) Pike, Bob and Busse, Christopher (1995). *101 More Games for Trainers*. Minneapolis, MN: Lakewood Books.

- C0-004 (ISBN 1-58062-577-0) McClain, Gary Ph.D. and Romaine, Deborah, S (2002). *The Everything Managing People Book*. Avon, MA: Adams Media Corporation.
- C0-005 (ISBN 0-07-046414-6) Scannell, Edward E. and Newstrom, John W. (1994). *Even More Games Trainers Play*. New York, NY: McGraw-Hill Inc.
- C0-007 (ISBN 0-02-029265-1) Kjellstrom, Bjorn (1994). *Be Expert With Map & Compass: The Complete Orienteering Handbook*. New York, NY: Hungry Minds, Inc.
- C0-008 A-CR-CCP-151/PT-001 Canadian Orienteering Federation (1983). *Orienteering Level 1 Coaching Certification*. Ottawa, ON: Canadian Orienteering Federation.
- C0-010 Stott, Winifred (1987). *Armchair Orienteering II: A Practical Guide to Route Planning*. Winnipeg, MB: Manitoba Orienteering Association.
- C0-011 Canadian Orienteering Federation (1985). *Orienteering Level Two Coaching Certification*. Ottawa, ON: Canadian Orienteering Federation.
- C0-021 (ISBN 1-58062-513-4) Adams, Bob (2001). *The Everything Leadership Book*. Avon, MA: Adams Media Corporation.
- C0-022 (ISBN 0-02864-207-4) Cole, Kris (2002). *The Complete Idiot's Guide To Clear Communication*. USA: Pearson Education, Inc.
- C0-023 A-CR-CCP-150/PT-001 Chapman, J.R. Major, M.B.E. (1968). *Orienteering: An Aid To Training*. London, England: Hillside Printing & Publishing Co.
- C0-024 (ISBN 0-19-541731-3) Barber, Katherine (Ed.) (2001). *The Canadian Oxford Dictionary*. Don Mills, ON: Oxford University Press.
- C0-025 (ISBN 1-895465-33-8) Gifford, Doug (Ed.) (2000). *Canoeing Instructor's Resource Manual*. Merrickville, ON: Canadian Recreational Canoeing Association.
- C0-028 (ISBN 0-07-046513-4) Newstrom, John and Scannell, Edward (1998). *The Big Book of Team Building Games*. New York, NY: McGraw-Hill Inc.
- C0-029 (ISBN 0-7872-4532-1) Cain, Jim and Jolliff, Barry (1998). *Teamwork and Teamplay*. Dubuque, IO: Kendall/Hunt Publishing Company.
- C0-076 (ISBN 0-07-134984-7) West, E. (1999). *The Big Book of Icebreakers: Quick, Fun Activities for Energizing Meetings and Workshops*. New York, NY: McGraw-Hill.
- C0-077 (ISBN 0-8403-5682-X) Rohnke, K. (1984). *A Guide to Initiative Problems, Adventure Games and Trust Activities: Silver Bullets*. Iowa: Kendall/Hunt Publishing Company.
- C3-002 (ISBN 0-00-653140-7) Wiseman, J. (1999). *SAS Survival Handbook*. London: HarperCollins Publishers.
- C3-003 (ISBN 1-896713-00-9) Tawrell, P. (1996). *Camping and Wilderness Survival: The Ultimate Outdoors Book*. Green Valley, ON: Tawrell.
- C3-016 (ISBN EG-2003-01-108-HQ) NASA (2003). *Nasa: Rockets: A Teacher's Guide With Activities in Science, Mathematics, and Technology*. Washington, DC: NASA.
- C3-017 (ISBN 1-895569-23-0) Schmidt, N. (1998). *Fabulous Paper Gliders*. New York, NY: Sterling Publishing.

- C3-040 (ISBN 0-7787-1112-9) Goodman Polly Arty Facts (2002). *Space and Art Activities*. St. Catharines, ON: Crabtree Publications.
- C3-057 (ISBN 1-59647-055-0) E. Sobey (2006). *Rocket – Powered Science*. Tucson, AZ: Good Year Books.
- C3-058 (ISBN 1-4027-3034-9) Norman Schmidt (2005). *Paper Creations – Paper Airplanes*. New York, NY: Sterling Publishing Co., Inc.
- C3-091 (ISBN 1-55652-477-3) Mary Kay Carson (2003). *The Wright Brothers for Kids: How They Invented the Airplane*. Chicago: Chicago Review Press.
- C3-092 (ISBN 0-74600-978-X) Helen Edom, Moira Butterfield, Rebecca Heddle and Mike Unwin (1992). *Usborne Science Activities: Volume 2*. London, England: Usborne Publishing.
- C3-096 (ISBN 1-7157-382) Transport Canada (2006-2). *Aeronautical Information Manual*. Ottawa: Her Majesty the Queen in Right of Canada.
- C3-101 Canadian Aviation Maintenance Council (CAMC) (2004). *Careers In Aviation*. Ottawa: CAMC.
- C3-105 DVD. *World’s Biggest Airlines. The Air Bus A380 – Coming Together*.
- C3-108 (ISBN 0-88487-203-3) Jeppesen Sanderson Training Products (2000). *A&P Technician: General*. Englewood, CO: Jeppesen Sunderson Inc.
- C3-109 (ISBN 1-89477-700-X) Canadian Aviation Maintenance Council (CAMC) (2002). *Aviation Maintenance Orientation Program*. Ottawa: CAMC.
- C3-116 (ISBN 0-96803-905-7) A.F MacDonal & I.L. Pepler (2000). *From the Ground*. Ottawa: Aviation Publishers Co. Ltd.
- C3-117 (ISBN 0-96522-025-7) M. H. Ferguson (1996). *GPS Land Navigation: A Complete Guide Book for Back Country Users of the NAVSTAR Satellite System*. Glassford Publishing.
- C3-122 Air Minister (1941). *The Battle of Britain August – October 1940*. London, England: His Majesty’s Stationary Office.
- C3-126 Brigadier C. N. Barclay (1968). *Armistice 1918*. London, England: J.M. Dent & Sons Ltd.
- C3-129 James Malony Spaight (1941). *The Battle of Britain 1940. The Inceptors Take Off*. Strand, London: Geoffrey Bles.
- C3-132 (ISBN 1-89476-548-6) Lawrence Letham (2003). *GPS Made Easy*. Surrey, BC: Rocky Mountain Books.

## WEBSITES

- A0-003 *CATO Index*. (2006). Retrieved 25 May 2006, from [www.cadets.ca/support/cato-oaic/intro\\_e.asp?vol=1](http://www.cadets.ca/support/cato-oaic/intro_e.asp?vol=1).
- A0-005 *Morale By Message Board*. (2006). Retrieved 25 May 2006, from [http://www.forces.gc.ca/site/community/messageboard/index\\_e.asp](http://www.forces.gc.ca/site/community/messageboard/index_e.asp).
- A0-006 *Addresses for Overseas Operations*. (2006). Retrieved 25 May 2006, from [http://www.forces.gc.ca/site/community/messageboard/addresses\\_e.asp](http://www.forces.gc.ca/site/community/messageboard/addresses_e.asp).

- A0-010 *Cadet Program Vision*. (2006). Retrieved 25 May 2006, from [www.cadets.ca/about-nous/vision/vision\\_e.asp](http://www.cadets.ca/about-nous/vision/vision_e.asp).
- A0-011 *Canadian Rangers*. (2006). Retrieved 19 May 2006, from [www.rangers.forces.gc.ca/pubs/rangers/intro\\_e.asp](http://www.rangers.forces.gc.ca/pubs/rangers/intro_e.asp).
- A0-026 *Canadian Forces Recruiting – Civilian Jobs*. (2006). Retrieved 24 May 2006, from [www.recruiting.forces.ca/engraph/civilian/index.e.aspx](http://www.recruiting.forces.ca/engraph/civilian/index.e.aspx).
- A0-042 *Cadet Marksmanship and Firearms Safety Program*. (2006). Retrieved 18 April 2007, from [http://www.central.cadets.ca/events/biath\\_cadetmarksman\\_e.html](http://www.central.cadets.ca/events/biath_cadetmarksman_e.html).
- A0-045 *About Cadets-History*. (2006). Retrieved 19 February 2007, from [http://www.cadets.ca/about-nous/histo\\_e.asp](http://www.cadets.ca/about-nous/histo_e.asp).
- A3-031 *Canadian Forces Aircraft*. (2007). Retrieved 20 November 2006, from [http://www.airforce.gc.ca/equip/equip1\\_e.asp](http://www.airforce.gc.ca/equip/equip1_e.asp).
- A3-033 *Historical Aircraft*. (2007). Retrieved 20 November 2006, from [http://www.airforce.forces.gc.ca/equip/historical\\_e.asp](http://www.airforce.forces.gc.ca/equip/historical_e.asp).
- A3-038 *The Battle of the Atlantic*. (2007). Retrieved 19 February 2007, from [www.vac-acc.gc.ca/remember/sub.cfm?sourse=history/secondwar/canada2/batat1](http://www.vac-acc.gc.ca/remember/sub.cfm?sourse=history/secondwar/canada2/batat1).
- A3-039 *World War II 1939-1945*. (2007). Retrieved 19 February 2007, from [www.airforce.forces.ca/hist/ww\\_2\\_e.asp](http://www.airforce.forces.ca/hist/ww_2_e.asp).
- A3-040 *LW170 Proposal*. (2007). Retrieved 20 February 2007, from [www.57rescuecanada.com/LocatingLW170/LW170\\_Proj\\_Proposal.htm](http://www.57rescuecanada.com/LocatingLW170/LW170_Proj_Proposal.htm).
- A3-041 *D-Day*. (2007). Retrieved 20 February 2007, from [www.forces.gc.ca/site/Feature\\_story/2003/jun03/06\\_f\\_e.asp](http://www.forces.gc.ca/site/Feature_story/2003/jun03/06_f_e.asp).
- A3-043 *Halifax Bombers*. (2007). Retrieved 22 March 2007, from [www.airforce.gc.ca/equip/historical/halifax\\_e.asp](http://www.airforce.gc.ca/equip/historical/halifax_e.asp).
- C0-009 *Orienteering*. (2006). Retrieved 25 May 2006, from [www.orienteeing.org](http://www.orienteeing.org).
- C0-013 *Canadian Heritage Site*. (2006). Retrieved 16 March 2006, from [www.canadianheritage.gc.ca](http://www.canadianheritage.gc.ca).
- C0-014 *The Royal Canadian Legion: Responding to the Needs of Canadian Communities*. (2006). Retrieved 25 May 2006, from [http://www.legion.ca/asp/docs/about/community\\_e.asp](http://www.legion.ca/asp/docs/about/community_e.asp).
- C0-015 *About Kiwanis*. (2006). Retrieved 25 May 2006, from <http://www.kiwanis.org/about>.
- C0-016 *Lions Clubs International History*. (2006). Retrieved 25 May 2006, from [http://www.lionsclubs.org/en/content/lions\\_history.shtml](http://www.lionsclubs.org/en/content/lions_history.shtml).
- C0-017 *About Rotary*. (2006). Retrieved 25 May 2006, from <http://www.rotary.org/aboutrotary/index.html>.
- C0-018 *United Way of Canada*. (2006). Retrieved 25 May 2006, from [www.unitedway.ca/english](http://www.unitedway.ca/english).
- C0-026 *At Health Mental Health*. (2006). Retrieved 19 May 2006, from [www.athealth.com](http://www.athealth.com).

- C0-027 *Lifejacket Comparison Chart*. (2006). Retrieved 2 October 2006, from [http://www.redcross.ca/cmslib/general/lifejacket\\_chart.pfd](http://www.redcross.ca/cmslib/general/lifejacket_chart.pfd).
- C0-027 *PFD Checklist*. (2006). Retrieved 2 October 2006, from <http://www.redcross.ca/article.asp?id=001039&tid=024>.
- C0-027 *Welcome to the Canadian Red Cross*. (2006). Retrieved 19 May 2006, from [www.redcross.ca](http://www.redcross.ca).
- C0-030 *How Ringette Is Played*. (2006). Retrieved 2 October 2006, from <http://www.ringette.ca/about/played.htm>.
- C0-030 *Ringette Canada*. (2006). Retrieved 27 April 2006, from [www.ringette.ca](http://www.ringette.ca).
- C0-031 *What Is Ultimate – The Game*. (2006). Retrieved 2 October 2006, from [http://www.whatisultimate.com/what/what\\_game\\_en.html](http://www.whatisultimate.com/what/what_game_en.html).
- C0-031 *What Is Ultimate Frisbee?* (2006). Retrieved 27 April 2006, from [www.whatisultimate.com](http://www.whatisultimate.com).
- C0-032 *Stanford Intramurals*. (2006). Retrieved 27 April 2006, from [www.stanford.edu/group/Intramurals/kickballrules.html](http://www.stanford.edu/group/Intramurals/kickballrules.html).
- C0-033 *Flag Football Flag Rules*. (2006). Retrieved 30 April 2006, from [www.slam.canoe.ca/FlagFootball/Rules/home.html](http://www.slam.canoe.ca/FlagFootball/Rules/home.html).
- C0-034 *About Ultimate*. (2006). Retrieved 2 October 2006, from <http://www.upa.org/ultimate>.
- C0-034 *About Ultimate*. (2006). Retrieved 27 April 2006, from [www.upa.org/ultimate](http://www.upa.org/ultimate).
- C0-035 *The World Adult Kickball Association*. (2006). Retrieved 1 May 2006, from [www.kickball.com](http://www.kickball.com).
- C0-036 *Prevention, Survival, Quality of Life*. (2006). Retrieved 25 April 2006, from [www.womensheart.org](http://www.womensheart.org).
- C0-037 *A Walking Club – Walkablock Club of America*. (2006). Retrieved 25 April 2006, from [www.walkablock.com](http://www.walkablock.com).
- C0-038 *Shelter Online*. (2006). Retrieved 25 April 2006, from [www.shelterpub.com](http://www.shelterpub.com).
- C0-040 *Back Pain & Sciatica Relief – Back Pain Exercises, Stretches and Treatments*. (2006). Retrieved 25 April 2006, from [www.losethebackpain.com](http://www.losethebackpain.com).
- C0-041 *Roadcycling.com – Cycling Info As It Should Be*. (2006). Retrieved 25 April 2006, from [www.roadcycling.com](http://www.roadcycling.com).
- C0-042 *Back Pain and Neck Pain for Spine Patients*. (2006). Retrieved 25 April 2006, from [www.spineuniverse.com](http://www.spineuniverse.com).
- C0-043 *Canada*. (2006). Retrieved 25 May 2006, from <http://www.theodora.com/maps>.
- C0-043 *Quick Maps of the World*. (2006). Retrieved 25 May 2006, from [www.theodora.com/maps](http://www.theodora.com/maps).
- C0-044 *Canadian Commission for UNESCO*. (2006). Retrieved 16 August 2006, from <http://www.unesco.ca>.
- C0-045 *Leadership: Getting It Done*. (2006). Retrieved 16 March 2006, from <http://www.ssu.missouri.edu/faculty/rcampbell/leadership/chapter5.htm>.

- C0-046 *Winnie the Pooh*. (2006). Retrieved 5 May 2006, from [http://en.wikipedia.org/wiki/Winnie\\_the\\_pooh](http://en.wikipedia.org/wiki/Winnie_the_pooh).
- C0-047 *Inukshuk*. (2006). Retrieved 5 May 2006, from <http://en.wikipedia.org/wiki/Inukshuk>.
- C0-048 *Maple Syrup*. (2006). Retrieved 5 May 2006, from [http://en.wikipedia.org/wiki/Maple\\_syrup](http://en.wikipedia.org/wiki/Maple_syrup).
- C0-049 *Blue Nose*. (2006). Retrieved 5 May 2006, from [http://en.wikipedia.org/wiki/Blue\\_nose](http://en.wikipedia.org/wiki/Blue_nose).
- C0-050 *Avro Arrow*. (2006). Retrieved 5 May 2006, from [http://en.wikipedia.org/wiki/Avro\\_arrow](http://en.wikipedia.org/wiki/Avro_arrow).
- C0-051 *VAC Canada Remembers: Facts on Remembrance Day*. (2006). Retrieved 25 May 2006, from [http://www.vac\\_acc.gc.ca/remembers/sub.cfm?source=teach\\_resources/remdayfact](http://www.vac_acc.gc.ca/remembers/sub.cfm?source=teach_resources/remdayfact).
- C0-052 *The Battle of the Atlantic*. (2006). Retrieved 25 May 2006, from <http://www.vac-acc.gc.ca/general/sub.cfm?source=history/secondwar/atlantic/atlfact>
- C0-057 *Warm-ups*. (2006). Retrieved 2 October 2006, from <http://www.marthajefferson.org/warmup.php>.
- C0-058 *Running Exercises*. (2006). Retrieved 2 October 2006, from <http://www.physionline.co.za/conditions/article/asp?id=46>.
- C0-059 *Exercise Programme for Squash, Tennis, Softball, Handball*. (2006). Retrieved 2 October 2006, from <http://physionline.co.za/conditions/article.asp?id=49>.
- C0-060 *Exercises*. (2006). Retrieved 2 October 2006, from <http://www.2protect.com/work3b.htm>.
- C0-061 *Stretch Your Limits: A Smart Guide To Stretching for Fitness*. (2006). Retrieved 2 October 2006, from <http://www.in-motion.ca/walkingworkout/plan/flexibility/>.
- C0-063 *Whirlpool*. (2006). Retrieved 2 October 2006, from [http://eventwise.co.uk/asp/Game\\_286.asp?CategoryId=69](http://eventwise.co.uk/asp/Game_286.asp?CategoryId=69).
- C0-064 *Pool Colours*. (2006). Retrieved 2 October 2006, from [http://eventwise.co.uk/asp/Game\\_285.asp?CategoryId=69](http://eventwise.co.uk/asp/Game_285.asp?CategoryId=69).
- C0-065 *Sharks and Minnows*. (2006). Retrieved 2 October 2006, from [http://eventwise.co.uk/asp/Game\\_284.asp?CategoryId=69](http://eventwise.co.uk/asp/Game_284.asp?CategoryId=69).
- C0-070 *Families of Instruments*. (2006). Retrieved 2 October 2006, from <http://empire.k12.ca.us/Capistrano/Mike/capmusic/instruments/intstruments.htm>.
- C0-071 *Flute*. (2006). Retrieved 2 October 2006, from <http://www.wclipart.com/music/instruments/flute.png>.
- C0-072 *Instrument Care*. (2006). Retrieved 2 October 2006, from <http://westyorkband.org/instrumentcare.html>.
- C0-073 *Lyra Glockenspiel*. (2006). Retrieved 2 October 2006, from <http://hyperphysics.phy-astr.gsu.edu/hbase/music/glock.html>.
- C0-075 *BT-100 Biathlon Target*. (2006). Retrieved 16 November 2006, from [www.devinmfg.com/targets1.htm](http://www.devinmfg.com/targets1.htm).



- C0-078 *Clothing Info: Layering Your Clothing.* (2006). Retrieved 12 February 2007, from [http://www.mec.ca/Main/content\\_text.jsp?FOLDER%3C%Efolder\\_id=2534374302881786&CONTENT%3C%Ecnt\\_id+10134198673220739&bmUID=1176745629068](http://www.mec.ca/Main/content_text.jsp?FOLDER%3C%Efolder_id=2534374302881786&CONTENT%3C%Ecnt_id+10134198673220739&bmUID=1176745629068).
- C0-079 *Outdoor Fitness Expert Advice.* (2006). Retrieved 12 February 2007, from <http://www.rei.com/online/store/LearnShareArticlesList?categoryId=Crosstrain>.
- C0-080 *Fitness & Performance.* (2006). Retrieved 12 February 2007, from [http://www.coolrunning.com/engine/2/2\\_1index.shtml](http://www.coolrunning.com/engine/2/2_1index.shtml).
- C0-081 *Fact Sheet: Rights and Responsibilities.* (2006). Retrieved 2 February 2007, from [www.cic.gc.ca/english/newcomer/fact\\_08e.html](http://www.cic.gc.ca/english/newcomer/fact_08e.html).
- C0-081 *Rights and Responsibilities of Canadian Citizenship.* (2006). Retrieved 4 April 2007, from <http://cic.gc.ca/English/citizen/rights-fs.html>.
- C0-082 *Biathlon Canada.* (2006). Retrieved 12 February 2007, from <http://www.biathloncanada.ca>.
- C0-090 *Code of Enviromental Stewardship.* (2006). Retrieved 2 February 2007, from [www.ns.ec.gc.ca/g7/code.html](http://www.ns.ec.gc.ca/g7/code.html).
- C0-091 *Household Tips to Reduce Greenhouse Gas Effect.* (2006). Retrieved 19 February 2007, from [www.city.red-deer.ab.ca/Keeping+You+Informed/Enviromental+Tips+and+Initiatives/Household+Tips+to+Reduce+Greenhouse+Gas+Emissions.htm](http://www.city.red-deer.ab.ca/Keeping+You+Informed/Enviromental+Tips+and+Initiatives/Household+Tips+to+Reduce+Greenhouse+Gas+Emissions.htm).
- C0-092 *Household Hazardous Waste.* (2006). Retrieved 19 February 2007, from [www.city.red-deer.ab.ca/Keeping+You+Informed/Enviromental+Tips+and+Initiatives/Household+Tips+to+Reduce+Greenhouse+Gas+Emissions.htm](http://www.city.red-deer.ab.ca/Keeping+You+Informed/Enviromental+Tips+and+Initiatives/Household+Tips+to+Reduce+Greenhouse+Gas+Emissions.htm).
- C0-094 *High-level Radioactive Waste in Canada.* (2006). Retrieved 19 February 2007, from <http://dsp-psd.pwgsc.gc.ca/Collection-R/LoPBdP/BP/bp338-e.htm>.
- C0-096 *Target Heart Rate.* (2006). Retrieved 20 February 2007, from <http://www.cardiovascularservices.org/HeartRate.html>.
- C0-097 *Target Heart Rate Chart.* (2006). Retrieved 20 February 2007, from [http://www.active2010.ca/index.cfm?fa=english\\_tools.target](http://www.active2010.ca/index.cfm?fa=english_tools.target).
- C0-099 *Manitoba Marithon: Training-easy Run Pacing.* (2006). Retrieved 20 February 2007, from [http://www.manitobamarithon.mb.ca/training\\_pacing.aspx](http://www.manitobamarithon.mb.ca/training_pacing.aspx).
- C0-103 *Free Space Shuttle Clip Art.* (2006). Retrieved 21 February 2007, from <http://www.freefever.com/freeclipart/spaceshuttle.html>.
- C0-107 *Canada's Food Guide: My Food Guide.* (2006). Retrieved 20 February 2007, from [http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/myguide-monguide/index\\_e.html](http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/myguide-monguide/index_e.html).
- C0-109 *Moon.* (2006). Retrieved 21 February 2007, from <http://luna.eightplants.net/>.
- C0-110 *Moon.* (2006). Retrieved 21 February 2007, from [http://www.h2ouniversity.org/html/K2\\_facts\\_earth.html](http://www.h2ouniversity.org/html/K2_facts_earth.html).
- C0-119 *Convoys.* (2006). Retrieved 23 February 2007, from <http://www.junobeach.org/e/4/can-tac-con-e.htm>.

- C0-121 *Hinterland Who's Who Species.* (2006). Retrieved 26 February 2007, from <http://www.hww.ca/hww.asp?id=1&pid=0>.
- C0-123 *Seasonal Safety Tips: Be Causal, Not a Casualty September 2004.* (2006). Retrieved 27 February 2007, from [www.sja.ca/english/safety\\_tips/safety\\_tips/september.asp](http://www.sja.ca/english/safety_tips/safety_tips/september.asp).
- C0-127 *In Motion.* (2006). Retrieved 12 March 2007, from <http://www.winnipegmotion.ca/prevention>.
- C0-128 *Facts and Stats.* (2006). Retrieved 12 March 2007, from [http://cahperd.ca/eng/advocacy/facts/facts\\_stats.cfm](http://cahperd.ca/eng/advocacy/facts/facts_stats.cfm).
- C0-129 *Clips on Sugars: For Up-to-date Information on Sugars in Healthy Eating.* (2006). Retrieved 12 March 2007, from <http://www.sugar.ca>.
- C0-131 *Craig Kielburger Biography.* (2006). Retrieved 13 March 2007, from <http://www.freethechildren.com/aboutus/craigmarc/craigkielburger.htm>.
- C0-132 (2006). Retrieved 13 March 2007, from [www.kidzworld.com/article/1065-teen-protects-white-bear](http://www.kidzworld.com/article/1065-teen-protects-white-bear).
- C0-136 *RCMP Recruiting – Physical Abilities Requirement Evaluation (PARE).* (2006). Retrieved 21 March 2007, from [http://www.rcmp-grc.ca/recruiting/pare\\_partb\\_e.htm](http://www.rcmp-grc.ca/recruiting/pare_partb_e.htm).
- C0-137 *Provincial Trees.* (2006). Retrieved 22 March 2007, from <http://www.cfl.scf.mcan.gc.ca/impecidecf/hostress/provincialtrees.html>.
- C0-138 *Food Section.* (2006). Retrieved 29 March 2007, from <http://www.clipart.com/food/index.html>.
- C0-141 *Victory in the Atlantic.* (2006). Retrieved 30 March 2007, from <http://www.junobeach.org>.
- C0-146 *Runner's World: Beginner's: Training: First Steps.* (2006). Retrieved 18 April 2007, from <http://www.runnersworld.com/article/printer/1,7124,s6-380-381-386-678-0,0.html>.
- C0-147 *MyDietExercise.com: Wind Sprint Your Way to Fitness.* (2006). Retrieved 17 April 2007, from <http://www.healthcentral.com/diet-exercise/fitness-survival-guides-81076-137.html>.
- C0-148 *International Biathlon Union.* (2006). Retrieved 18 April 2007, from <http://www.biathlonworld.com>.
- C0-151 *Biathlon Style Airgun Target.* (2006). Retrieved 15 February 2007, from <http://www.devinmfg.com/targets1.html>.
- C0-152 *Slice 'n Dice Description of Team Building Activities.* (2006). Retrieved 26 April 2007, from <http://wilderdom.com/games/descriptions/SliceNDice.html>.
- C0-153 *Myriam Bedard.* (2006). Retrieved 30 April 2007, from <http://www.collectionscanada.ca/women/002026-223-e.html>.
- C0-154 *Moving on the Spot: Fun and Physical Activity: A Collection of 5 Minute Stretch and Movement Sessions.* (2006). Retrieved 26 October 2006, from <http://www.lin.ca/resource/html/dn3.htm#1>.
- C3-037 *Space Exploration.* (2007). Retrieved 25 May 2006, from <http://www.space.gc.ca/asc/eng/exploration/exploration.asp>.
- C3-050 *Canadian Forces Aircraft.* (2007). Retrieved 20 November 2006, from [http://www.airforce.gc.ca/equip/equip1\\_e.asp](http://www.airforce.gc.ca/equip/equip1_e.asp).

- C3-054 *Make a Helicopter.* (2007). Retrieved 20 November 2006, from [http://www.teacherresourcesgalore.ca/physics\\_files/helicopter.doc](http://www.teacherresourcesgalore.ca/physics_files/helicopter.doc).
- C3-055 *Helicopters.* (2007). Retrieved 20 November 2006, from <http://alex.edfac.usyd.edu.au/blp/website/Machan/heli.htm>.
- C3-056 *Helicopters.* (2007). Retrieved 20 November 2006, from <http://www.centennialof flight.gov/essay/Dictionary/helicopter/DI127.htm>.
- C3-061 *A History of Helicopter Flight.* (2007). Retrieved 20 November 2006, from <http://www.glue.umd.edu/~leishman/Aevo/history.html>.
- C3-077 *History.* (2007). Retrieved February 19, 2007, from [www.aircadetleague.com/General/history\\_e.html](http://www.aircadetleague.com/General/history_e.html).
- C3-078 *The Invasion Threat to Britain and the Battle of Britain.* (2007). Retrieved 16 February 2007, from [www.warmuseum.ca/cwm/newspapers/operations/Britain\\_e.html](http://www.warmuseum.ca/cwm/newspapers/operations/Britain_e.html).
- C3-079 *The Battle of the Atlantic.* (2007). Retrieved 9 February 2007, from [www.warmuseum.ca/cwm/newspapers/operations/atlantic\\_e.html](http://www.warmuseum.ca/cwm/newspapers/operations/atlantic_e.html).
- C3-080 *Remembrance Day. Armistice Day.* (2007). Retrieved 19 February 2007, from [www.warmuseum.ca/cwm/remember/armisticeday\\_e.html](http://www.warmuseum.ca/cwm/remember/armisticeday_e.html).
- C3-081 *Remembrance Day. Armistice Day Becomes Remembrance Day.* (2007). Retrieved 19 February 2007, from [www.warmuseum.ca/cwm/remember/1931remembrance\\_e.html](http://www.warmuseum.ca/cwm/remember/1931remembrance_e.html).
- C3-082 *The Five at Canadian Warplane Heritage Museum.* (2007). Retrieved 20 February 2007, from [www.richthistle.com/article\\_include.php?l=912\\_into\\_the\\_blue.php](http://www.richthistle.com/article_include.php?l=912_into_the_blue.php).
- C3-083 *D-Day and the Normandy Campaigns.* (2007). Retrieved 16 February 2007, from <http://search.civilization.ca/dwesearch.asp?showDoc=130985&page=1&resultsetToken=IKT000021353.1178603944&Lang=en&docType=>.
- C3-084 *Ultra-efficient Engine Technology.* (2007). Retrieved 21 February 2007, from [www.ueet.nasa.gov/Engines101.html#Aeronautics](http://www.ueet.nasa.gov/Engines101.html#Aeronautics).
- C3-086 *Internal Combustion Engine.* (2007). Retrieved 21 February 2007, from [www.grc.nasa.gov/WWW/K-12/airplane/icengine.html](http://www.grc.nasa.gov/WWW/K-12/airplane/icengine.html).
- C3-087 *Propulsion Index.* (2007). Retrieved 21 February 2007, from [www.grc.nasa.gov/WWW/K-12/airplane/shortp.html](http://www.grc.nasa.gov/WWW/K-12/airplane/shortp.html).
- C3-088 *Beginner's Guide to Rockets.* (2007). Retrieved 21 February 2007, from <http://exploration.grc.nasa.gov/education/rocket/bgmr.html>.
- C3-090 *Virtual Skies: Aeronautics: Tutorial.* (2007). Retrieved 20 April 2007, from <http://virtualskies.arc.nasa.gov/aeronautics/tutorial/intro.html>.
- C3-093 *Observatorium: The Parts of a Wind Tunnel.* (2007). Retrieved 12 February 2007, from [http://observe.arc.nasa.gov/nasa/aero/tunnel/tunnel\\_parts.html](http://observe.arc.nasa.gov/nasa/aero/tunnel/tunnel_parts.html).
- C3-094 *COLDITZ Gateway to Saxony: Das Tor zu Sachsen.* (2007). Retrieved 23 February 2007, from [www.colditz-4c.com/glider.htm](http://www.colditz-4c.com/glider.htm).

- C3-095 *The Memory Project*. (2007). Retrieved 20 February 2007, from [www.thememoryproject.com/index.asp](http://www.thememoryproject.com/index.asp).
- C3-097 *Air Traffic Controllers*. (2007). Retrieved 9 February 2007, from [www.bls.gov/oco/ocos/08.htm](http://www.bls.gov/oco/ocos/08.htm).
- C3-098 *About CATSA*. (2007). Retrieved 19 February 2007, from [www.catsa-acsta.gc.ca/english/about\\_propos/mandat.shtml](http://www.catsa-acsta.gc.ca/english/about_propos/mandat.shtml).
- C3-099 *Airport Ground Control Equipment and Systems*. (2007). Retrieved 21 February 2007, from [www.airportinnovation.com/airport\\_ground.php](http://www.airportinnovation.com/airport_ground.php).
- C3-100 *China's Space Rockets*. (2007). Retrieved 26 February 2007, from [www.spacetoday.org/China/ChinaRockets.html](http://www.spacetoday.org/China/ChinaRockets.html).
- C3-102 *Index of/en/Corporate Profiles*. (2007). Retrieved 22 February 2007, from [www.camc.ca/en/CorporateProfiles/](http://www.camc.ca/en/CorporateProfiles/).
- C3-103 *Legendary Aviators and Aircraft of World War One*. (2007). Retrieved 26 February 2007, from [www.acepilots.com/wwi/main.html](http://www.acepilots.com/wwi/main.html).
- C3-104 *Non-verbal Communication*. (2007). Retrieved 22 February 2007, from [www.dest.gov.au/nwt/hospitality/comm\\_non.htm](http://www.dest.gov.au/nwt/hospitality/comm_non.htm).
- C3-106 *Rocket Parts*. (2007). Retrieved 26 February 2007, from <http://exploration.grc.nasa.gov/education/rocket/rockpart.html>.
- C3-107 *Programs and Courses*. (2007). Retrieved 8 February 2007, from [www.bcit.ca/study/programs](http://www.bcit.ca/study/programs).
- C3-110 *Space on Earth: How Technology Transfer Benefits Humanity*. (2007). Retrieved 27 February 2007, from [www.space.com/business/technology/technology/tech\\_hallofame\\_030101-2.html](http://www.space.com/business/technology/technology/tech_hallofame_030101-2.html).
- C3-111 *Space Survival Challenge*. (2007). Retrieved 27 February 2007, from [www.lakelandschool.org/EOTECH/leslie/space.htm](http://www.lakelandschool.org/EOTECH/leslie/space.htm).
- C3-112 *Roscosmos: Space Programs: Rocket Families*. (2007). Retrieved 26 February 2007, from [www.roscosmos.ru/RoketsMain.asp](http://www.roscosmos.ru/RoketsMain.asp).
- C3-113 *ESA Launchers: Launch Vehicles*. (2007). Retrieved 26 February 2007, from [www.esa.int/esaCP/index.html](http://www.esa.int/esaCP/index.html).
- C3-114 *Countdown! NASA Launch Vehicle and Facilities*. (2007). Retrieved 27 February 2007, from <http://www-pao.ksc.nasa.gov/kscpao/nasafact/count1.htm#nasa>.
- C3-115 *CAMC-IMLT*. (2007). Retrieved 27 February 2007, from <http://www.camc-implt.ca/>.
- C3-118 *Wilderness Survival*. (2007). Retrieved 9 March 2007, from <http://www.wilderness-survival.net/chp5.php>.
- C3-119 *Simple Survival*. (2007). Retrieved 9 March 2007, from [www.simplesurvival.net/dressing.htm](http://www.simplesurvival.net/dressing.htm).
- C3-120 *Imagine the Power PT6T/T400 Product Overview*. (2007). Retrieved 18 March 2007, from [www.pwc.ca/en/3\\_0/3\\_0\\_3/3\\_0\\_3\\_3\\_1.asp](http://www.pwc.ca/en/3_0/3_0_3/3_0_3_3_1.asp).
- C3-121 *Return to Flight: Space Shuttle Main Engines*. (2007). Retrieved 18 March 2007, from [www.nasa.gov/returntoflight/system/system\\_SSME.html](http://www.nasa.gov/returntoflight/system/system_SSME.html).

- C3-123 *The Sopwith Triplane.* (2007). Retrieved 20 March 2007, from [www.aviation-history.com/sopwith/triplane.html](http://www.aviation-history.com/sopwith/triplane.html).
- C3-124 *Bristol F. 2b Fighter.* (2007). Retrieved 20 March 2007, from [www.theaerodrome.com/aircraft/gbritain/bristol\\_f2b.php](http://www.theaerodrome.com/aircraft/gbritain/bristol_f2b.php).
- C3-125 *Consolidated B-24 Liberator Bomber.* (2007). Retrieved 20 March 2007, from [www.beehivehockey.com/photo\\_18liberator.htm](http://www.beehivehockey.com/photo_18liberator.htm).
- C3-127 *Avro Lancaster.* (2007). Retrieved 22 March 2007, from [http://secure.warplane.com/pages/aircraft\\_lancaster.html](http://secure.warplane.com/pages/aircraft_lancaster.html).
- C3-128 *Avro Lancaster.* (2007). Retrieved 22 March 2007, from [www.rcaf.com/aircraft/bombers/lancaster/index.php?name=lancaster](http://www.rcaf.com/aircraft/bombers/lancaster/index.php?name=lancaster).
- C3-130 *Sopwith Triplane.* (2007). Retrieved 22 March 2007, from [www.aviation.technomuses.ca/collections/artifacts/aircraft/sopwithtriplane.shtml](http://www.aviation.technomuses.ca/collections/artifacts/aircraft/sopwithtriplane.shtml).
- C3-131 *League-Policy & Produces – Manual Background and Organization.* (2007). Retrieved 30 March 2007, from [www.aircadetleague.com/League/policy\\_e.html](http://www.aircadetleague.com/League/policy_e.html).
- C3-133 *Marshalling Signals.* (2007). Retrieved 26 February 2007, from [www.esso.ca/Canada-English/Products/Aviation/PS\\_A\\_Marshalling.asp](http://www.esso.ca/Canada-English/Products/Aviation/PS_A_Marshalling.asp).
- C3-134 *Helicopter Signals.* (2007). Retrieved 26 February 2007, from [www.esso.ca/Canada-English/Products/Aviation/PS\\_A\\_Helicopter.asp](http://www.esso.ca/Canada-English/Products/Aviation/PS_A_Helicopter.asp).
- C3-135 *Two-way Radio Communication Failure.* (2007). Retrieved 18 February 2007, from [http://virtualskies.arc.nasa.gov/communication/youDecide/AIM6\\_4\\_1.html](http://virtualskies.arc.nasa.gov/communication/youDecide/AIM6_4_1.html).

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## CHAPTER 3

### CADET EVALUATION

#### PURPOSE

1. The purpose of this chapter is to outline the specific evaluation requirements for the Proficiency Level Two Program of the Royal Canadian Air Cadets.

#### LEARNER EVALUATION

2. “Learner evaluation is the assessment of progress made by participants during an instructional program (formative evaluation) and of their achievement at the end of the program (summative evaluation).” (A-P9-050-000/PT-Z01, *Manual of Individual Training and Education, Volume 1 (1), Glossary*)

#### DEVELOPMENTAL PERIODS

3. A developmental period (DP) is a time frame, during a cadet’s progression through the CP, in which the cadet participates in training and is provided opportunities to develop desired knowledge, skills and attitudes that support the aims of the CP and contribute to the achievement of the CP outcomes. DPs are distinguished by progressive training levels and associated learning objectives ensuring each level of training will be relevant, achievable and age-appropriate for the target audience.

4. The CP is conducted across the three adolescent DPs applicable to the CP population. Outlined in each DP are specific philosophies and approaches to learning which impact training and evaluation. Proficiency Level Two training and evaluation are participatory in nature. A basic overview of the DP characteristics is located at [Annex A](#).

#### PROFICIENCY LEVEL TWO CADET EVALUATION

5. The intent of Proficiency Level Two cadet evaluation is to measure the extent of cadet participation in the scheduled mandatory and complementary training and make an assessment by comparing the level of participation to the minimum standard required for qualification.

#### PROFICIENCY LEVEL TWO QUALIFICATION STANDARD

6. The minimum standard for Proficiency Level Two Program qualification is:
- a. sixty percent overall attendance in all scheduled mandatory and complementary training as calculated by the squadron; and
  - b. successful completion of each PO as outlined in the Proficiency Level Two Program Qualification Record located at [Annex B](#).

#### ADDITIONAL CADET EVALUATIONS

7. All cadets must successfully complete the Cadet Air Rifle Handling Test, located at A-CR-CCP-801/PG-001, *Royal Canadian Air Cadets, Proficiency Level One Qualification Standard and Plan*, Chapter 3, Annex C, prior to participating in familiarization and recreational marksmanship activities.

8. No additional cadet evaluations (i.e. theory tests, performance checks, etc.) are to be used to determine Proficiency Level Two qualification eligibility. Therefore, these national standards are not to be supplemented with regional and/or local standards.

## **MONITORING CADET PROGRESS**

9. Cadets must meet the standard of behaviour and conduct expected from all cadets. The course officer during cadet interviews and personal counselling should adopt a proactive approach towards difficulties.

10. Frequent absences from mandatory and complementary training that could result in the cadet not meeting the minimum standard for Proficiency Level Two qualification must be addressed in accordance with CATO 15-22, *Conduct and Discipline – Cadets*.

## **REPORTING CADET PROGRESS**

11. The progress of each cadet shall be reported using the Proficiency Level Two Program Qualification Record, located at [Annex B](#), which is also used to determine successful completion of the Proficiency Level Two Program. The results shall be recorded on DND 2399, Cadet Personnel Record.

## **CADETS NOT MEETING THE MINIMUM QUALIFICATION STANDARD**

12. Cadets who do not meet the minimum qualification standard shall be given a reasonable opportunity to complete the training missed. If, by the end of the training year, the cadet still has not successfully attained any PO, the squadron CO may waive the minimum qualification standard. When waiving any PO requirement, the squadron CO should consider the overall performance of the cadet and the legitimacy of their reason for failing to attain the PO. In granting a waiver, the CO must also consider the cadet's attendance and behaviour.

13. Any cadet for whom a waiver has been issued will not be granted the Proficiency Level Two Qualification, however, they will progress to Proficiency Level Three in the third year of their squadron membership. If a CO has decided to not grant a waiver based on attendance and/or behaviour, a cadet may be held back to repeat Proficiency Level Two.

14. Cadets who have been granted a waiver of the minimum qualification standard of Proficiency Level Two and have progressed to Proficiency Level Three in the third year of their squadron membership are expected to achieve the missing Proficiency Level Two Program PO requirements. To facilitate this, cadets can concurrently receive credit for activities completed in Proficiency Level Three as part of also achieving Proficiency Level Two.

## **PROFICIENCY LEVEL TWO CERTIFICATE OF QUALIFICATION**

15. The Cadet Certificate of Qualification, CF 558 (NSN 7530-21-870-7685), shall be awarded to each cadet upon successful completion of the Proficiency Level Two Program. Until cadets who have been waived from the minimum qualification standard have attained said standard, they shall not be granted the Cadet Certificate of Qualification.



CHARACTERISTICS OF CP DPs

DEVELOPMENTAL PERIOD (DP)	DEVELOPMENTAL PERIOD 1 (DP1)	DEVELOPMENTAL PERIOD 2 (DP2)	DEVELOPMENTAL PERIOD 3 (DP3)
AGES	12 to 14	15 to 16	17 to 18
YEARS	Y1 Y2	Y3 Y4	Y5+
DP OVERVIEW	Learning in the CP is designed around three progressive, DPs. The mental, physical, emotional, and social development of a cadet are considered in these age-appropriate DPs. The cadet develops and ultimately refines higher-level thinking skills (reasoning, reflective thinking, problem solving) as they progress through each DP.		
AGE-APPROPRIATE LEARNING	<b>EXPERIENCE-BASED</b>	<b>DEVELOPMENTAL</b>	<b>COMPETENCY</b>
DP DESCRIPTION	The cadet has well-developed automatic responses; however, the area of the brain that processes higher-level thinking is not yet mature. Effective learning is active and interactive with lots of practical experiences.	The cadet starts developing higher-level thinking skills such as problem-solving skills. Effective learning is interactive and practical, allowing cadets to start making decisions within their learning process.	The cadet is refining higher-level thinking skills. Effective learning is interactive and allows for increased individual responsibility and independent learning.
ASSESSMENT EXPECTATION	<b>PARTICIPATORY</b>	<b>BASELINE PROFICIENCY</b>	<b>ENHANCED PROFICIENCY</b>
ASSESSMENT PURPOSE	<ul style="list-style-type: none"> <li>Stimulation and maintenance of an enhanced interest in the CP.</li> </ul> <p><b>Note:</b> Exposing the cadet to a variety of training activities and learning opportunities with the assessment expectation focused on participation will help accomplish this.</p> <ul style="list-style-type: none"> <li>Exposure to a broad knowledge base and skill set.</li> </ul> <p><b>Note:</b> CSTC Summer 2 courses will begin to expose the cadet to some specific specialty areas, which will allow the cadet to discover possible areas of particular interest.</p>	<ul style="list-style-type: none"> <li>Development of a broad knowledge base and skill set as well as introducing reasoning proficiency.</li> <li>Ongoing determination and development of specific specialty areas of interest and capability.</li> <li>Recognition of enhanced proficiency achievement.</li> <li>Ongoing stimulation and maintenance of an enhanced interest in the CP.</li> </ul>	<ul style="list-style-type: none"> <li>Development of an enhanced knowledge, reasoning or skill proficiency in a targeted specialty area – related to interest, capability and cadet program requirements.</li> <li>Ongoing development of the broad knowledge base and skill set as well as reasoning proficiency.</li> <li>Ongoing recognition of enhanced proficiency achievement.</li> <li>Ongoing stimulation and maintenance of an enhanced interest in the CP.</li> </ul>

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**PROFICIENCY LEVEL TWO PROGRAM QUALIFICATION RECORD**

Cadet's Name: \_\_\_\_\_

Topic	PO	Performance Statement	PO Assessment		CO's Waiver
			Participated	Did Not Participate	
Citizenship	201	Identify the Role of an Environmentally Conscious Canadian Citizen			
Community Service	202	Perform Community Service			
Leadership	203	Demonstrate Leadership Attributes Within a Peer Setting			
Personal Fitness and Healthy Living	204	Update Personal Activity Plan			
Recreational Sports	205	Participate in Recreational Sports			
Air Rifle Marksmanship	206	Fire the Cadet Air Rifle During Recreational Marksmanship			
General Cadet Knowledge	207	Serve in an Air Cadet Squadron			
Drill	208	Execute Drill as a Member of a Squad			
Aviation History	230	Discussion Canadian Aviation History			
Principles of Flight	231	Explain Principles of Flight			
Propulsion	232	Identify Characteristics of Piston-Powered Aircraft			
Aerospace	240	Participate in Aerospace Activities			
Aerodrome Operations	260	Participate in Aerodrome Operations Activities			
Aircraft Manufacturing and Maintenance	270	Discuss Aircraft Manufacturing and Maintenance			
Aircrew Survival	290	Participate in a Field Exercise			

**Note:** The CO's waiver section requires initialling from the Squadron Commanding Officer when being applied.

<b>Proficiency Level Two Program Qualification Achieved</b>	<b>Yes</b>	
	<b>No</b>	

Trg O's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**PERFORMANCE OBJECTIVE (PO) REQUIRED STANDARDS**

<b>PO</b>	<b>Performance Statement</b>	<b>Abbreviated Standard</b>
201	Identify the Role of an Environmentally Conscious Canadian Citizen	The cadet identified the role of an environmentally conscious Canadian including the rights and responsibilities of a Canadian citizen and the Government of Canada's code of environmental stewardship.
202	Perform Community Service	The cadet participated in a community service activity.
203	Demonstrate Leadership Attributes Within a Peer Setting	The cadet demonstrated leadership attributes within a peer setting by positively contributing to a group, displaying a positive attitude toward learning, and being accountable for personal actions and choices.
204	Update Personal Activity Plan	The cadet updated their personal activity plan using the PACER test.
205	Participate in Recreational Sports	The cadet participated in a recreational sports activity.
206	Fire the Cadet Air Rifle During Recreational Marksmanship	The cadet participated in recreational marksmanship using the cadet air rifle.
207	Serve in an Air Cadet Squadron	Over the course of the training year, the cadet demonstrated an ability to recognize significant historical aspects related to the Royal Canadian Air Cadets, recognize the role of the local sponsor, and identify year two summer training opportunities.
208	Execute Drill as a Member of a Squad	The cadet executed drill as a member of a squad.
230	Discuss Canadian Aviation History	The cadet participated in a discussion on aviation history including the Battle of Britain, Remembrance Day, the Battle of the Atlantic and D-Day.
231	Explain Principles of Flight	The cadet correctly explained the principles of flight by identifying the four forces that act upon an aircraft, describing the production of lift, describing types of drag, describing aircraft axis movement, and describing aircraft control surfaces.

PO	Performance Statement	Abbreviated Standard
232	Identify Characteristics of Piston-Powered Aircraft	The cadet correctly identified characteristics of piston-powered aircraft including the types of engines, the components of an internal combustion engine, the four stroke cycle, and the functions of oil.
240	Participate in Aerospace Activities	The cadet participated in aerospace activities including current advancements in aerospace technology, inventing a space technology item and participating in a space survival scenario.
260	Participate in Aerodrome Operations Activities	The cadet participated in aerodrome operations activities including air traffic control and basic airport operations.
270	Discuss Aircraft Manufacturing and Maintenance	The cadet participated in discussions on aircraft manufacturing, maintenance and education and employment opportunities therein.
290	Participate in a Field Exercise	The cadet participated in a field exercise including building and lighting a signal fire, constructing a natural shelter, constructing a simple snare, constructing ground to air signals, practicing hiking techniques and operating a radio.

**Note:** The abbreviated standards are based on the lesson specifications detailed in Chapter 4.

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**CHAPTER 4**  
**PERFORMANCE OBJECTIVES AND LESSON SPECIFICATIONS**

**SECTION 1**

**PO 201 – IDENTIFY THE ROLE OF AN ENVIRONMENTALLY CONSCIOUS CANADIAN CITIZEN**

1. **Performance.** Identify the Role of an Environmentally Conscious Canadian Citizen.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Any conditions.
3. **Standard.** In accordance with specified references, the cadet shall identify the role of an environmentally conscious Canadian citizen, to include:
  - a. the rights and responsibilities of a Canadian citizen; and
  - b. the Government of Canada's *Code of Environmental Stewardship*.
4. **Remarks.** N/A.
5. **Complementary Material**
  - a. Complementary material associated with PO 201 is designed to enhance the cadet's knowledge of citizenship and environmental stewardship:
    - (1) EO C201.01 (Discuss Environmental Issues Relative to Canada);
    - (2) EO C201.02 (Tour a Local Municipal, Provincial or National Political Institution);
    - (3) EO C201.03 (Tour a Local Municipal, Provincial or National Environmental Facility);
    - (4) EO C201.04 (Participate in a Presentation Given by an Environmental Guest Speaker); and
    - (5) EO C201.05 (Participate in a Presentation Given by a Government Representative).
  - b. Complementary training associated with PO 201 is limited to a total of 11 periods, which may be conducted during sessions or on a supported day. Squadrons are not required to use all 11 periods.

**EO M201.01 – DISCUSS THE RIGHTS AND RESPONSIBILITIES OF A CANADIAN CITIZEN**

1. **Performance.** Discuss the Rights and Responsibilities of a Canadian Citizen.
2. **Conditions**
  - a. Given:
    - (1) handout of the rights and responsibilities of a Canadian citizen;
    - (2) supervision; and
    - (3) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with *Citizenship and Immigration Canada Fact Sheet: Rights and Responsibilities*, the cadet shall discuss the rights and the responsibilities of a Canadian citizen.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain the rights of a Canadian citizen, to include: <ol style="list-style-type: none"> <li>a. equality rights;</li> <li>b. democratic rights;</li> <li>c. legal rights;</li> <li>d. mobility rights;</li> <li>e. language rights; and</li> <li>f. minority language education rights.</li> </ol>	Interactive Lecture	10 min	C0-081
TP2	Explain the responsibilities of a Canadian citizen, to include: <ol style="list-style-type: none"> <li>a. understanding and obeying Canadian laws;</li> <li>b. participating in Canada's democratic political system;</li> <li>c. voting in elections;</li> <li>d. allowing other Canadians to enjoy their rights and freedoms; and</li> <li>e. appreciating and helping to preserve Canada's multicultural heritage.</li> </ol>	Interactive Lecture	5 min	C0-081
TP3	Conduct a group discussion where cadets decide which right or responsibility is the most important to them.	Group Discussion	10 min	



**5. Time**

a.	Introduction/Conclusion:	5 min
b.	Interactive Lecture:	15 min
c.	Group Discussion:	10 min
d.	Total:	30 min

**6. Substantiation**

- a. An interactive lecture was chosen for TP1 and TP2 to orient the cadets to the rights and responsibilities of a Canadian citizen, to generate an interest and to present basic material.
- b. A group discussion was chosen for TP3 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions, and feelings about the rights and responsibilities of a Canadian citizen.

7. **References.** C0-081 Citizenship and Immigration Canada. (2006). *Fact Sheet: Rights and Responsibilities*. Retrieved 2 February 2007, from [http://www.cic.gc.ca/english/newcomer/fact\\_08e.html](http://www.cic.gc.ca/english/newcomer/fact_08e.html).

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** Handout of the rights and responsibilities of a Canadian citizen located at A-CR-CCP-802/PF-001, Annex A.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**EO M201.02 – DISCUSS THE PRINCIPLES OF ENVIRONMENTAL STEWARDSHIP**

1. **Performance.** Discuss the Principles of Environmental Stewardship.
2. **Conditions**
  - a. Given:
    - (1) handout of the *Code of Environmental Stewardship*;
    - (2) supervision; and
    - (3) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facility or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall discuss the principles of environmental stewardship.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	<p>Explain the Government of Canada's <i>Code of Environmental Stewardship</i>, to include:</p> <ol style="list-style-type: none"> <li>a. incorporating environmental concerns in relevant decisions;</li> <li>b. ensuring environmental considerations are incorporated in purchasing practices;</li> <li>c. applying environmentally responsible practices in disposal;</li> <li>d. meeting or exceeding federal environmental laws;</li> <li>e. reusing, recycling and reducing waste; and</li> <li>f. improving the level of environmental awareness.</li> </ol>	Interactive Lecture	10 min	C0-090
TP2	<p>Explain that the CCM has a <i>Code of Environmental Stewardship</i> in CATO 11-08, <i>Environmental Protection and Stewardship</i>, to include:</p> <ol style="list-style-type: none"> <li>a. the definition of due diligence;</li> <li>b. that if a member of the CF does not comply with the Code they may be personally liable to cover financial loss or imprisonment; and</li> <li>c. that if a cadet does not comply with the Code they may be charged under the Youth Criminal Justice Act.</li> </ol>	Interactive Lecture	5 min	A0-039

TP	Description	Method	Time	Ref
TP3	Conduct a group discussion about environmental stewardship within the Cadet Program, to include: <ul style="list-style-type: none"> <li>a. reducing, reusing and recycling at the squadron; and</li> <li>b. improving environmental awareness:               <ul style="list-style-type: none"> <li>(1) at the squadron;</li> <li>(2) while at outdoor activities; and</li> <li>(3) within the community.</li> </ul> </li> </ul>	Group Discussion	10 min	

5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 5 min  |
| b. | Interactive Lecture:     | 15 min |
| c. | Group Discussion:        | 10 min |
| d. | Total:                   | 30 min |

6. **Substantiation**

- a. An interactive lecture was chosen for TP1 and TP2 to orient the cadets to the principles of environmental stewardship, generate an interest and present basic material.
- b. A group discussion was chosen for TP3 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions, and feelings about environmental stewardship.

7. **References**

- a. A0-039 CATO 11-08 D Cdts 3. (1997). *Environmental Protection and Stewardship*. Ottawa, ON: Department of National Defence.
- b. C0-090 Environment Canada. (2007). *Code of Environmental Stewardship*. Retrieved 2 February 2007 from <http://www.ns.ec.gc.ca/g7/code.html>.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** Handout of the *Code of Environmental Stewardship*.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**EO C201.01 – DISCUSS ENVIRONMENTAL ISSUES RELATIVE TO CANADA**

1. **Performance.** Discuss Environmental Issues Relative to Canada.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall discuss local, provincial/territorial and national environmental issues, to include:
  - a. recycling opportunities;
  - b. lowering greenhouse gas emissions; and
  - c. disposing of hazardous waste.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Conduct a group discussion on recycling opportunities in the local community, to include, the availability of: <ol style="list-style-type: none"> <li>a. aluminum can and bottle recycling;</li> <li>b. paper/cardboard recycling;</li> <li>c. battery recycling; and</li> <li>d. other recycling opportunities.</li> </ol>	Group Discussion	5 min	See Remarks para 11
TP2	Conduct a group discussion on suggestions for lowering greenhouse gas emissions locally, provincially/territorially or nationally, to include: <ol style="list-style-type: none"> <li>a. walking or taking public transit instead of driving a vehicle;</li> <li>b. avoiding unnecessary idling of a vehicle;</li> <li>c. driving a hybrid car;</li> <li>d. investing in a programmable thermostat;</li> <li>e. turning down the temperature in the house before going to sleep;</li> <li>f. replacing standard bulbs with fluorescent bulbs;</li> <li>g. turning off lights when not in the room;</li> </ol>	Group Discussion	10 min	C0-091

TP	Description	Method	Time	Ref
	h. tax incentives for towns and cities to create public transportation; i. researching and developing alternate fuels and energy sources; j. taxing; k. educating the public about greenhouse gas emissions; and l. having all governments employees use the ideas from the previous TP.			
TP3	Conduct a group discussion on local, provincial/territorial or national hazardous waste disposal sites, to include: a. a list of household hazard waste items; and b. disposal locations for: (1) nuclear waste; (2) biomedical waste; (3) household hazardous waste; and (4) chemical waste.	Group Discussion	10 min	C0-092 C0-093 C0-094

#### 5. Time

a. Introduction/Conclusion:	5 min
b. Group Discussion:	25 min
c. Total:	30 min

6. **Substantiation.** A group discussion was chosen for this lesson to allow the cadets to interact with their peers and share their knowledge, experiences, opinions, and feelings about environmental issues.

#### 7. References

- a. C0-091 The City Of Red Deer. (2007). *Household Tips to Reduce Greenhouse Gas Emissions*. Retrieved 19 February 2007 from <http://www.city.red-deer.ab.ca/Keeping+You+Informed/Environmental+Tips+and+Initiatives/Household+Tips+to+Reduce+Greenhouse+Gas+Emissions.htm>.
- b. C0-092 The City of Red Deer. (2007). *Household Hazardous Waste*. Retrieved 19 February 2007 from <http://www.city.red-deer.ab.ca/Keeping+You+Informed/Environmental+Tips+and+Initiatives/Household+Hazardous+Waste.htm>.
- c. C0-093 Industry Canada. (2007). *Canadian Company Capabilities*. Retrieved 19 February 2007 from <http://www.strategis.ic.gc.ca/app/ccs/search/navigate.do?language=eng&portal=1&subportal=&estimntNo=234567041421&profile=completeProfile>.
- d. C0-094 Depository Services Program. (2007). *High-Level Radioactive Waste in CANADA*. Retrieved 19 February 2007 from <http://www.dsp-psd.pwgsc.gc.ca/Collection-R/LoPBdP/BP/bp338-e.htm>.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flip chart/OHP) appropriate for the classroom/training area.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks.** References for TP1 can be found by investigating the website for your local, municipality, region and/or province/territory.

**EO C201.02 – TOUR A LOCAL MUNICIPAL, PROVINCIAL OR NATIONAL POLITICAL INSTITUTION**

1. **Performance.** Tour a Local Municipal, Provincial or National Political Institution.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: The squadron Commanding Officer will determine conditions suitable for this training.
3. **Standard.** The cadet shall tour a local municipal, provincial or federal political institution to gain an awareness of the role of political institutions in:
  - a. improving the level of environmental awareness; and
  - b. applying environmentally responsible waste disposal practices.
4. **Teaching Points.** The tour guide is asked to explain:
  - a. the rights of a Canadian citizen;
  - b. the responsibilities of a Canadian citizen; and
  - c. the government's role in:
    - (1) improving environmental awareness; and
    - (2) applying environmentally responsible waste disposal practices.
5. **Time**

a.	Introduction/Conclusion:	10 min
b.	Field Trip:	80 min
c.	Total:	90 min
6. **Substantiation.** A field trip was chosen for this lesson to reinforce the cadet's knowledge of material previously taught in EO M201.01 (Discuss the Rights and Responsibilities of a Canadian Citizen) and EO M201.02 (Discuss the Principles of Environmental Stewardship) through participation in a tour.
7. **References.** N/A.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.

11. **Remarks**

- a. Cadet squadron personnel are to determine whether a guide will escort the group or if an instructor from the squadron will be responsible for conducting the tour. If an instructor from the squadron will conduct the tour, the government's role in improving environmental awareness and applying environmentally responsible waste disposal practices are to be researched in advance.
- b. This field trip can be completed on a supported day or during a complementary session.
- c. There is no instructional guide for the lesson.



**EO C201.03 – TOUR A LOCAL MUNICIPAL, PROVINCIAL OR NATIONAL ENVIRONMENTAL FACILITY**

1. **Performance.** Tour a Local Municipal, Provincial or National Environmental Facility.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: The squadron Commanding Officer will determine conditions suitable for this training.
3. **Standard.** The cadet shall tour a local municipal, provincial or federal environmental facility to gain an awareness of environmental stewardship, to include:
  - a. improving the level of environmental awareness; and
  - b. applying environmentally responsible practices.
4. **Teaching Points.** The tour guide is asked to explain:
  - a. reducing;
  - b. reusing;
  - c. recycling; and
  - d. recovering.
5. **Time**

a.	Introduction/Conclusion:	10 min
b.	Field Trip:	80 min
c.	Total:	90 min
6. **Substantiation.** A field trip was chosen for the lesson to reinforce the cadet's knowledge of material previously taught in EO M201.02 (Discuss the Principles of Environmental Stewardship) through participation in a tour.
7. **References.** N/A.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. Cadet squadron personnel are to determine whether a guide will escort the group or if an instructor from the squadron will be responsible for conducting the tour. If an instructor from the squadron will conduct the tour, all teaching points are to be researched in advance.
  - b. This field trip can be completed on a supported day or during a complementary session.

- c. There is no instructional guide for the lesson.

**EO C201.04 – PARTICIPATE IN A PRESENTATION GIVEN BY AN ENVIRONMENTAL GUEST SPEAKER**

1. **Performance.** Participate in a Presentation Given by an Environmental Guest Speaker.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** The cadet shall participate in a presentation given by an environmental guest speaker to gain an awareness of environmental stewardship.
4. **Teaching Points.** The environmental guest speaker is asked to:
  - a. describe the environmental service or facility of which they are a member;
  - b. describe their duties;
  - c. explain the role of their service or facility within the community; and
  - d. facilitate a question and answer period.
5. **Time**

a.	Introduction/Conclusion:	10 min
b.	Interactive Lecture:	50 min
c.	Total:	60 min
6. **Substantiation.** An interactive lecture was chosen for this lesson to review, clarify, emphasize and summarize the teaching points.
7. **References.** N/A.
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. Required training aids should be determined by contacting the speaker prior to the presentation.
  - b. There is no instructional guide for the lesson.

**EO C201.05 – PARTICIPATE IN A PRESENTATION GIVEN BY A GOVERNMENT REPRESENTATIVE**

1. **Performance.** Participate in a Presentation Given by a Government Representative.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** The cadet shall participate in a presentation given by a government representative, to gain an awareness of environmental stewardship at the various levels of government.
4. **Teaching Points.** The government representative is asked to:
  - a. explain the decision-making process with regard to:
    - (1) improving environmental awareness;
    - (2) applying environmentally responsible practices in waste disposal; and
    - (3) reducing, reusing and recycling; and
  - b. facilitate a question and answer period.
5. **Time**

a. Introduction/Conclusion:	10 min
b. Interactive Lecture:	50 min
c. Total:	60 min
6. **Substantiation.** An interactive lecture was chosen for this lesson to review, clarify, emphasize and summarize the teaching points.
7. **References.** N/A.
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. Required training aids should be determined by contacting the speaker prior to the presentation.
  - b. There is no instructional guide for the lesson.

**SECTION 2**  
**PO 202 – PERFORM COMMUNITY SERVICE**

1. **Performance.** Perform Community Service.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Any conditions.
3. **Standard.** As a member of a team, the cadet will participate in a community service activity that:
  - a. provides a direct benefit to the community (e.g. support of a non-profit group's fundraising event, community cleanup, or trail maintenance project); and
  - b. promotes good citizenship.
4. **Remarks**
  - a. Squadrons are encouraged to participate in a community service activity that contributes to the conservation of the environment.
  - b. Community service may be conducted as nine periods during a supported day or over three sessions of three periods each.
  - c. The community service activity selected shall not have any partisan political association, or be seen to promote or support any single religious denomination or belief system.
  - d. Squadrons should consult their sponsor in the selection of community service activities.
  - e. The community service selected shall not directly benefit the cadet squadron or the cadet squadrons' sponsor.
5. **Complementary Material**
  - a. Complementary material associated with PO 202 is designed to provide opportunities for cadets to perform community service through a number of activities.
  - b. No new complementary training will be added in the Proficiency Level Two Program.
  - c. Some complementary training offered in the Proficiency Level One Program may be selected as complementary training in the Proficiency Level Two Program, specifically:
    - (1) EO C102.01 (Participate in a Ceremonial Parade); and
    - (2) EO C102.02 (Perform Community Service).
  - d. When selecting complementary material from Proficiency Level One Program, training staff will review the applicable performance objective, lesson specification, and instructional guide.

- e. Complementary training associated PO 202 is limited to a total of nine periods conducted during sessions or on a supported day. No more than three periods may be used in support of EO C102.01 (Participate in a Ceremonial Parade). Squadrons are not required to use all nine periods.

**EO M202.01 – PERFORM COMMUNITY SERVICE**

1. **Performance.** Perform Community Service.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Any conditions.
3. **Standard.** As a member of a team, the cadet shall participate in a community service activity that:
  - a. provides a direct benefit to the community (e.g. support of a non-profit group's fundraising event, community clean up, trail maintenance project); and
  - b. promotes good citizenship attributes.
4. **Teaching Points.** The community service activity should be structured as follows:
  - a. The cadets are to be briefed prior to the start of the activity, which may be given by a guest speaker from the community group being assisted, to include an explanation of:
    - (1) the objectives and importance of the activity;
    - (2) the resources that may be required to perform the activity;
    - (3) the set-up of the activity; and
    - (4) any safety guidelines that must be followed while performing the activity; and
  - b. Following participation in the activity, the cadets are to be debriefed, ideally by a guest speaker or specialist who was involved in the activity. They should be asked:
    - (1) how they felt about the activity;
    - (2) what they felt they accomplished;
    - (3) what benefit the community received from their participation; and
    - (4) how they can be more active citizens based on this experience.
5. **Time**

a.	Introduction:	15 min
b.	Experiential Learning:	255 min
c.	Total:	270 min
6. **Substantiation.** The experiential approach was chosen for this lesson as it allows the cadets to acquire new knowledge through a direct experience. This approach allows cadets to actively participate in their community and experience the positive outcomes that are derived from that participation. Cadets can then define that experience at a personal level, and through reflection on the experience, derive an understanding of how their individual efforts may benefit their community in future projects.

7. **References**

- a. A0-010 CATO 11-03 D Cdts 2. (2006). *Cadet Program Mandate*. Ottawa, ON: Department of National Defence.
- b. C0-014 The Royal Canadian Legion. (2002). *The Royal Canadian Legion: Responding to the Needs of Canadian Communities*. Retrieved 25 May 2006, from [http://www.legion.ca/asp/docs/about/community\\_e.asp](http://www.legion.ca/asp/docs/about/community_e.asp).
- c. C0-015 Kiwanis International. (2006). *About Kiwanis*. Retrieved 25 May 2006, from <http://www.kiwanis.org/about>.
- d. C0-016 Lions Club International. (2006). *Lions Clubs International History*. Retrieved 25 May 2006, from [http://www.lionsclubs.org/en/content/lions\\_history.shtml](http://www.lionsclubs.org/en/content/lions_history.shtml).
- e. C0-017 Rotary International. (2005). *About Rotary*. Retrieved 25 May 2006, from <http://www.rotary.org/aboutrotary/index.html>.
- f. C0-044 UNESCO. (2006). *Canadian Commission for UNESCO*. Retrieved 16 August 2006, from <http://www.unesco.ca>.

8. **Training Aids.** N/A.

9. **Learning Aids.** Appropriate equipment/material for the activity.

10. **Test Details.** There is no formal assessment of this EO. The instructor will confirm the cadets' comprehension of the material immediately following the activity by means of a debrief.

11. **Remarks**

- a. A sample listing of community based/oriented groups could include:
  - (1) The Trans Canada Trail;
  - (2) Local environmental groups;
  - (3) The Children's Wish Foundation of Canada;
  - (4) Hospital committees;
  - (5) Alzheimer Society of Canada;
  - (6) Canadian Cancer Society;
  - (7) Arthritis Society of Canada;
  - (8) Big Brothers Big Sisters of Canada;
  - (9) The Royal Canadian Legion;
  - (10) The Rotary Club;
  - (11) The Kinsmen Club;
  - (12) The Kiwanis Club;
  - (13) Lions Clubs International;
  - (14) Local food bank;



- (15) Canadian Red Cross;
  - (16) United Way of Canada; and
  - (17) The United Nations Educational, Scientific and Cultural Organization (UNESCO).
- b. Additional information should be obtained from the chosen group to assist the instructor in the development of the initial briefing, and to provide information, as required, for specific activities.
  - c. This activity may be conducted over a day (nine periods), or in three sessions (three periods x three occasions) based on local needs.
  - d. The community service activity selected shall not have any partisan political association, or be seen to promote or support any single religious denomination or belief system.
  - e. The community service selected shall not directly benefit the cadet squadron or the cadet squadrons' sponsor.
  - f. When developing the squadron's training plan, training staff are to review the similar instructional periods found in all levels of the training program, and are encouraged to pool resources between proficiency levels when possible.

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**SECTION 3****PO 203 – DEMONSTRATE LEADERSHIP ATTRIBUTES WITHIN A PEER SETTING**

1. **Performance.** Demonstrate Leadership Attributes Within a Peer Setting.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Any conditions.
3. **Standard.** In accordance with specified references, the cadet will demonstrate leadership attributes within a peer setting by:
  - a. positively contributing to a group;
  - b. displaying a positive attitude towards learning; and
  - c. being accountable for personal actions and choices.
4. **Remarks.** N/A.
5. **Complementary Material**
  - a. Complementary material associated with PO 203 is designed to enhance the cadet's ability to demonstrate leadership attributes:
    - (1) EO C203.01 (Record Entries in a Reflective Journal),
    - (2) EO C203.02 (Employ Problem Solving),
    - (3) EO C203.03 (Discuss Characteristics of a Leader),
    - (4) EO C203.04 (Participate in a Presentation Given by a Leader),
    - (5) EO C203.05 (Participate in Trust-Building Activities), and
    - (6) EO C203.06 (Participate in Problem-Solving Activities).
  - b. Complementary training associated with PO 203 is limited to a total of 11 periods, which may be conducted during sessions or on a supported day. Squadrons are not required to use all 11 periods.

**EO M203.01 – DISCUSS LEADERSHIP WITHIN A PEER SETTING**

1. **Performance.** Discuss Leadership Within a Peer Setting.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall discuss leadership within a peer setting.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain leadership within a peer setting, to include: <ol style="list-style-type: none"> <li>a. responsibilities of a Proficiency Level Two cadet, to include:               <ol style="list-style-type: none"> <li>(1) following the chain of command;</li> <li>(2) setting the example;</li> <li>(3) being firm, fair and friendly;</li> <li>(4) being respectful to superiors and subordinates;</li> <li>(5) being aware of safety hazards;</li> <li>(6) displaying initiative; and</li> <li>(7) setting goals; and</li> </ol> </li> <li>b. squadron specific Proficiency Level Two cadet responsibilities.</li> </ol>	Interactive Lecture	15 min	C0-134
TP2	Conduct a goal mapping activity by having the cadets record:	In-class Activity	10 min	C0-022 (pp. 39 to 42)

TP	Description	Method	Time	Ref
	a. short-term goals achievable at the squadron, such as: <ul style="list-style-type: none"> <li>(1) improving their uniform;</li> <li>(2) improving their drill;</li> <li>(3) attending all parade nights, etc.;</li> <li>(4) long-term goals for the training year, such as;               <ul style="list-style-type: none"> <li>(a) getting promoted;</li> <li>(b) achieving perfect attendance; and</li> <li>(c) attending summer training, etc.; and</li> </ul> </li> </ul> b. the steps the cadets must take to achieve these goals.			

#### 5. Time

a. Introduction/Conclusion:	5 min
b. Interactive Lecture:	15 min
c. In-class Activity:	10 min
d. Total:	30 min

#### 6. Substantiation

- a. An interactive lecture was chosen for TP1 to orient the cadets to junior leadership, to generate interest and present basic material.
- b. An in-class activity was chosen for TP2 as an interactive way to provoke thought, stimulate an interest among cadets and present leadership within a peer setting.

#### 7. References

- a. C0-022 (ISBN 0-02864-207-4) Cole, K. (2002). *The Complete Idiot's Guide to Clear Communication*. Indianapolis, IN: Alpha Books.
- b. C0-134 (ISBN 0-7852-7440-5) Maxwell, J. (1999). *The 21 Indispensable Qualities of a Leader: Becoming the Person Others Will Want to Follow*. Nashville, TN: Thomas Nelson Publishers.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** Goal mapping template located at A-CR-CCP-802/PF-001, Annex A.

10. **Test Details.** N/A.

11. **Remarks.** The list of responsibilities in TP1 is not exhaustive. For each squadron Proficiency Level Two cadet responsibilities may vary.

**EO M203.02 – DISCUSS THE PRINCIPLES OF LEADERSHIP**

1. **Performance.** Discuss the Principles of Leadership.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall discuss the principles of leadership.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Discuss the principles of leadership, to include: <ol style="list-style-type: none"> <li>a. leadership is influence;</li> <li>b. influence can be positive or negative; and</li> <li>c. leadership can create opportunities in life.</li> </ol>	Interactive Lecture	5 min	C0-112 (pp. 1 to 5)
TP2	Share brief narratives of youth who have influenced the environment or their community in a positive way and created opportunity for their future or the future of others.	Interactive Lecture	10 min	C0-113 (pp. 103 and 107) C0-131 C0-132
TP3	Discuss a peer leader who has influenced the environment or the community in a positive way.	Group Discussion	10 min	

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Interactive Lecture: 15 min
  - c. Group Discussion: 10 min
  - d. Total: 30 min
6. **Substantiation**
  - a. An interactive lecture was chosen for TP1 and TP2 to orient the cadets to the principles of leadership, to generate interest and to present basic material.
  - b. A group discussion was chosen for TP3 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions and feelings about leaders who display positive influence.

**7. References**

- a. A0-010 CATO 11-03 D Cdts 2. (2006). *Cadet Program Mandate*. Ottawa, ON: Department of National Defence.
  - b. C0-112 (ISBN 0-8407-6744-7) Maxwell, J. C. (1993). *Developing the Leader Within You*. Nashville, Tennessee: Thomas Nelson Inc. Publishers.
  - c. C0-113 (ISBN 1-882664-12-4) Karnes, F. A. & Bean, S. M. (1995). *Leadership for Students: A Practical Guide for Ages 8-18*. Waco, Texas: Prufrock Press.
  - d. C0-131 *Free the Children*. (2007). Craig Kielburger Biography. Retrieved 13 March 2007, from <http://www.freethechildren.com/aboutus/craigmarc/craigkielburger.htm>.
  - e. C0-132 Kidz World. (2007). *Teen Protects White Bear*. Retrieved 13 March 2007, from <http://www.kidzworld.com/article/1065-teen-protects-white-bear>.
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
  9. **Learning Aids.** Narratives of youth who have positively influenced the environment or their community.
  10. **Test Details.** N/A.
  11. **Remarks.** Instructors are encouraged to research recent newsworthy articles of youth in the area that have positively influenced the environment or their community, to share as in-class stories.

**EO M203.03 – DISCUSS EFFECTIVE COMMUNICATION IN A PEER SETTING**

1. **Performance.** Discuss Effective Communication in a Peer Setting.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall discuss effective communication in a peer setting.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Discuss how communication is fundamental to influencing others, to include: <ol style="list-style-type: none"> <li>a. effective communication as a skill;</li> <li>b. aspects of non-verbal communication; and</li> <li>c. sending, receiving, and responding to messages.</li> </ol>	Interactive Lecture	10 min	C0-115 (pp. 43 and 44) C0-144 (p. 18)
TP2	Explain the three styles of communication, to include: <ol style="list-style-type: none"> <li>a. aggressive communication;</li> <li>b. passive communication; and</li> <li>c. assertive communication.</li> </ol>	Interactive Lecture	5 min	C0-022 (pp. 211 and 212)
TP3	Discuss assertive communication, to include: <ol style="list-style-type: none"> <li>a. using “I” statements; and</li> <li>b. active listening skills.</li> </ol>	Interactive Lecture	10 min	C0-022 (pp. 230 to 234) C0-144 (p. 13)

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Interactive Lecture: 25 min
  - c. Total: 30 min
6. **Substantiation.** An interactive lecture was chosen for this lesson to orient the cadets to effective communication in a peer setting, to generate interest and to present basic material.



**7. References**

- a. C0-022 (ISBN 0-02864-207-4) Cole, K. (2002). *The Complete Idiots Guide to Clear Communications*. USA: Pearson Education, Inc.
- b. C0-115 (ISBN 0-7879-4059-3) Van Linden, J. A. & Fertman, C. I. (1998). *Youth Leadership*. San Francisco, California: Jossey-Bass Inc.
- c. C0-144 (ISBN TBA) Colver, E. & Reid, M. (2001). *Peacebuilders 2: Peer Helping*. Ottawa, ON: YouCAN.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**EO M203.04 – DEMONSTRATE POSITIVE GROUP DYNAMICS**

1. **Performance.** Demonstrate Positive Group Dynamics.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, and while in a peer group setting, the cadet shall demonstrate positive group dynamics, to include:
  - a. contributing to group goals;
  - b. exhibiting trust in the group;
  - c. creating a safe environment for others to share their opinions;
  - d. following the leader;
  - e. finishing the task;
  - f. displaying esprit de corps; and
  - g. appreciating others within the group.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Discuss positive group dynamics.	Group Discussion	10 min	
TP2	Explain how to display positive group dynamics, by: <ol style="list-style-type: none"> <li>a. contributing to group discussions by providing input;</li> <li>b. motivating yourself;</li> <li>c. ensuring your group goals are consistent with the aims of the CCM;</li> <li>d. trying new things;</li> <li>e. being sensitive to other points of view;</li> <li>f. knowing your teammates' strengths and weaknesses;</li> <li>g. increasing your self-confidence through positive self-talk;</li> <li>h. being cooperative;</li> </ol>	Interactive Lecture	25 min	C0-028 C0-114 (p. 12) C0-115

TP	Description	Method	Time	Ref
	<ul style="list-style-type: none"> <li>i. resolving conflicts as quickly as possible at the lowest and most appropriate level; and</li> <li>j. celebrating successes.</li> </ul>			
TP3	Demonstrate positive group dynamics.	In-class Activity	15 min	

5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 10 min |
| b. | Group Discussion:        | 10 min |
| c. | Interactive Lecture:     | 25 min |
| d. | In-class Activity:       | 15 min |
| e. | Total:                   | 60 min |

6. **Substantiation**

- a. A group discussion was chosen for TP1 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions, and feelings about positive group dynamics.
- b. An interactive lecture was chosen for TP2 to orient the cadets to positive group dynamics, to generate interest and to present basic material.
- c. An in-class activity was chosen for TP3 as an interactive way to provoke thought and stimulate interest among cadets.

7. **References**

- a. C0-028 (ISBN 0-07-046513-4) Newstrom, J. & Scannell, E. (1998). *The Big Book of Team Building Games*. USA: McGraw-Hill Companies.
- b. C0-114 (ISBN 0-02-863656-2) Pell, A. R. (1999). *The Complete Idiot's Guide to Team Building*. USA: Alpha Books.
- c. C0-115 (ISBN 0-7879-4059-3) Van Linden, J. A. & Fertman, C. I. (1998). *Youth Leadership*. San Francisco, California: Jossey-Bass Inc.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** The instructor shall provide a safe learning and team-building environment in which the cadets will display and demonstrate positive group dynamics.

**EO M203.05 – DISCUSS INFLUENCE BEHAVIOURS**

1. **Performance.** Discuss Influence Behaviours.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall discuss influence behaviours, to include:
  - a. the directive approach;
  - b. the persuasive approach; and
  - c. the participative approach.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Perform in a skit to portray the directive influence behaviour.	In-class Activity	5 min	A0-047 A0-048
TP2	Perform in a skit to portray the persuasive influence behaviour.	In-class Activity	5 min	A0-047 A0-048
TP3	Perform in a skit to portray the participative influence behaviour.	In-class Activity	5 min	A0-047 A0-048
TP4	Discuss situations in which cadets may employ the various influence behaviours in peer group settings, to include: <ol style="list-style-type: none"> <li>a. at cadets; and</li> <li>b. at school, etc.</li> </ol>	Group Discussion	10 min	C0-113 (pp. 88 to 91 and 164) C0-115

5. **Time**

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 5 min  |
| b. In-class Activity:       | 15 min |
| c. Group Discussion:        | 10 min |
| d. Total:                   | 30 min |

**6. Substantiation**

- a. An in-class activity was chosen for TP1–3 as an interactive way to provoke thought and stimulate interest among cadets.
- b. A group discussion was chosen for TP4 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions, and feelings about influence behaviours.

**7. References**

- a. A0-047 A-PA-005-000/AP-004 DND. (2005). *Leadership in the Canadian Forces: Conceptual foundations*. Ottawa, ON: Department of National Defence.
- b. A0-048 A-PA-005-000/AP-003 DND. (2005). *Leadership in the Canadian Forces: Doctrine*. Ottawa, ON: Department of National Defence.
- c. C0-113 (ISBN 1-882664-12-4) Karnes, F. A. & Bean, S. M. (1995). *Leadership for Students: A Practical Guide for Ages 8-18*. Waco, Texas: Prufrock Press.
- d. C0-115 (ISBN 0-7879-4059) Van Linden, J.A. & Fertman, C.I. (1998). *Youth Leadership*. San Francisco, California: Jossey-Bass Inc.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** Skits found at A-CR-CCP-802/PF-001, Annex A, B and C.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**EO M203.06 – EMPLOY PROBLEM SOLVING**

1. **Performance.** Employ Problem Solving.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall employ problem solving.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	a. Explain problem-solving, to include: <ol style="list-style-type: none"> <li>(1) trial and error analysis; and</li> <li>(2) logical analysis; and</li> </ol> b. steps in the problem-solving process, to include: <ol style="list-style-type: none"> <li>(1) confirming the task;</li> <li>(2) identifying the problem;</li> <li>(3) determining the critical factor;</li> <li>(4) developing alternate solutions;</li> <li>(5) comparing alternatives;</li> <li>(6) determining the best solution;</li> <li>(7) implementing the solution; and</li> <li>(8) evaluating the plan and the implementation.</li> </ol>	Interactive Lecture	20 min	A2-036 C0-115 (pp. 45 and 46) C0-135 (pp. 221 to 223)
TP2	Conduct a writing activity where cadets solve problems using the technique from TP1.	In-class Activity	10 min	C0-115 (pp. 45 and 46)
TP3	Conduct a discussion where cadets explain their choices from the problem-solving exercise.	Group Discussion	20 min	C0-115 (pp. 45 and 46)

5. **Time**

a.	Introduction/Conclusion:	10 min
b.	Interactive Lecture:	20 min
c.	In-class Activity:	10 min
d.	Group Discussion:	20 min
e.	Total:	60 min

6. **Substantiation**

- a. An interactive lecture was chosen for TP1 to orient the cadets to problem solving.
- b. An in-class activity was chosen for TP2 as an interactive way to provoke thought, stimulate interest among cadets and present problem-solving.
- c. A group discussion was chosen for TP3 as it allows the cadets to interact with their peers and share their knowledge, experiences, and opinions about problem-solving.

7. **References**

- a. A2-036 A-CR-CCP-121/PT-001 D Cdts 3. (2003). *Royal Canadian Army Cadet Reference Book*. Ottawa, ON: Department of National Defence.
- b. C0-115 (ISBN 0-7879-4059-3) Van Linden, J. A. & Fertman, C. I. (1998). *Youth Leadership*. San Francisco, California: Jossey-Bass Inc.
- c. C0-135 (ISBN 0-7645-5176-0) Loeb, M. & Kindel, S. (1999). *Leadership for Dummies*. Indianapolis, Indiana: Wiley Publishing, Inc.

8. **Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area; and
- b. Scenarios of problems.

9. **Learning Aids.** Scenarios of problems.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**EO M203.07 – DISCUSS PERSONAL INTEGRITY AS A QUALITY OF LEADERSHIP**

1. **Performance.** Discuss Personal Integrity as a Quality of Leadership.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall discuss personal integrity as a quality of leadership.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain personal integrity, to include: <ol style="list-style-type: none"> <li>a. the definition of integrity;</li> <li>b. that personal integrity is the foundation of leadership;</li> <li>c. that personal integrity ensures the leader will be consistent because the leader's beliefs will be mirrored by his actions; and</li> <li>d. that to earn the trust of others, a leader must lead by example because their words and actions must match.</li> </ol>	Interactive Lecture	5 min	C0-112 (pp. 35 to 47)
TP2	Conduct an activity where cadets brainstorm where they have seen integrity displayed within their peer group, to include: <ol style="list-style-type: none"> <li>a. honesty;</li> <li>b. honour;</li> <li>c. good character;</li> <li>d. decency;</li> <li>e. fairness;</li> <li>f. sincerity; and</li> <li>g. trustworthiness, etc.</li> </ol>	In-class Activity	5 min	
TP3	Conduct an activity where cadets create a poster that shows an example of integrity. The poster may be in the form of a drawing, map, a saying, etc.	In-class Activity	15 min	



5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 5 min  |
| b. | Interactive Lecture:     | 5 min  |
| c. | In-class Activity:       | 20 min |
| d. | Total:                   | 30 min |

6. **Substantiation**

- An interactive lecture was chosen for TP1 to orient the cadets to personal integrity as a quality of leadership.
- An in-class activity was chosen for TP2 and TP3 as an interactive way to provoke thought, stimulate interest among cadets and present personal integrity as a quality of leadership.

7. **References**

- A0-010 CATO 11-03 D Cdts 2. (2006). *Cadet Program Mandate*. Ottawa, ON: Department of National Defence.
- C0-112 (ISBN 0-8407-6744-7) Maxwell, J. C. (1993). *Developing the Leader Within You*. Nashville, Tennessee: Thomas Nelson Inc. Publishers.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.9. **Learning Aids.**

- Pencil crayons/felt markers; and
- 8.5 x 14 inch paper.

10. **Test Details.** N/A.11. **Remarks.** N/A.

**EO M203.08 – PARTICIPATE IN TEAM-BUILDING ACTIVITIES**

1. **Performance.** Participate in Team-Building Activities.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall participate in team-building activities.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Conduct team-building activities through trust games.	In-class Activity	25 min	C0-152 C1-006 (pp. 79 to 95)

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. In-class Activity: 25 min
  - c. Total: 30 min
6. **Substantiation.** An in-class activity was chosen for this lesson as it is a fun and challenging way to expand the cadet's knowledge of team-building activities and reinforce their appreciation of the fundamentals of leadership.
7. **References**
  - a. C0-152 Wilderdom. (2007). *Index to Group Activities, Games, Exercises and Initiatives: Trust-Building Activities*. Retrieved 26 April 2007, from <http://wilderdom.com/games/descriptions/SliceNDice.html>.
  - b. C1-006 (ISBN 0-8403-5682-X) Ronhke, C. (1984). *Silver Bullets: A Guide to Initiative Problems, Adventures Games and Trust Activities*. USA: Kendall/Hunt Publishing Company.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks.** N/A.

**EO C203.01 – RECORD ENTRIES IN A REFLECTIVE JOURNAL**

1. **Performance.** Record Entries in a Reflective Journal.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with Karnes, F. A. & Bean, S. M., *Leadership For Students: A Practical Guide for Ages 8-18*, Prufrock Press, the cadet shall record entries in a reflective journal after a specific training activity, by writing, mapping, or drawing.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Conduct an activity during which cadets record their thoughts on the leadership they displayed and the leadership they observed on a specific training activity.	In-class Activity	25 min	C0-113 (pp. 122 to 131)

5. **Time**

- a. Introduction/Conclusion: 5 min
  - b. In-class Activity: 25 min
  - c. Total: 3 x 30 min
6. **Substantiation.** An in-class activity was chosen for this lesson to reinforce leadership principles and characteristics and to provoke thought. It also allows the cadets to interact with their peers and share their knowledge, experiences, opinions and feelings about a recent team-building or training activity.
  7. **References.** C0-113 (ISBN 1-882664-12-4) Karnes, F. A. & Bean, S. M. (1995). *Leadership for Students: A Practical Guide for Ages 8-18*. Waco, Texas: Prufrock Press.
  8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
  9. **Learning Aids.** Template of questions for reflection.
  10. **Test Details.** N/A.
  11. **Remarks**
    - a. This EO should follow a significant practical activity such as a tour, a field exercise or EO M203.08 (Participate in Team-building Activities).
    - b. This EO has been allocated three periods. Squadrons may conduct this training more than once a year.

**EO C203.02 – EMPLOY PROBLEM SOLVING**

1. **Performance.** Employ Problem Solving.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, and as a member of a group of no more than four, the cadet shall demonstrate problem solving by:
  - a. completing the activities, scenarios or simulations provided; and
  - b. peer sharing:
    - (1) the decision made; and
    - (2) the reason for the decision.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Conduct an activity where cadets solve problems using logical analysis by: <ol style="list-style-type: none"> <li>a. confirming the task;</li> <li>b. identifying the problem;</li> <li>c. determining the critical factor;</li> <li>d. developing an alternate solution;</li> <li>e. comparing alternate solutions;</li> <li>f. determining the best solution;</li> <li>g. implementing the solution; and</li> <li>h. evaluating the plan and implementation.</li> </ol>	In-class Activity	25 min	C0-115 (pp. 45 and 46) A2-036
TP2	Conduct a group discussion where cadets explain their choices from the problem-solving exercise.	Group Discussion	25 min	

5. **Time**

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 10 min |
| b. In-class Activity:       | 25 min |
| c. Group Discussion:        | 25 min |
| d. Total:                   | 60 min |

**6. Substantiation**

- a. An in-class activity was chosen for TP1 as an interactive way to provoke thought and stimulate interest among cadets.
- b. A group discussion was chosen for TP2 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions and feelings about problem solving.

**7. References**

- a. A2-036 A-CR-CCP-121/PT-001 D Cdts 3. (2003). *Royal Canadian Army Cadet Reference Book*. Ottawa, ON: Department of National Defence.
- b. C0-115 (ISBN 0-7879-4059-3) Van Linden, J. A. & Fertman, C. I. (1998). *Youth Leadership*. San Francisco, California: Jossey-Bass Inc.
- c. C0-135 (ISBN 0-7645-5176-0) Loeb, M. & Kindel, S. (1999). *Leadership for Dummies*. Indianapolis, Indiana: Wiley Publishing, Inc.

**8. Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area; and
- b. Scenarios of problems.

9. **Learning Aids.** Scenarios of problems.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**EO C203.03 – DISCUSS CHARACTERISTICS OF A LEADER**

1. **Performance.** Discuss Characteristics of a Leader.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with Karnes, F. A. & Bean, S. M., *Leadership for Students: A Practical Guide for Ages 8-18*, Prufrock Press, the cadet shall discuss the characteristics of a leader, to include:
  - a. choosing a specific leader; and
  - b. sharing the characteristics of their leader.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	In a group of no more than four, cadets discuss their study of a specific leader.	In-class Activity	30 min	C0-113 (pp. 162 to 166)
TP2	Conduct a group discussion where cadets volunteer to share their study of a specific leader with the entire group.	Group Discussion	20 min	C0-113 (pp. 162 to 166)

5. **Time**
  - a. Introduction/Conclusion: 10 min
  - b. In-class Activity: 30 min
  - c. Group Discussion: 20 min
  - d. Total: 60 min
6. **Substantiation**
  - a. An in-class activity was chosen for TP1 to reinforce leadership principles to provoke thought.
  - b. A group discussion was chosen for TP2 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions and feelings about characteristics of a leader.
7. **References.** C0-113 (ISBN 1-882664-12-4) Karnes, F. A. & Bean, S. M. (1995). *Leadership for Students: A Practical Guide for Ages 8-18*. Waco, Texas: Prufrock Press.
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
9. **Learning Aids.** N/A.

10. **Test Details.** N/A.
11. **Remarks.** Cadets will need to research a specific leader of their choice (a military person, political leader, pastor, teacher, etc.), in advance, and bring information or knowledge about that person to the class.

**EO C203.04 – PARTICIPATE IN A PRESENTATION GIVEN BY A LEADER**

1. **Performance.** Participate in a Presentation Given by a Leader.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough for the entire group.
3. **Standard.** The cadet shall participate in a presentation given by a leader.
4. **Teaching Points.** The leadership guest speaker is asked to:
  - a. describe their leadership characteristics, to include:
    - (1) their principles of leadership; and
    - (2) their qualities as a leader; and
  - b. facilitate a question and answer period.
5. **Time**
  - a. Introduction/Conclusion: 10 min
  - b. Interactive Lecture: 50 min
  - c. Total: 60 min
6. **Substantiation.** An interactive lecture was chosen for this lesson to review, clarify, emphasize and summarize the teaching points.
7. **References.** N/A.
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. This EO is not to be conducted by squadron personnel so as to expose cadets to other leaders.
  - b. This EO may be duplicated by using a variety of leaders during optional periods in the training schedule.
  - c. Required training aids should be determined by contacting the speaker prior to the presentation.
  - d. There is no instructional guide for the lesson.



**EO C203.05 – PARTICIPATE IN TRUST-BUILDING ACTIVITIES**

1. **Performance.** Participate in Trust-Building Activities.
2. **Conditions**
  - a. Given:
    - (1) a blindfold;
    - (2) supervision; and
    - (3) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with Ronhke, C., *Silver Bullets: A Guide to Initiative Problems, Adventures Games and Trust Activities*, Kendall/Hunt Publishing Company, the cadet shall participate in team-building activities, using problem-solving techniques and reflective thinking skills.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Conduct team-building activities through trust games.	Experiential	25 min	C1-006 (pp. 79 to 95)

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Experiential: 25 min
  - c. Total: 30 min
6. **Substantiation.** An experiential approach was chosen for this lesson as it allows the cadets to acquire new skills through a direct experience. This approach allows cadets to experience trust-building activities and define that experience on a personal level.
7. **References.** C1-006 (ISBN 0-8403-5682-X) Ronhke, C. (1984). *Silver Bullets: A Guide to Initiative Problems, Adventures Games and Trust Activities*. USA: Kendall/Hunt Publishing Company.
8. **Training Aids.** A blindfold.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks.** N/A.

**EO C203.06 – PARTICIPATE IN PROBLEM-SOLVING ACTIVITIES**

1. **Performance.** Participate in Problem-Solving Activities.
2. **Conditions**
  - a. Given:
    - (1) a stopwatch;
    - (2) supervision; and
    - (3) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with Ronhke, C., *Silver Bullets: A Guide to Initiative Problems, Adventures Games and Trust Activities*, Kendall/Hunt Publishing Company, the cadet shall participate in team-building activities, using problem-solving techniques and reflective thinking skills.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Conduct team-building activities through problem-solving games.	Experiential	25 min	C1-006 (pp. 110 to 123)

5. **Time**

- a. Introduction/Conclusion: 10 min
- b. Experiential: 50 min
- c. Total: 60 min
6. **Substantiation.** An experiential approach was chosen for this lesson as it allows the cadets to acquire new skills through a direct experience. This approach allows cadets to experience trust-building activities and define that experience on a personal level.
7. **References.** C1-006 (ISBN 0-8403-5682-X) Ronhke, C. (1984). *Silver Bullets: A Guide to Initiative Problems, Adventures Games and Trust Activities*. USA: Kendall/Hunt Publishing Company.
8. **Training Aids.** A stopwatch.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks.** N/A.

**SECTION 4**  
**PO 204 – UPDATE PERSONAL ACTIVITY PLAN**

1. **Performance.** Update Personal Activity Plan.
2. **Conditions**
  - a. Given:
    - (1) Health Canada, *Canada's Food Guide*, Her Majesty the Queen in Right of Canada;
    - (2) The Cooper Institute, *Fitnessgram 8.0 Stand-Alone Test Kit*, Human Kinetics;
    - (3) supervision; and
    - (4) assistance as required.
  - b. Denied: N/A.
  - c. Environmental:
    - (1) Training area large enough to conduct the PACER; and
    - (2) Suitable classroom facility or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadets will update their personal activity plan, to include:
  - a. participating in the PACER; and
  - b. setting new short-term and long-term personal goals for the training year.
4. **Remarks.** The PACER focuses on individual assessment and achievement. Cadets will run the PACER in order to obtain a benchmark for tailoring their personal activity plan for the training year.
5. **Complementary Material**
  - a. Complementary material associated with PO 204 is designed to enhance the cadet's personal activity plan, through a number of activities:
    - (1) EO C204.01 (Perform the PACER) allows the cadet to track individual progress; and
    - (2) EO C204.02 (Develop a Personal Nutrition Plan).
  - b. Some complementary training offered in Proficiency Level One may be selected as Proficiency Level Two complementary training, specifically EO C104.01 (Create Team Goals), to enhance a cadet's personal activity plan through the creation of team goals as a member of a group.
  - c. When selecting complementary training from Proficiency Level One, training staff shall review the applicable performance objective, lesson specification, and instructional guide.
  - d. Complementary training associated with PO 204 is limited to a total of three periods conducted during sessions or on a supported day. Squadrons are not required to use all three periods.

**EO M204.01 – PERFORM THE PACER**

1. **Performance.** Perform the PACER.
2. **Conditions**
  - a. Given:
    - (1) The Cooper Institute, *Fitnessgram 8.0 Stand-Alone Test Kit*, Human Kinetics;
    - (2) supervision; and
    - (3) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Training area large enough to conduct the PACER.
3. **Standard.** In accordance with specified references, the cadet shall perform the PACER.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Describe heart rate/pulse, to include: <ol style="list-style-type: none"> <li>a. how to determine heart rate/pulse;</li> <li>b. the normal range for resting heart rate; and</li> <li>c. target heart rate.</li> </ol>	Interactive Lecture	5 min	C0-096 C0-097 C0-098 (pp. 177 and 178) C0-102 (p. 11-7)
TP2	Introduce methods to increase cardiovascular endurance, to include: <ol style="list-style-type: none"> <li>a. pacing;</li> <li>b. running form; and</li> <li>c. progression.</li> </ol>	Interactive Lecture	5 min	C0-098 (p. 69) C0-099
TP3	Conduct a warm-up session, composed of light cardiovascular exercises, meant to: <ol style="list-style-type: none"> <li>a. stretch the muscles;</li> <li>b. gradually increase respiratory action and heart rate;</li> <li>c. expand the muscles' capillaries to accommodate the increase in blood circulation; and</li> <li>d. raise muscle temperature to facilitate reactions in muscle tissue.</li> </ol>	Practical Activity	5 min	C0-002 (pp. 109 to 113) C0-089
TP4	Demonstrate and have the cadets practice performing the PACER, to include: <ol style="list-style-type: none"> <li>a. identifying the layout of the PACER;</li> </ol>	Demonstration and Performance	10 min	C0-095

TP	Description	Method	Time	Ref
	<ul style="list-style-type: none"> <li>b. responding to the beeps; and</li> <li>c. recording the results.</li> </ul>			
TP5	Supervise while the cadets perform the PACER.	Practical Activity	25 min	C0-095
TP6	Conduct a cool-down session, composed of light cardiovascular exercises, meant to: <ul style="list-style-type: none"> <li>a. allow the body time to slowly recover from physical activity and to help prevent injury;</li> <li>b. prepare the respiratory and cardiovascular systems to return to their normal state; and</li> <li>c. stretch the muscles.</li> </ul>	Practical Activity	5 min	C0-002 (pp 109 to 113) C0-089

#### 5. Time

a.	Introduction/Conclusion:	5 min
b.	Interactive Lecture:	10 min
c.	Practical Activity:	35 min
d.	Demonstration and Performance:	10 min
e.	Total:	60 min

#### 6. Substantiation

- a. An interactive lecture was chosen for TP1 and TP2 to present basic information on heart rate/pulse and cardiovascular endurance.
- b. A practical activity was chosen for TP3, TP5 and TP6 as it is an interactive way to introduce cadets to cardiovascular activities in a safe and controlled environment. This activity contributes to the development of cardiovascular endurance in a fun and challenging setting.
- c. Demonstration and performance was chosen for TP4 as it allows the instructor to explain and demonstrate how to perform the PACER while providing an opportunity for the cadets to practice the PACER under supervision.

#### 7. References

- a. C0-002 (ISBN 0-88962-630-8) LeBlanc, J. & Dickson, L. (1997). *Straight Talk About Children and Sport: Advice for Parents, Coaches, and Teachers*. Oakville, ON and Buffalo, NY: Mosaic Press.
- b. C0-057 Martha Jefferson Hospital. (2001). *Warm-ups*. Retrieved 26 October 2006, from <http://www.marthajefferson.org/warmup.php>.
- c. C0-058 Webb Physiotherapists Inc. *Running Exercises*. Retrieved 26 October 2006, from <http://www.physionline.co.za/conditions/article.asp?id=46>.
- d. C0-059 Webb Physiotherapists Inc. *Exercise Programme for Squash, Tennis, Softball, Handball*. Retrieved 25 October 2006, from <http://www.physionline.co.za/conditions/article.asp?id=49>.
- e. C0-060 Impacto Protective Products Inc. (1998). *Exercises*. Retrieved 25 October 2006, from <http://www.2protect.com/work3b.htm>.

- f. C0-061 City of Saskatoon, Community Services Department. *Stretch Your Limits: A Smart Guide to Stretching for Fitness*. Retrieved 26 October 2006, from <http://www.in-motion.ca/walkingworkout/plan/flexibility>.
- g. C0-089 (ISBN 0-936070-22-6) Anderson, B. (2000). *Stretching: 20<sup>th</sup> Anniversary*. (Rev. Ed.) Bolinas, CA: Shelter Publications, Inc.
- h. C0-095 (ISBN 0-7360-5962-8) The Cooper Institute. (ND). *Fitnessgram/Activitygram Test Administration Kit: Fitnessgram 8.0 Stand-Alone Test Kit*. Windsor, ON: Human Kinetics.
- i. C0-096 Kaleida Health Cardiovascular Services. *Target Heart Rate*. Retrieved 20 February 2007, from <http://www.cardiovascularservices.org/HeartRate.html>.
- j. C0-097 Government of Ontario. (2006). *Target Heart Rate Chart*. Retrieved 20 February 2007, from [http://www.active2010.ca/index.cfm?fa=english\\_tools.target](http://www.active2010.ca/index.cfm?fa=english_tools.target).
- k. C0-098 (ISBN 0-7360-0212-X) Bompa, T.O. (2000). *Total Training for Young Champions: Proven Conditioning Programs for Athletes Ages 6 to 18*. Windsor, ON: Human Kinetics.
- l. C0-099 Manitoba Marathon. *Manitoba Marathon: Training-Easy Run Pacing*. Retrieved 20 February 2007, from [http://www.manitobamarathon.mb.ca/training\\_pacing.aspx](http://www.manitobamarathon.mb.ca/training_pacing.aspx).
- m. C0-102 (ISBN 0-662-69515-1) St. John Ambulance. (2006). *First on the Scene: Student Reference Guide*. Ottawa, ON: Her Majesty the Queen of Right in Canada.
- n. C0-136 RCMP Recruiting. *RCMP Recruiting—Physical Abilities Requirement Evaluation (PARE)*. Retrieved 21 March 2007, from [http://www.rcmp-grc.ca/recruiting/pare\\_partb\\_e.htm](http://www.rcmp-grc.ca/recruiting/pare_partb_e.htm).

8. **Training Aids**

- a. Stopwatch;
- b. Measuring tape;
- c. Pylons;
- d. Scoresheets;
- e. Cassette/CD player;
- f. TV;
- g. DVD player; and
- h. The Cooper Institute, *Fitnessgram 8.0 Stand-Alone Test Kit*, Human Kinetics.

9. **Learning Aids.**

- a. Pylons;
- b. Scoresheets;
- c. Pens/pencils; and
- d. The Cooper Institute, *Fitnessgram 8.0 Stand-Alone Test Kit*, Human Kinetics.

10. **Test Details.** N/A.

11. **Remarks.** The PACER is an individual assessment of cardiovascular fitness. Results from this assessment are not to be used for competition or classification among cadets.

**EO M204.02 – IDENTIFY HEALTHY FOOD CHOICES**

1. **Performance.** Identify Healthy Food Choices.
2. **Conditions**
  - a. Given:
    - (1) Health Canada, *Canada's Food Guide*, Her Majesty the Queen in Right of Canada;
    - (2) supervision; and
    - (3) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facility or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify healthy food choices, to include:
  - a. identifying food groups; and
  - b. recognizing the recommended number of servings per day.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Introduce Health Canada, <i>Canada's Food Guide</i> , Her Majesty the Queen in Right of Canada, to include: <ol style="list-style-type: none"> <li>a. food groups; and</li> <li>b. food guide servings.</li> </ol>	Interactive Lecture	10 min	C0-100 C0-101
TP2	Introduce the recommended daily intake, depending on: <ol style="list-style-type: none"> <li>a. age groups; and</li> <li>b. gender.</li> </ol>	Interactive Lecture	5 min	C0-100 C0-101
TP3	Conduct an activity using Health Canada, <i>Canada's Food Guide</i> , Her Majesty the Queen in Right of Canada.	In-class Activity	10 min	C0-100 C0-101 C0-138

5. **Time**

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 5 min  |
| b. Interactive Lecture:     | 15 min |
| c. In-class Activity:       | 10 min |
| d. Total:                   | 30 min |

6. **Substantiation**

- a. An interactive lecture was chosen for TP1 and TP2 to introduce Health Canada, *Canada's Food Guide*, Her Majesty the Queen in Right of Canada.
- b. An in-class activity was chosen for TP3 as it is an interactive way to provoke thought and stimulate an interest in healthy eating among cadets.

7. **References**

- a. C0-057 Martha Jefferson Hospital. (2001). *Warm-ups*. Retrieved 26 October 2006, from <http://www.marthajefferson.org/warmup.php>.
- b. C0-058 Webb Physiotherapists Inc. *Running Exercises*. Retrieved 26 October 2006, from <http://www.physionline.co.za/conditions/article.asp?id=46>.
- c. C0-059 Webb Physiotherapists Inc. *Exercise Programme for Squash, Tennis, Softball, Handball*. Retrieved 25 October 2006, from <http://www.physionline.co.za/conditions/article.asp?id=49>.
- d. C0-060 Impacto Protective Products Inc. (1998). *Exercises*. Retrieved 25 October 2006, from <http://www.2protect.com/work3b.htm>.
- e. C0-061 City of Saskatoon, Community Services Department. *Stretch Your Limits: A Smart Guide to Stretching for Fitness*. Retrieved 26 October 2006, from <http://www.in-motion.ca/walkingworkout/plan/flexibility>.
- f. C0-100 (ISBN 0-662-44467-1) Health Canada. (2007). *Canada's Food Guide*. Ottawa, ON: Her Majesty the Queen in Right of Canada.
- g. C0-101 (ISBN 0-662-44470-1) Health Canada. (2007). *Eating Well with Canada's Food Guide: A Resource for Educators and Communicators*. Ottawa, ON: Her Majesty the Queen in Right of Canada.
- h. C0-138 WP Clipart. *Food Section*. Retrieved 29 March 2007, from <http://www.clipart.com/food/index.html>.

8. **Training Aids.** Health Canada, *Canada's Food Guide*, Her Majesty the Queen in Right of Canada.

9. **Learning Aids**

- a. Health Canada, *Canada's Food Guide*, Her Majesty the Queen in Right of Canada;
- b. Handouts located at A-CR-CCP-802/PF-001, Annex A;
- c. Pens/pencils (one per cadet);
- d. Scissors; and
- e. Glue/tape.

10. **Test Details.** N/A.

11. **Remarks.** Copies of *Canada's Food Guide* can be ordered from Health Canada's Website at [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca) to be given as a handout to each cadet.



**EO M204.03 – IDENTIFY THE BENEFITS OF A HEALTHY LIFESTYLE**

1. **Performance.** Identify the Benefits of a Healthy Lifestyle.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facility or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify the benefits of a healthy lifestyle.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Discuss personal decisions that can be made to achieve a healthy lifestyle, to include, but not limited to: <ol style="list-style-type: none"> <li>a. not smoking;</li> <li>b. making healthy nutrition choices; and</li> <li>c. participating in physical activity.</li> </ol>	Group Discussion	10 min	C0-100 C0-104 C0-105 (p. 4–6) C0-126 (Gr. 7 Lesson Plans)
TP2	Discuss the physical benefits of a healthy lifestyle, to include: <ol style="list-style-type: none"> <li>a. healthy growth and development;</li> <li>b. a healthy heart;</li> <li>c. stronger bones and muscles;</li> <li>d. weight control; and</li> <li>e. lower health risks.</li> </ol>	Group Discussion	10 min	C0-104 (p. 4) C0-105 (p. 4) C0-108 C0-127 C0-128 C0-130
TP3	Discuss the psychological benefits of a healthy lifestyle, to include: <ol style="list-style-type: none"> <li>a. positive self-esteem;</li> <li>b. positive self/body image;</li> <li>c. higher energy; and</li> <li>d. reduced stress/increased relaxation.</li> </ol>	Group Discussion	5 min	C0-104 (pp. 4 and 8) C0-108 C0-129 C0-130 C0-133

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Group Discussion: 25 min
  - c. Total: 30 min

6. **Substantiation.** A group discussion was chosen for this lesson as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions, and feelings about the benefits of a healthy lifestyle.

7. **References**

- a. C0-100 (ISBN 0-662-44467-1) Health Canada. (2007). *Canada's Food Guide*. Ottawa, ON: Her Majesty the Queen in Right of Canada.
- b. C0-104 (ISBN 0-662-26628-5) Public Health Agency of Canada. (ND). *Handbook for Canada's Physical Activity Guide to Healthy Active Living*. Ottawa, ON: Public Health Agency of Canada.
- c. C0-105 (ISBN 0-662-32897-3) Public Health Agency of Canada. (2002). *Teacher's Guide to Physical Activity for Youth 10-14 Years of Age*. Ottawa, ON: Her Majesty the Queen in Right of Canada.
- d. C0-108 (ISBN 0-662-28677-4) Health Canada. (2000). *The Vitality Approach: A Guide for Leaders*. Ottawa, ON: Her Majesty the Queen in Right of Canada.
- e. C0-126 (ISBN 0-9687739-3-1) The Lung Association. (2000). *Lungs for Life: Grade 7*. Ontario, Canada: The Lung Association.
- f. C0-127 Winnipeg in Motion. *In Motion: Prevention of....* Retrieved 12 March 2007, from <http://www.winnipeginmotion.ca/prevention/>.
- g. C0-127 Winnipeg in Motion. *In Motion: Children and Youth*. Retrieved 12 March 2007, from <http://www.winnipeginmotion.ca/youths/facts.php>.
- h. C0-128 CAHPERD Advocacy Action Centre. (1996–2006). *Facts and Stats*. Retrieved 12 March 2007, from [http://www.cahperd.ca/eng/advocacy/facts/facts\\_stats.cfm](http://www.cahperd.ca/eng/advocacy/facts/facts_stats.cfm).
- i. C0-129 Canadian Sugar Institute. (2005). *Clips on Sugars: For Up-to-Date Information on Sugars in Healthy Eating*. Retrieved 12 March 2007, from <http://www.sugar.ca>.
- j. C0-130 (ISBN 2-550-360-427-7) Thibault, G. (2000). *Physical Activity, a Determinant of Health in Youth: Advisory Option of the Kino-Quebec Scientific Committee*. Quebec: Government of Quebec.
- k. C0-133 (ISBN 1-895724-51-1) Cragg, S. & Cameron, C. (2006). *Physical Activity of Canadian Youth – An Analysis of 2002 Health Behaviour in School-aged Children Data*. Ottawa, ON: Canadian Fitness and Lifestyle Research Institute.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) suitable for the classroom/training area.

9. **Learning Aids.** Handout located at A-CR-CCP-802/PF-001, Annex A.

10. **Test Details.** N/A.

11. **Remarks**

- a. Points that arise from the group discussions in TP1–4 should be placed on a whiteboard/flipchart/OHP to be referenced during the conclusion of the lesson.
- b. The handout located at Annex A is not to be used by the instructor. It is a personal resource for each cadet.

**EO M204.04 – UPDATE PERSONAL ACTIVITY PLAN**

1. **Performance.** Update Personal Activity Plan.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facility or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadets shall update their personal activity plan for the training year.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Have cadets adjust their personal activity plan (from Proficiency Level One) for the training year.	In-class Activity	25 min	C0-024 C0-104 C0-105 C0-106

5. **Time**

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 5 min  |
| b. In-class Activity:       | 25 min |
| c. Total:                   | 30 min |

6. **Substantiation.** An in-class activity was chosen for this lesson as it is an interactive way to reinforce the importance of goal setting within a personal activity plan.

7. **References**

- a. C0-019 (ISBN 0-7894-7147-7) Eaton, J. & Johnson, R. (2001). *Coaching Successfully*. New York: Dorling, Kindersley.
- b. C0-024 (ISBN 0-19-541731-3) Barber, K. (Ed.). (2001). *The Canadian Oxford Dictionary*. Don Mills, ON: Oxford University Press.
- c. C0-104 (ISBN 0-662-26628-5) Public Health Agency of Canada. (ND). *Handbook for Canada's Physical Activity Guide to Healthy Active Living*. Ottawa, ON: Public Health Agency of Canada.
- d. C0-105 (ISBN 0-662-32897-3) Public Health Agency of Canada. (2002). *Teacher's Guide to Physical Activity for Youth 10-14 Years of Age*. Ottawa, ON: Her Majesty the Queen in Right of Canada.
- e. C0-106 (ISBN 0-662-32899-X) Public Health Agency of Canada. (2002). *Let's Get Active! Magazine for Youth 10-14 Years of Age*. Ottawa, ON: Her Majesty the Queen in Right of Canada.

**8. Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- b. Paper;
- c. Pens/pencils; and
- d. Minister of Health, *Canada's Physical Activity Guide to Healthy Active Living*, Health Canada.

**9. Learning Aids**

- a. Pens/pencils;
- b. Paper;
- c. Activity plan from Proficiency Level One; and
- d. Handout of a blank activity plan located at A-CR-CCP-802/PF-001, Annex A.

**10. Test Details. N/A.**

**11. Remarks**

- a. Copies of the cadets' updated personal activity plans should be kept by the Training Officer.
- b. Resources such as: *Canada's Physical Activity Guide for Youth*, *Let's Get Active! Magazine for Youth 10-14 Years of Age*, and *Family Guide to Physical Activity for Youth 10-14 Years of Age*, can be ordered from the Public Health Agency of Canada's Website at [www.pageguide.com](http://www.pageguide.com) to be given as a handout to each cadet.

**EO M204.05 – PERFORM THE PACER**

1. **Performance.** Perform the PACER.
2. **Conditions**
  - a. Given:
    - (1) The Cooper Institute, *Fitnessgram 8.0 Stand-Alone Test Kit*, Human Kinetics;
    - (2) supervision; and
    - (3) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facility or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall perform the PACER.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Conduct a warm-up session, composed of light cardiovascular exercises, meant to: <ol style="list-style-type: none"> <li>a. stretch the muscles;</li> <li>b. gradually increase respiratory action and heart rate;</li> <li>c. expand the muscles' capillaries to accommodate the increase in blood circulation; and</li> <li>d. raise muscle temperature to facilitate reactions in muscle tissue.</li> </ol>	Practical Activity	5 min	C0-002 (pp. 109 to 113) C0-089
TP2	Supervise while the cadets perform the PACER.	Practical Activity	15 min	C0-095
TP3	Conduct a cool-down session, composed of light cardiovascular exercises, meant to: <ol style="list-style-type: none"> <li>a. allow the body time to slowly recover from physical activity and to help prevent injury;</li> <li>b. prepare the respiratory and cardiovascular systems to return to their normal state; and</li> <li>c. stretch the muscles.</li> </ol>	Practical Activity	5 min	C0-002 (pp. 109 to 113) C0-089

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Practical Activity: 25 min
  - c. Total: 30 min

6. **Substantiation.** A practical activity was chosen for this lesson as it is an interactive way to allow the cadets to track their progress in cardiovascular endurance. This activity contributes to the development of cardiovascular endurance in a fun and challenging setting.

7. **References**

- a. C0-002 (ISBN 0-88962-630-8) LeBlanc, J. & Dickson, L. (1997). *Straight Talk About Children and Sport: Advice for Parents, Coaches, and Teachers*. Oakville, ON and Buffalo, NY: Mosaic Press.
- b. C0-057 Martha Jefferson Hospital. (2001). *Warm-ups*. Retrieved 26 October 2006, from <http://www.marthajefferson.org/warmup.php>.
- c. C0-058 Webb Physiotherapists Inc. (ND). *Running Exercises*. Retrieved 26 October 2006, from <http://www.physionline.co.za/conditions/article.asp?id=46>.
- d. C0-059 Webb Physiotherapists Inc. (ND). *Exercise Programme for Squash, Tennis, Softball, Handball*. Retrieved 25 October 2006, from <http://www.physionline.co.za/conditions/article.asp?id=49>.
- e. C0-060 Impacto Protective Products Inc. (1998). *Exercises*. Retrieved 25 October 2006, from <http://www.2protect.com/work3b.htm>.
- f. C0-061 City of Saskatoon, Community Services Department. (2006). *Stretch your Limits: A Smart Guide to Stretching for Fitness*. Retrieved 26 October 2006, from <http://www.in-motion.ca/walkingworkout/plan/flexibility>.
- g. C0-089 (ISBN 0-936070-22-6) Anderson, B. (2000). *Stretching: 20<sup>th</sup> Anniversary (Rev. ed.)*. Bolinas, CA: Shelter Publications, Inc.
- h. C0-095 (ISBN 0-7360-5962-8) The Cooper Institute. (ND). *Fitnessgram/Activitygram Test Administration Kit: Fitnessgram 8.0 Stand-alone Test Kit*. Windsor, ON: Human Kinetics.
- i. C0-154 Hansen, B. (1999). *Moving on the Spot: Fun and Physical Activity: A Collection of 5 Minute Stretch and Movement Sessions*. Retrieved 26 October 2006, from <http://lin.ca/resource/html/dn3.htm#11>.

8. **Training Aids**

- a. Measuring tape;
- b. Pylons;
- c. *PACER Individual Score Sheet A*;
- d. Cassette/CD player;
- e. TV;
- f. DVD player; and
- g. The Cooper Institute, *Fitnessgram 8.0 Stand-Alone Test Kit*, Human Kinetics.

9. **Learning Aids**

- a. Pylons;
- b. *PACER Individual Score Sheet A*;
- c. Pens/pencils; and

d. The Cooper Institute, *Fitnessgram 8.0 Stand-Alone Test Kit*, Human Kinetics.

10. **Test Details.** N/A.

11. **Remarks**

- a. The PACER is an individual assessment of cardiovascular fitness. Results from this assessment are not to be used for competition or classification among cadets.
- b. The results of the second PACER should be compared to the results of the first PACER to determine the cadets' individual progress in cardiovascular endurance.

**EO C204.01 – PERFORM THE PACER**

1. **Performance.** Perform the PACER.
2. **Conditions**
  - a. Given:
    - (1) The Cooper Institute, *Fitnessgram 8.0 Stand-Alone Test Kit*, Human Kinetics;
    - (2) supervision; and
    - (3) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facility or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall perform the PACER.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Conduct a warm-up session, composed of light cardiovascular exercises, meant to: <ol style="list-style-type: none"> <li>a. stretch the muscles;</li> <li>b. gradually increase respiratory action and heart rate;</li> <li>c. expand the muscles' capillaries to accommodate the increase in blood circulation; and</li> <li>d. raise muscle temperature to facilitate reactions in muscle tissue.</li> </ol>	Practical Activity	5 min	C0-002 (pp. 109 to 113) C0-089
TP2	Supervise while the cadets perform the PACER.	Practical Activity	15 min	C0-095
TP3	Conduct a cool-down session, composed of light cardiovascular exercises, meant to: <ol style="list-style-type: none"> <li>a. allow the body time to slowly recover from physical activity and to help prevent injury;</li> <li>b. prepare the respiratory and cardiovascular systems to return to their normal state; and</li> <li>c. stretch the muscles.</li> </ol>	Practical Activity	5 min	C0-002 (pp. 109 to 113) C0-089

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Practical Activity: 25 min
  - c. Total: 30 min



6. **Substantiation.** A practical activity was chosen for this lesson as it is an interactive way to allow the cadets to track their progress in cardiovascular endurance. This activity contributes to the development of cardiovascular endurance in a fun and challenging setting.

7. **References**

- a. C0-002 (ISBN 0-88962-630-8) LeBlanc, J. & Dickson, L. (1997). *Straight Talk About Children and Sport: Advice for Parents, Coaches, and Teachers*. Oakville, ON and Buffalo, NY: Mosaic Press.
- b. C0-057 Martha Jefferson Hospital. (2001). *Warm-ups*. Retrieved 26 October 2006, from <http://www.marthajefferson.org/warmup.php>.
- c. C0-058 Webb Physiotherapists Inc. (ND). *Running Exercises*. Retrieved 26 October 2006, from <http://www.physionline.co.za/conditions/article.asp?id=46>.
- d. C0-059 Webb Physiotherapists Inc. (ND). *Exercise Programme for Squash, Tennis, Softball, Handball*. Retrieved 25 October 2006, from <http://www.physionline.co.za/conditions/article.asp?id=49>.
- e. C0-060 Impacto Protective Products Inc. (1998). *Exercises*. Retrieved 25 October 2006, from <http://www.2protect.com/work3b.htm>.
- f. C0-061 City of Saskatoon, Community Services Department. (2006). *Stretch Your Limits: A Smart Guide to Stretching for Fitness*. Retrieved 26 October 2006, from <http://www.in-motion.ca/walkingworkout/plan/flexibility>.
- g. C0-089 (ISBN 0-936070-22-6) Anderson, B. (2000). *Stretching: 20<sup>th</sup> Anniversary (Rev. ed.)*. Bolinas, CA: Shelter Publications, Inc.
- h. C0-095 (ISBN 0-7360-5962-8) The Cooper Institute. (ND). *Fitnessgram/Activitygram Test Administration Kit: Fitnessgram 8.0 Stand-alone Test Kit*. Windsor, ON: Human Kinetics.
- i. C0-154 Hansen, B. (1999). *Moving on the Spot: Fun and Physical Activity: A Collection of 5 Minute Stretch and Movement Sessions*. Retrieved 26 October 2006, from <http://lin.ca/resource/html/dn3.htm#11>.

8. **Training Aids**

- a. Measuring tape;
- b. Pylons;
- c. *PACER Individual Score Sheet A*;
- d. Cassette/CD player;
- e. TV;
- f. DVD player; and
- g. The Cooper Institute, *Fitnessgram 8.0 Stand-Alone Test Kit*, Human Kinetics.

9. **Learning Aids**

- a. Pylons;
- b. *PACER Individual Score Sheet A*;
- c. Pens/pencils; and

d. The Cooper Institute, *Fitnessgram 8.0 Stand-Alone Test Kit*, Human Kinetics.

10. **Test Details.** N/A.

11. **Remarks**

- a. The PACER is an individual assessment of cardiovascular fitness. Results from this assessment are not to be used for competition or classification amongst cadets.
- b. This EO gives the cadet the opportunity to run the PACER a third time in the middle of the training year allowing them to better track their progress in cardiovascular endurance.

**EO C204.02 – DEVELOP A PERSONAL NUTRITION PLAN**

1. **Performance.** Develop a Personal Nutrition Plan.
2. **Conditions**
  - a. Given:
    - (1) Health Canada, *Canada's Food Guide*, Her Majesty the Queen in Right of Canada;
    - (2) handout of a blank weekly meal plan;
    - (3) supervision; and
    - (4) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facility or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall develop a personal nutrition plan, to include:
  - a. creating a food journal; and
  - b. choosing healthy foods based on the recommendations in Health Canada, *Canada's Food Guide*, Her Majesty the Queen in Right of Canada.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Have cadets complete a food journal of what they ate that day.	In-class Activity	10 min	
TP2	Discuss how the cadets' food choices compare with Health Canada, <i>Canada's Food Guide</i> , Her Majesty the Queen in Right of Canada.	Group Discussion	10 min	C0-100 C0-101
TP3	Have the cadets develop a personal nutrition plan for one week.	In-class Activity	30 min	C0-107

5. **Time**

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 10 min |
| b. In-class Activity:       | 40 min |
| c. Group Discussion:        | 10 min |
| d. Total:                   | 60 min |

6. **Substantiation**

- a. An in-class activity was chosen for TP1 and TP3 as it is an interactive way to provoke thought and stimulate an interest in healthy eating among the cadets.
- b. A group discussion was chosen for TP2 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions, and feelings about healthy eating.

7. **References**

- a. C0-100 (ISBN 0-662-44467-1) Health Canada. (2007). *Canada's Food Guide*. Ottawa, ON: Her Majesty the Queen in Right of Canada.
- b. C0-101 (ISBN 0-662-44470-1) Health Canada. (2007). *Eating Well with Canada's Food Guide: A Resource for Educators and Communicators*. Ottawa, ON: Her Majesty the Queen in Right of Canada.
- c. C0-107 Health Canada. (2007). *Canada's Food Guide: My Food Guide*. Retrieved 20 February 2007, from [http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/myguide-monguide/index\\_e.html](http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/myguide-monguide/index_e.html).

8. **Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate to the classroom/training area; and
- b. Health Canada, *Canada's Food Guide*, Her Majesty the Queen in Right of Canada.

9. **Learning Aids**

- a. Health Canada, *Canada's Food Guide*, Her Majesty the Queen in Right of Canada;
- b. Pens/pencils;
- c. Paper;
- d. Food journal handout located at A-CR-CCP-802/PF-001, Annex A; and
- e. Personal nutrition plan handout located at A-CR-CCP-802/PF-001, Annex B.

10. **Test Details.** N/A.

11. **Remarks.** The personal nutrition plan is not to be used as a measurement tool. It should be developed solely for use by the cadet to understand healthy food choices.

**SECTION 5****PO 205 – PARTICIPATE IN RECREATIONAL SPORTS**

1. **Performance.** Participate in Recreational Sports.
2. **Conditions**
  - a. Given:
    - (1) sports equipment;
    - (2) Canadian Cadet Organization's (CCO) list of acceptable sports;
    - (3) safety equipment;
    - (4) supervision; and
    - (5) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Appropriate sporting venue.
3. **Standard.** In accordance with specified references, the cadet will participate in organized recreational team sports, to include:
  - a. receiving a briefing on the specific sport's rules and regulations;
  - b. participating in a warm-up;
  - c. participating in recreational sports; and
  - d. participating in a cool-down.
4. **Remarks.** Recreational sports can be carried out as nine periods during a supported day or over three sessions of three periods each.
5. **Complementary Material**
  - a. Some complementary training offered in Proficiency Level One may be selected as complementary training in Proficiency Level Two, specifically:
    - (1) EO C105.01 (Participate in an Organized Sports Tabloid);
    - (2) EO C105.02 (Participate in an Organized Intramural Sports Event); and
    - (3) EO C105.03 (Participate in an Orienteering Event).
  - b. When selecting complementary material training from Proficiency Level One, training staff will review the applicable performance objective, lesson specification, and instructional guide.
  - c. Complementary training associated with PO 205 is limited to a total of nine periods conducted during sessions or on a supported day. If PO 205 is carried out over three training sessions, it will be comprised of three periods of training per night. If recreational team sports is carried out as a full day activity, it will be comprised of nine periods. Squadrons are not required to use all nine periods.

**EO M205.01 – PARTICIPATE IN ORGANIZED RECREATIONAL TEAM SPORTS**

1. **Performance.** Participate in Organized Recreational Team Sports.
2. **Conditions**
  - a. Given:
    - (1) sports equipment;
    - (2) safety equipment;
    - (3) supervision; and
    - (4) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Appropriate sporting venue.
3. **Standard.** In accordance with specified references, the cadet shall:
  - a. follow the rules and regulations of the specific sport;
  - b. participate in a warm-up;
  - c. participate in the given sport; and
  - d. participate in a cool-down.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Introduce cadets to a specific sport's rules and regulations, to include: <ol style="list-style-type: none"> <li>a. an overview of how to play the sport; and</li> <li>b. rules and regulations of the sport.</li> </ol>	Interactive Lecture	10 min	C0-001
TP2	Conduct a warm-up session, composed of light cardiovascular exercises, meant to: <ol style="list-style-type: none"> <li>a. stretch the muscles;</li> <li>b. gradually increase respiratory action and heart rate;</li> <li>c. expand the muscles' capillaries to accommodate the increase in blood circulation; and</li> <li>d. raise muscle temperature to facilitate reactions in muscle tissue.</li> </ol>	Practical Activity	10 min	C0-002 (pp. 109 to 113) C0-089
TP3	Supervise the cadets' participation in a given sports activity.	Practical Activity	50 min	

TP	Description	Method	Time	Ref
TP4	Conduct a cool-down session, composed of light cardiovascular exercises, meant to: <ol style="list-style-type: none"> <li>allow the body time to slowly recover from physical activity and to help prevent injury;</li> <li>prepare the respiratory and cardiovascular systems to return to their normal state; and</li> <li>stretch the muscles.</li> </ol>	Practical Activity	10 min	C0-002 (pp. 109 to 113) C0-089

#### 5. Time

a.	Introduction/Conclusion:	10 min
b.	Interactive Lecture:	10 min
c.	Practical Activity:	70 min
d.	Subtotal:	90 min
e.	Total (three sessions):	270 min

#### 6. Substantiation

- An interactive lecture was chosen for TP1 to illustrate the application of rules, principles, or concepts of the specific sport to be played.
- A practical activity was chosen for TP2–4 as it allows cadets to participate in sports activities in a safe and controlled environment. This activity contributes to the development of sports skills in a fun and challenging setting.

#### 7. References

- C0-001 (ISBN 0-88011-807-5) Hanlon, T. (1998). *The Sports Rules Book: Essential Rules for 54 Sports*. USA: Human Kinetics Publishers, Inc.
- C0-002 (ISBN 0-88962-630-8) LeBlanc, J., and Dickson, L. (1997). *Straight Talk About Children and Sport: Advice for Parents, Coaches, And teachers*. Oakville, ON and Buffalo, NY: Mosaic Press.
- C0-030 Ringette Canada. (2006). *How Ringette is Played*. Retrieved 30 October 2006, from <http://www.ringette.ca/e/about/played.htm>.
- C0-031 What is Ultimate Frisbee? (2006). *What is Ultimate – The Game*. Retrieved 30 October 2006, from [http://www.whatisultimate.com/what/what\\_game\\_en.html](http://www.whatisultimate.com/what/what_game_en.html).
- C0-034 About Ultimate. (2006). *About Ultimate*. Retrieved 30 October 2006, from <http://www.upa.org/ultimate>.
- C0-057 Martha Jefferson Hospital. (2001). *Warm-ups*. Retrieved 26 October 2006, from <http://www.marthajefferson.org/warmup.php>.
- C0-058 Webb Physiotherapists Inc. (ND). *Running Exercises*. Retrieved 26 October 2006, from <http://www.physionline.co.za/conditions/article.asp?id=46>.
- C0-059 Webb Physiotherapists Inc. (ND). *Exercise Programme for Squash, Tennis, Softball, Handball*. Retrieved 25 October 2006, from <http://www.physionline.co.za/conditions/article.asp?id=49>.

- i. C0-060 Impacto Protective Products Inc. (1998). *Exercises*. Retrieved 25 October 2006, from <http://www.2protect.com/work3b.htm>.
- j. C0-061 City of Saskatoon, Community Services Department. (2006). *Stretch Your Limits: A Smart Guide to Stretching for Fitness*. Retrieved 26 October 2006, from <http://www.in-motion.ca/walkingworkout/plan/flexibility>.
- k. C0-074 Norris, G. (Ed.). (1998). *National Football Federation: Touch Football Rule Book 2004*. Ottawa, ON: National Football Federation.
- l. C0-089 (ISBN 0-936070-22-6) Anderson, B. (2000). *Stretching: 20<sup>th</sup> Anniversary (Rev. Ed.)*. Bolinas, CA: Shelter Publications, Inc.
- m. C0-154 Hansen, B. (1999). *Moving on the Spot: Fun and Physical Activity: A Collection of 5 Minute Stretch and Movement Sessions*. Retrieved 26 October 2006, from <http://lin.ca/resource/html/dn3.htm#11>.

8. **Training Aids**

- a. Sports/safety equipment appropriate for the activity;
- b. First aid kit;
- c. Whistles; and
- d. Stopwatch.

9. **Learning Aids.** Sports equipment.

10. **Test Details.** N/A.

11. **Remarks**

- a. The CCO list of approved sports is located at A-CR-CCP-802/PF-001, Annex A.
- b. Recreational sports can be carried out as nine periods during a supported day or over three sessions of three periods each.



**EO C105.01 – PARTICIPATE IN AN ORGANIZED SPORTS TABLOID**

1. **Performance.** Participate in an Organized Sports Tabloid.

2. **Conditions**

a. Given:

- (1) Appropriate activity equipment;
- (2) Safety equipment;
- (3) Supervision; and
- (4) Assistance as required.

b. Denied: N/A.

c. Environmental: Appropriate sporting venue.

3. **Standard.** IAW specified references, the cadet shall:

- a. follow the rules of the sports tabloid;
- b. participate in a warm-up;
- c. participate in the sports tabloid; and
- d. participate in a cool-down.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Introduce cadets to the sport tabloid's rules and regulations.	Interactive Lecture	10 min	
TP2	Conduct a warm-up session, composed of light cardiovascular exercises, meant to: <ol style="list-style-type: none"> <li>a. stretch the muscles;</li> <li>b. gradually increase respiratory action and heart rate;</li> <li>c. expand the muscles' capillaries to accommodate the increase in blood circulation; and</li> <li>d. raise muscle temperature to facilitate reactions in muscle tissue.</li> </ol>	Practical Activity	10 min	C0-002 (pp. 109 to 113) C0-089
TP3	Supervise the cadets' participation in a sports tabloid.	Practical Activity	50 min	
TP4	Conduct a cool-down session, composed of light cardiovascular exercises, meant to: <ol style="list-style-type: none"> <li>a. allow the body time to slowly recover from physical activity and to help prevent injury;</li> </ol>	Practical Activity	10 min	C0-002 (pp. 109 to 113) C0-089

TP	Description	Method	Time	Ref
	b. prepare the respiratory and cardiovascular systems to return to their normal state; and c. stretch the muscles.			

## 5. Time

a.	Introduction/Conclusion:	10 min
b.	Interactive Lecture:	10 min
c.	Practical Activity:	70 min
d.	Subtotal:	90 min
e.	Total (three sessions):	270 min

## 6. Substantiation

- An interactive lecture was chosen for TP1 to illustrate the application of rules, principles or concepts of the sports tabloid.
- A practical activity was chosen for TP2 to TP4 as it allows cadets to participate in a sports tabloid in a safe and controlled environment. This activity contributes to the development of sports skills in a fun and challenging setting.

## 7. References

- C0-002 (ISBN 0-88962-630-8) LeBlanc, J. and Dickson, L. (1997). *Straight Talk About Children and Sport: Advice for Parents, Coaches, and Teachers* (2006). Oakville, ON and Buffalo, NY: Mosaic Press.
- C0-057 Martha Jefferson Hospital. (2001). *Warm-ups*. Retrieved 26 October 2006, from <http://www.marthajefferson.org/warmup.php>.
- C0-058 Webb Physiotherapists Inc. *Running Exercises*. Retrieved 26 October 2006, from <http://www.physionline.co.za/conditions/article.asp?id=46>.
- C0-059 Webb Physiotherapists Inc. *Exercise Programme for Squash, Tennis, Softball, Handball*. Retrieved 25 October 2006, from <http://www.physionline.co.za/conditions/article.asp?id=49>.
- C0-060 Impacto Protective Products Inc. (1998). *Exercises*. Retrieved 25 October 2006, from <http://www.2protect.com/work3b.htm>.
- C0-061 City of Saskatoon, Community Services Department. (2006). *Stretch Your Limits: A Smart Guide to Stretching for Fitness*. Retrieved 26 October 2006, from <http://www.in-motion.ca/walkingworkout/plan/flexibility>.
- C0-089 (ISBN 0-936070-22-6) Anderson, B. (2000). *Stretching: 20<sup>th</sup> Anniversary*. (Rev. Ed.). Bolinas, CA: Shelter Publications, Inc.

## 8. Training Aids

- Equipment for sports tabloid in accordance with A-CR-CCP-802/PF-001, Annex C;
- Tables;
- Chairs;

- d. Paper;
  - e. Tape;
  - f. First aid kit;
  - g. Whistles;
  - h. Stopwatch;
  - i. Master score sheet;
  - j. Station score sheet; and
  - k. Gym mats.
9. **Learning Aids.** Equipment for sports tabloid.
10. **Test Details.** N/A.
11. **Remarks.** Recreational sports can be carried out as nine periods during a supported day or over three sessions of three periods each.

**EO C105.02 – PARTICIPATE IN AN ORGANIZED INTRAMURAL SPORTS EVENT**

1. **Performance.** Participate in an Organized Intramural Sports Event.

2. **Conditions**

- a. Given:
- (1) Sports equipment;
  - (2) Safety equipment;
  - (3) Supervision; and
  - (4) Assistance as required.

b. Denied: N/A.

c. Environmental: Appropriate sporting venue.

3. **Standard.** IAW specified references, the cadet shall:

- a. follow the rules and regulations of the given event;
- b. participate in a warm-up;
- c. participate in the intramural sports event; and
- d. participate in a cool-down.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Introduce cadets to the organized intramural sports' rules and regulations.	Interactive Lecture	10 min	C0-001
TP2	Conduct a warm-up session, composed of light cardiovascular exercises, meant to: <ul style="list-style-type: none"> <li>a. stretch the muscles;</li> <li>b. gradually increase respiratory action and heart rate;</li> <li>c. expand the muscles' capillaries to accommodate the increase in blood circulation; and</li> <li>d. raise muscle temperature to facilitate reactions in muscle tissue.</li> </ul>	Practical Activity	10 min	C0-002 (pp. 109 to 113) C0-089
TP3	Supervise the cadets' participation in an intramural sports event.	Practical Activity	50 min	
TP4	Conduct a cool-down session, composed of light cardiovascular exercises, meant to: <ul style="list-style-type: none"> <li>a. allow the body time to slowly recover from physical activity and to help prevent injury;</li> </ul>	Practical Activity	10 min	C0-002 (pp. 109 to 113) C0-089

TP	Description	Method	Time	Ref
	b. prepare the respiratory and cardiovascular systems to return to their normal state; and c. stretch the muscles.			

#### 5. Time

a.	Introduction/Conclusion:	10 min
b.	Interactive Lecture:	10 min
c.	Practical Activity:	70 min
d.	Subtotal:	90 min
e.	Total (three sessions):	270 min

#### 6. Substantiation

- a. An interactive lecture was chosen for TP1 to illustrate the application of rules, principles or concepts of the specific sport to be played.
- b. A practical activity was chosen for TP2 to TP4 as it allows cadets to participate in sports activities in a safe and controlled environment. This activity contributes to the development of sports skills in a fun and challenging setting.

#### 7. References

- a. C0-001 (ISBN 0-88011-807-5) Hanlon, T. (1998). *The Sports Rules Book: Essential Rules for 54 Sports*. USA: Human Kinetics Publishers, Inc.
- b. C0-002 (ISBN 0-88962-630-8) LeBlanc, J. and Dickson, L. (1997). *Straight Talk About Children and Sport: Advice for Parents, Coaches, and Teachers* (2006). Oakville, ON and Buffalo, NY: Mosaic Press.
- c. C0-030 Ringette Canada. (2006). *How Ringette Is Played*. Retrieved 30 October 2006, from <http://www.ringette.ca/e/about/played.htm>.
- d. C0-031 What Is Ultimate Frisbee? (2006). *What Is Ultimate – The Game*. Retrieved 30 October 2006, from [http://www.whatisultimate.com/what/what\\_game\\_en.html](http://www.whatisultimate.com/what/what_game_en.html).
- e. C0-034 About Ultimate. (2006). *About Ultimate*. Retrieved 30 October 2006, from <http://www.upa.org/ultimate>.
- f. C0-057 Martha Jefferson Hospital. (2001). *Warm-ups*. Retrieved 26 October 2006, from <http://www.marthajefferson.org/warmup.php>.
- g. C0-058 Webb Physiotherapists Inc. *Running Exercises*. Retrieved 26 October 2006, from <http://www.physionline.co.za/conditions/article.asp?id=46>.
- h. C0-059 Webb Physiotherapists Inc. *Exercise Programme for Squash, Tennis, Softball, Handball*. Retrieved 25 October 2006, from <http://www.physionline.co.za/conditions/article.asp?id=49>.
- i. C0-060 Impacto Protective Products Inc. (1998). *Exercises*. Retrieved 25 October 2006, from <http://www.2protect.com/work3b.htm>.

- j. C0-061 City of Saskatoon, Community Services Department. (2006). *Stretch Your Limits: A Smart Guide to Stretching for Fitness*. Retrieved 26 October 2006, from <http://www.in-motion.ca/walkingworkout/plan/flexibility>.
- k. C0-074 Norris, G. (Ed.). (1998). *National Football Federation: Touch Football Rule Book 2004*. Ottawa, ON: National Football Federation.
- l. C0-089 (ISBN 0-936070-22-6) Anderson, B. (2000). *Stretching: 20<sup>th</sup> Anniversary*.(Rev. Ed.). Bolinas, CA: Shelter Publications, Inc.

8. **Training Aids**

- a. Sports/safety equipment appropriate for the activity;
- b. First aid kit;
- c. Whistles; and
- d. Stopwatch.

9. **Learning Aids.** Sports equipment.

10. **Test Details.** N/A.

11. **Remarks**

- a. The CCO list of approved sports can be found in A-CR-CCP-802/PF-001, Annex A.
- b. Recreational sports can be carried out as nine periods during a supported day or over three sessions of three periods each.

**EO C105.03 – PARTICIPATE IN AN ORIENTEERING EVENT**

1. **Performance.** Participate in an Orienteering Event.
2. **Conditions**
  - a. Given:
    - (1) Orienteering/recreational/locally produced map;
    - (2) Orienteering compass;
    - (3) Control markers with control punches;
    - (4) Control card;
    - (5) Control description sheet;
    - (6) Prepared course;
    - (7) Stopwatch;
    - (8) Whistle;
    - (9) Radio;
    - (10) Supervision; and
    - (11) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Field setting during the day (training area large enough to set up a basic orienteering course), in favourable weather conditions.
3. **Standard.** IAW specified references, the cadet shall apply orienteering techniques while participating in an orienteering event.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain the use of orienteering equipment, to include: <ol style="list-style-type: none"> <li>a. orienteering maps and the marginal information found on them, to include:               <ol style="list-style-type: none"> <li>(1) scale;</li> <li>(2) International Orienteering Federation (IOF) colours;</li> <li>(3) IOF symbols;</li> <li>(4) contour lines; and</li> <li>(5) contour intervals;</li> </ol> </li> </ol>	Interactive Lecture	15 min	C0-007 (pp. 11, 12, 76, 162, 196, 197 and 204) C0-008 (pp. 20, 23 to 38, and 40)

TP	Description	Method	Time	Ref
	b. orienteering compasses, to include: <ol style="list-style-type: none"> <li>(1) magnetic needle;</li> <li>(2) compass housing; and</li> <li>(3) base plate; and</li> </ol> c. scoring equipment, to include: <ol style="list-style-type: none"> <li>(1) control markers;</li> <li>(2) control punches;</li> <li>(3) control description sheets; and</li> <li>(4) score cards.</li> </ol>			
TP2	Explain, demonstrate, and have the cadets practice the following orienteering techniques: <ol style="list-style-type: none"> <li>a. folding and holding the map;</li> <li>b. orienting a map by inspection;</li> <li>c. thumbing position;</li> <li>d. determining distance; and</li> <li>e. checking off features.</li> </ol>	Demonstration and Performance	15 min	C0-008 (pp. 44 and 45) C0-023 (p. 17)
TP3	Explain the following techniques for route evaluation: <ol style="list-style-type: none"> <li>a. handrails;</li> <li>b. catching/collecting features;</li> <li>c. attack points;</li> <li>d. attacking from above;</li> <li>e. height assessment versus detouring around; and</li> <li>f. long easy route versus short tough route.</li> </ol>	Interactive Lecture	10 min	C0-023 (pp. 14 to 16)
TP4	Explain and demonstrate the following map-reading techniques: <ol style="list-style-type: none"> <li>a. the "CART" technique, in that CART is the mnemonic for:               <ol style="list-style-type: none"> <li>(1) Control;</li> <li>(2) Attack point;</li> <li>(3) Route choice; and</li> <li>(4) Technique;</li> </ol> </li> <li>b. simplifying the map;</li> <li>c. rough map-reading;</li> <li>d. precision map-reading;</li> <li>e. pace counting; and</li> <li>f. distance estimation.</li> </ol>	Interactive Lecture	10 min	C0-010 (pp. 1 to 9)



TP	Description	Method	Time	Ref
TP5	Conduct a warm-up session, composed of light cardiovascular exercises, meant to: <ol style="list-style-type: none"> <li>a. stretch the muscles;</li> <li>b. gradually increase respiratory action and heart rate;</li> <li>c. expand the muscles' capillaries to accommodate the increase in blood circulation; and</li> <li>d. raise muscle temperature to facilitate reactions in muscle tissue.</li> </ol>	Practical Activity	10 min	C0-002 (pp. 109 to 113) C0-089
TP6	Supervise the cadets' participation in an orienteering event, where they will: <ol style="list-style-type: none"> <li>a. progress through three starting grid blocks to:               <ol style="list-style-type: none"> <li>(1) receive the map and start time;</li> <li>(2) copy the course points from the master map onto their own map; and</li> <li>(3) orient the map to begin the course;</li> </ol> </li> <li>b. run a course with a minimum of five points to be retrieved in the specified order;</li> <li>c. apply orienteering techniques and read the orienteering map;</li> <li>d. evaluate their route as they progress through the course; and</li> <li>e. finish the race by:               <ol style="list-style-type: none"> <li>(1) running through the finish area;</li> <li>(2) crossing the finish line; and</li> <li>(3) submitting their control cards for verification.</li> </ol> </li> </ol>	Practical Activity	190 min	
TP7	Conduct a cool-down session, composed of light cardiovascular exercises, meant to: <ol style="list-style-type: none"> <li>a. allow the body time to slowly recover from physical activity and to help prevent injury;</li> <li>b. prepare the respiratory and cardiovascular systems to return to their normal state; and</li> <li>c. stretch the muscles.</li> </ol>	Practical Activity	10 min	C0-002 (pp. 109 to 113) C0-089

5. **Time**

a.	Introduction/Conclusion:	10 min
b.	Practical Activity:	210 min
c.	Interactive Lecture:	35 min
d.	Demonstration and Performance:	15 min
e.	Total:	270 min

6. **Substantiation**

- a. An interactive lecture was chosen for TP1, TP3, and TP4 to present basic orienteering material.
- b. Demonstration and performance was chosen for TP2 as it allows the instructor to explain and demonstrate orienteering skills the cadet is expected to acquire while providing an opportunity for the cadets to practice these skills under supervision.
- c. A practical activity was chosen for TP5 to TP7 as it is an interactive way to allow cadets to experience orienteering in a safe and controlled environment. This activity contributes to the development of orienteering skills and knowledge in a fun and challenging setting.

7. **References**

- a. C0-002 (ISBN 0-88962-630-8) LeBlanc, J. and Dickson, L. (1997). *Straight Talk About Children and Sport: Advice for Parents, Coaches, and Teachers* (2006). Oakville, ON and Buffalo, NY; Mosaic Press.
- b. C0-007 (ISBN 0-02-029265-1) Kjellstrom, B. (1994). *Be Expert With Map and Compass: The Complete Orienteering Handbook*. New York: Hungry Minds, Inc.
- c. C0-008 A-CR-CCP-151/PT-001 Canadian Orienteering Federation. (1983). *Orienteering Level 1 Coaching Certification*. Gloucester, ON: Canadian Orienteering Federation
- d. C0-010 Stott, W. (1987). *Armchair Orienteering II: A Practical Guide To Route Planning*. Winnipeg, MB: Manitoba Orienteering Association.
- e. C0-011 Canadian Orienteering Federation. (1985). *Orienteering Level 2 Coaching Certification*. Vanier, ON: Canadian Orienteering Federation.
- f. C0-023 A-CR-CCP-150/PT-001 Chapman, J.R. Major, M.B.E. (1968). *Orienteering: An Aid To Training*. London, England: Hillside Printing and Publishing Co.
- g. C0-089 (ISBN 0-936070-22-6) Anderson, B. (2000). *Stretching: 20<sup>th</sup> Anniversary*.(Rev. Ed.). Bolinas, CA: Shelter Publications, Inc.

8. **Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- b. Orienteering/recreational/locally produced map;
- c. Orienteering compass;
- d. Control markers with control punches;
- e. Control card;
- f. Control description sheet;

- g. Stopwatch;
- h. Gym mats;
- i. First aid kit;
- j. Pens/pencils; and
- k. Whistle.

9. **Learning Aids**

- a. Orienteering/recreational/locally produced map;
- b. Orienteering compass;
- c. Control markers with control punches;
- d. Control card;
- e. Control description sheet;
- f. Radios; and
- g. Pens/pencils.

10. **Test Details.** N/A.

11. **Remarks**

- a. If orienteering is carried out in the three training sessions, it will be comprised of two periods of training on the first night, followed by two training sessions for conducting orienteering events. The time difference will be taken from TP6.
- b. If orienteering is carried out as a full day activity, it will be comprised of nine periods.

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**SECTION 6****PO 206 – FIRE THE CADET AIR RIFLE DURING RECREATIONAL MARKSMANSHIP**

1. **Performance.** Fire the Cadet Air Rifle During Recreational Marksmanship.
2. **Conditions**
  - a. Given:
    - (1) cadet air rifle;
    - (2) cadet air rifle safety rod;
    - (3) safety glasses/goggles;
    - (4) approved air rifle pellets;
    - (5) target frame;
    - (6) suitable target;
    - (7) local Range Standing Orders;
    - (8) supervision; and
    - (9) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Air rifle range constructed IAW A-CR-CCP-177/PT-001, *Canadian Cadet Movement: Cadet Marksmanship Program Reference Manual*, Chapter 1, Section 8.
3. **Standard.** In accordance with specified references, the cadet will fire the cadet air rifle while participating in recreational marksmanship by:
  - a. carrying out safety precautions;
  - b. applying basic marksmanship techniques; and
  - c. following the rules of and commands given on a range.
4. **Remarks.** All range practices must be conducted by a Range Safety Officer (RSO).
5. **Complementary Material**
  - a. Complementary material associated with PO 206 is designed to enhance the cadet's air rifle marksmanship experience, to include:
    - (1) EO C206.01 (Practice Holding Techniques);
    - (2) EO C206.02 (Practice Aiming Techniques); and
    - (3) EO C206.03 (Practice Firing Techniques).
  - b. Some complementary training offered in Proficiency Level One may be selected as complementary training in Proficiency Level Two, specifically EO C106.01 (Participate in Recreational Air Rifle Marksmanship).
  - c. When selecting complementary material from the Proficiency Level One, training staff shall review the applicable performance objective, lesson specification, and instructional guide.

- d. Complementary training associated with PO 206 is limited to a total of ten periods conducted during sessions or on a supported day. No more than four periods in total shall be used to support EOs C206.01 to C206.03, marksmanship techniques. Squadrons are not required to use all ten periods.
- e. It is not necessary to conduct these EOs in sequential order; however, squadrons choosing to capitalize on marksmanship training should complete EOs C206.01 to C206.03, marksmanship techniques, prior to conducting EO C106.01 (Participate in Recreational Air Rifle Marksmanship).

**EO M206.01 – PARTICIPATE IN A RECREATIONAL MARKSMANSHIP ACTIVITY**

1. **Performance.** Participate in a Recreational Marksmanship Activity.
2. **Conditions**
  - a. Given:
    - (1) cadet air rifle;
    - (2) cadet air rifle safety rod;
    - (3) safety glasses/goggles;
    - (4) approved air rifle pellets;
    - (5) target frame;
    - (6) suitable target;
    - (7) shooting mat;
    - (8) local range standing orders;
    - (9) supervision; and
    - (10) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Air rifle range constructed IAW A-CR-CCP-177/PT-001, Chapter 1, Section 8.
3. **Standard.** In accordance with specified references, the cadet shall participate in a recreational marksmanship activity.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Conduct a range briefing, to include: <ol style="list-style-type: none"> <li>a. explaining pertinent sections of range standing orders;</li> <li>b. reviewing general rules observed on all ranges;</li> <li>c. reviewing commands used on an air rifle range;</li> <li>d. describing the layout of the range; and</li> <li>e. reviewing hand-washing procedures on completion of firing.</li> </ol>	Interactive Lecture	5 min	A0-027 (p. 1-3-4 and pp. 1-8-1 to 1-8-4)
TP2	Supervise the cadets' participation in a recreational marksmanship activity, choosing from the following categories: <ol style="list-style-type: none"> <li>a. classification;</li> <li>b. fun activities;</li> </ol>	Practical Activity	75 min	

TP	Description	Method	Time	Ref
	c. timed activities; or d. progressive skill achievement activities; or e. competitive team/individual activities.			

#### 5. Time

a.	Introduction/Conclusion:	10 min
b.	Interactive Lecture:	5 min
c.	Practical Activity:	75 min
d.	Total:	90 min

#### 6. Substantiation

- a. An interactive lecture was chosen for TP1 to present important information about the marksmanship activity.
- b. A practical activity was chosen for TP2 as it is an interactive way to allow cadets to experience recreational marksmanship in a safe, controlled environment. This activity contributes to the development of marksmanship skills and knowledge in a fun and challenging setting.

#### 7. References

- a. A0-027 A-CR-CCP-177/PT-001 D Cdts (2001). *Canadian Cadet Movement: Cadet Marksmanship Program Reference Manual*. Ottawa, ON: Department of National Defence.

#### 8. Training Aids

- a. Cadet air rifle;
- b. Cadet air rifle safety rod;
- c. Safety glasses/goggles;
- d. Approved air rifle pellets;
- e. Target frame;
- f. Suitable target;
- g. Shooting mat;
- h. Flags (red and green); and
- i. Local range standing orders.

#### 9. Learning Aids

- a. Cadet air rifle;
- b. Cadet air rifle safety rod;
- c. Safety glasses/goggles;
- d. Approved air rifle pellets;
- e. Target frame;



- f. Suitable targets; and
- g. Shooting mat.

10. **Test Details.** N/A.

11. **Remarks.** Cadets must successfully complete the cadet air rifle handling test (found at Chapter 3, Annex C) prior to firing pellets or cleaning pellets on an air rifle range.

**EO C206.01 – PRACTICE HOLDING TECHNIQUES**

1. **Performance.** Practice Holding Techniques.
2. **Conditions**
  - a. Given:
    - (1) cadet air rifle;
    - (2) cadet air rifle sling;
    - (3) supervision; and
    - (4) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facility and/or an air rifle range constructed IAW A-CR-CCP-177/PT-001, Chapter 1, Section 8.
3. **Standard.** IAW A-CR-CCP-177/PT-001, the cadet shall practice holding techniques, to include:
  - a. adopting the prone position; and
  - b. holding the cadet air rifle, using the cadet air rifle sling for support.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain and demonstrate adopting the prone position, ensuring: <ol style="list-style-type: none"> <li>a. the bodyweight is equally distributed;</li> <li>b. the position is consistent throughout the relay;</li> <li>c. the body forms a 5–20 degree angle to the line of sight;</li> <li>d. the body and spine are straight;</li> <li>e. the left leg is parallel with the spine;</li> <li>f. the right foot is straight out or turned to the right;</li> <li>g. the left foot is straight behind on the toe or pointed to the right; and</li> <li>h. the right knee is brought up so the thigh forms a 30–45 degree angle with the left leg.</li> </ol>	Demonstration	5 min	A0-027 (p. 2-7)
TP2	Explain and demonstrate holding techniques using the cadet air rifle sling, to include: <ol style="list-style-type: none"> <li>a. assembling the sling;</li> <li>b. positioning the sling on the arm;</li> <li>c. adjusting the arm loop;</li> </ol>	Demonstration	10 min	A0-027 (pp. 2-7 and 2-8)

TP	Description	Method	Time	Ref
	d. attaching the sling to the cadet air rifle; e. adjusting the rifle loop.			
TP3	Conduct a holding technique activity to include: a. the prone position; and b. the use of a sling.	Performance	10 min	

5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 5 min  |
| b. | Demonstration:           | 15 min |
| c. | Performance:             | 10 min |
| d. | Total:                   | 30 min |

6. **Substantiation**

- Demonstration was chosen for TP1 and TP2 as it allows the instructor to explain and demonstrate the holding techniques that the cadet is expected to acquire.
- Performance was chosen for TP3 as it provides an opportunity for the cadets to practice holding techniques under supervision.

7. **References.** A0-027 A-CR-CCP-177/PT-001 D Cdts 3. (2001). *Canadian Cadet Movement: Cadet Marksmanship Program Reference Manual*. Ottawa, ON: Department of National Defence.

8. **Training Aids**

- Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- Cadet air rifle;
- Cadet air rifle sling; and
- Shooting mat (if available).

9. **Learning Aids**

- Cadet air rifle;
- Cadet air rifle sling; and
- Shooting mat (if available).

10. **Test Details.** N/A.

11. **Remarks**

- Instructions may be modified for left-handed cadets (e.g. switching left hand/foot when instructions call for right hand/foot).
- This EO is intended to enhance and further develop techniques taught in EO M106.03 (Apply Basic Marksmanship Techniques).

**EO C206.02 – PRACTICE AIMING TECHNIQUES**

1. **Performance.** Practice Aiming Techniques.
2. **Conditions**
  - a. Given:
    - (1) cadet air rifle;
    - (2) suitable target;
    - (3) supervision; and
    - (4) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facility and/or an air rifle range constructed IAW A-CR-CCP-177/PT-001, Chapter 1, Section 8.
3. **Standard.** IAW A-CR-CCP-177/PT-001, the cadet shall practice aiming techniques, to include:
  - a. determining the proper eye usage;
  - b. identifying aspects of aiming; and
  - c. applying breathing techniques.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain, demonstrate and have cadets practice proper eye usage, to include: <ol style="list-style-type: none"> <li>a. determining the master eye;</li> <li>b. firing with both eyes open; and</li> <li>c. avoiding fixed vision.</li> </ol>	Demonstration and Performance	15 min	A0-027 (p. 2-10)
TP2	Identify and explain aspects of aiming, to include: <ol style="list-style-type: none"> <li>a. the sight system of the cadet air rifle, to include:               <ol style="list-style-type: none"> <li>(1) the front sight; and</li> <li>(2) the rear sight, to include:                   <ol style="list-style-type: none"> <li>(a) peep sight;</li> <li>(b) elevation; and</li> <li>(c) windage.</li> </ol> </li> </ol> </li> <li>b. natural head position; and</li> <li>c. eye relief.</li> </ol>	Interactive Lecture	25 min	A0-027 (p. 2-11)

TP	Description	Method	Time	Ref
	<p><b>Note:</b> Explain that elevation is the up and down movement, and windage is the left and right movement of the rear sights. Adjusting sights will not be covered at this time.</p>			
TP3	<p>Explain, demonstrate and have cadets practice marksmanship-related breathing, to include:</p> <ul style="list-style-type: none"> <li>a. discussing the importance of controlled breathing in marksmanship; and</li> <li>b. achieving a controlled breathing sequence.</li> </ul>	Demonstration and Performance	15 min	A0-027 (p. 2-12)

#### 5. Time

- |    |                                |        |
|----|--------------------------------|--------|
| a. | Introduction/Conclusion:       | 5 min  |
| b. | Demonstration and Performance: | 30 min |
| c. | Interactive Lecture:           | 25 min |
| d. | Total:                         | 60 min |

#### 6. Substantiation

- a. Demonstration and performance was chosen for TP1 and TP3 as it allows the instructor to explain and demonstrate aiming techniques while providing an opportunity for the cadets to practice these skills under supervision.
- b. An interactive lecture was chosen for TP2 to introduce the aspects of aiming.

#### 7. References. A0-027 A-CR-CCP-177/PT-001 D Cdts 3. (2001). *Canadian Cadet Movement: Cadet Marksmanship Program Reference Manual*. Ottawa, ON: Department of National Defence.

#### 8. Training Aids

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- b. Cadet air rifle;
- c. Cadet air rifle sling;
- d. Suitable target; and
- e. Shooting mat (if available).

#### 9. Learning Aids

- a. Cadet air rifle;
- b. Cadet air rifle sling;
- c. Suitable target; and
- d. Shooting mat (if available).

#### 10. Test Details. N/A.

11. **Remarks.** N/A.

**EO C206.03 – PRACTICE FIRING TECHNIQUES**

1. **Performance.** Practice Firing Techniques.
2. **Conditions**
  - a. Given:
    - (1) cadet air rifle;
    - (2) supervision; and
    - (3) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facility and/or an air rifle range constructed IAW A-CR-CCP-177/PT-001, Chapter 1, Section 8.
3. **Standard.** IAW A-CR-CCP-177/PT-001, while holding the cadet air rifle in the prone position, the cadet shall practice firing techniques, to include:
  - a. practicing natural alignment;
  - b. demonstrating trigger control; and
  - c. defining follow-through.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain, demonstrate and have the cadets practice natural alignment by: <ol style="list-style-type: none"> <li>a. adopting a comfortable prone position;</li> <li>b. acquiring a sight picture;</li> <li>c. closing both eyes;</li> <li>d. taking several normal breaths to relax the muscles;</li> <li>e. looking through sights when comfortable;</li> <li>f. adjusting body position until a proper sight picture is achieved; and</li> <li>g. proceeding with firing.</li> </ol>	Demonstration and Performance	15 min	A0-027 (p. 1-5-7)
TP2	Demonstrate and explain trigger control, to include: <ol style="list-style-type: none"> <li>a. position of the hand on the rifle;</li> <li>b. trigger finger position; and</li> <li>c. squeezing the trigger.</li> </ol>	Demonstration	5 min	A0-027 (pp. 1-5-9 and 1-5-10)
TP3	Define follow-through as the act of remaining in a stable prone position for two seconds and reacquiring the sight picture after firing the air rifle.	Interactive Lecture	5 min	A0-027 (p. 1-5-10)

5. **Time**

- |    |                                |        |
|----|--------------------------------|--------|
| a. | Introduction/Conclusion:       | 5 min  |
| b. | Demonstration and Performance: | 15 min |
| c. | Demonstration:                 | 5 min  |
| d. | Interactive Lecture:           | 5 min  |
| e. | Total:                         | 30 min |

6. **Substantiation**

- a. Demonstration and performance was chosen for TP1 as it allows the instructor to explain and demonstrate firing techniques while providing an opportunity for the cadets to practice these skills under supervision.
- b. Demonstration was chosen for TP2 as it allows the instructor to explain and demonstrate trigger control.
- c. An interactive lecture was chosen for TP3 to present basic material on follow-through.

7. **References.** A0-027 A-CR-CCP-177/PT-001 D Cdts 3. (2001). *Canadian Cadet Movement: Cadet Marksmanship Program Reference Manual*. Ottawa, ON: Department of National Defence.

8. **Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- b. Cadet air rifle;
- c. Cadet air rifle sling;
- d. Suitable target; and
- e. Shooting mat (if available).

9. **Learning Aids**

- a. Cadet air rifle;
- b. Cadet air rifle sling;
- c. Suitable target; and
- d. Shooting mat (if available).

10. **Test Details.** N/A.

11. **Remarks.** N/A.



**SECTION 7****PO 207 – SERVE IN AN AIR CADET SQUADRON**

1. **Performance.** Serve in an Air Cadet Squadron.
2. **Conditions**
  - a. Given:
    - (1) Supervision, and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Any conditions.
3. **Standard.** In accordance with specified references, the cadet will participate in a discussion on serving in a Royal Canadian Air Cadet Squadron, to include:
  - a. identifying training opportunities available in year two;
  - b. recognizing significant historical aspects related to the Royal Canadian Air Cadets;
  - c. recognizing the role and responsibility of the local sponsor; and
  - d. identifying year two CSTC training opportunities.
4. **Remarks**
  - a. EO M207.01 (Identify Proficiency Level Two Training Opportunities) shall be conducted at the beginning of the training year.
  - b. EO M207.04 (Identify Year Two CSTC Training Opportunities) shall be conducted prior to CSTC application deadlines.
5. **Complementary Material**
  - a. Complementary material associated with PO 207 is designed to enhance the cadet's knowledge of serving in an Air Cadet Squadron:
    - (1) EO C207.01 (Identify the Rank Structure of the Royal Canadian Sea and Army Cadets);
    - (2) EO C207.02 (Visit a Royal Canadian Sea/Army Cadet Corps or an Air Cadet Squadron);
    - (3) EO C207.03 (Describe the Affiliated Unit); and
    - (4) EO C207.04 (Tour the Affiliated Unit).
  - b. Complementary material associated with PO 207 is limited to a total of 8 periods, which may be conducted during sessions or on a supported day. Squadrons are not required to use all 8 periods.

**EO M207.01 – IDENTIFY PROFICIENCY LEVEL TWO TRAINING OPPORTUNITIES**

1. **Performance.** Identify Proficiency Level Two Training Opportunities.
2. **Conditions**
  - a. Given:
    - (1) Handout of Performance Objectives (POs) and Enabling Objectives (EOs) of Proficiency Level Two training opportunities;
    - (2) Supervision; and
    - (3) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify Proficiency Level Two training opportunities, to include:
  - a. mandatory; and
  - b. complementary.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Identify Proficiency Level Two mandatory training, to include: <ol style="list-style-type: none"> <li>a. training common to the sea, Army, and air elements of the CCO, to include:               <ol style="list-style-type: none"> <li>(1) citizenship;</li> <li>(2) community service;</li> <li>(3) leadership;</li> <li>(4) personal fitness and healthy living;</li> <li>(5) recreational sports;</li> <li>(6) air rifle marksmanship;</li> <li>(7) general cadet knowledge; and</li> <li>(8) drill.</li> </ol> </li> <li>b. air elemental training, to include:               <ol style="list-style-type: none"> <li>(1) aviation;</li> <li>(2) aviation technologies;</li> <li>(3) aerospace; and</li> <li>(4) aircrew survival.</li> </ol> </li> </ol>	In-class Activity	15 min	A0-010
TP2	Identify Proficiency Level Two complementary training opportunities.	Interactive Lecture	5 min	See Remarks para. 11

TP	Description	Method	Time	Ref
TP3	Conduct an activity on Proficiency Level Two training opportunities.	In-class Activity	5 min	

5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 5 min  |
| b. | Interactive Lecture:     | 5 min  |
| c. | In-class Activity:       | 20 min |
| d. | Total:                   | 30 min |

6. **Substantiation**

- An in-class activity was chosen for TPs 1 and 2 as it is an interactive way to provoke thought and stimulate interest among cadets.
- An interactive lecture was chosen for TP2 to orient the cadets to and generate interest in Proficiency Level Two training opportunities.

7. **References.** A0-010 CATO 11-03 D Cdts 2. (2006). *Cadet Program Mandate*. Ottawa, ON: Department of National Defence.

8. **Training Aids**

- Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- Handout of the EOs and POs for Proficiency Level Two training located at A-CR-CCP-802/PF-001, Annex A; and
- Tape.

9. **Learning Aids.** Handout of POs and EOs for Proficiency Level Two training opportunities located at A-CR-CCP-802/PF-001, Annex A.

10. **Test Details.** N/A.

11. **Remarks**

- For Proficiency Level Two complementary training opportunities in TP2, refer to the squadron's annual training plan.
- This EO should be scheduled as early as possible in the training year. See sample schedule attached to Chapter 2, Annex C of the QSP.

**EO M207.02 – RECOGNIZE HISTORICAL ASPECTS OF THE ROYAL CANADIAN AIR CADETS (RCAC)**

1. **Performance.** Recognize Historical Aspects of the Royal Canadian Air Cadets (RCAC).
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall recognize historical aspects of the RCAC, to include:
  - a. significant events in the Air Cadet Program;
  - b. uniforms; and
  - c. the Air Cadet League of Canada.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Introduce historical aspects of the Air Cadet Program, to include: <ol style="list-style-type: none"> <li>a. significant events in the Air Cadet Program, to include:               <ol style="list-style-type: none"> <li>(1) the world wars;</li> <li>(2) the post-war period;</li> <li>(3) unification of the Canadian Forces; and</li> <li>(4) girls in the Cadet Program;</li> </ol> </li> <li>b. changes in the Air Cadet uniform; and</li> <li>c. significant dates in the Air Cadet League, to include:               <ol style="list-style-type: none"> <li>(1) the early days;</li> <li>(2) the inauguration;</li> <li>(3) the post-war period; and</li> <li>(4) the post-unification years from 1968 to 2000.</li> </ol> </li> </ol>	In-class Activity	15 min	A0-045 C3-077
TP2	Discuss historical aspects of the RCAC, to include: <ol style="list-style-type: none"> <li>a. topics that were of interest; and</li> <li>b. why the topic was interesting.</li> </ol>	Group Discussion	10 min	

**5. Time**

a.	Introduction/Conclusion:	5 min
b.	In-class Activity:	15 min
c.	Group Discussion:	10 min
d.	Total:	30 min

**6. Substantiation**

- a. An in-class activity was chosen for TPs 1 as it is an interactive way to present the content and stimulate interest among cadets.
- b. A group discussion was chosen for TP2 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions, and feelings about the history of the Air Cadet Program.

**7. References**

- a. A0-045 Cadets Canada. (2007). *About Cadets – History*. Retrieved February 19, 2007, from [http://www.cadets.ca/about-nous/histo\\_e.asp](http://www.cadets.ca/about-nous/histo_e.asp).
- b. C3-077 Air Cadet League. (2007). *General – History*. Retrieved February 19, 2007, from [http://www.aircadetleague.com/General/history\\_e.html](http://www.aircadetleague.com/General/history_e.html).

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** After the introduction, the class shall be divided into three groups. Each group will begin at a separate learning station. Each group will rotate to a new learning station after approximately five minutes.

**EO M207.03 – RECOGNIZE THE ROLE AND RESPONSIBILITIES OF THE LOCAL SPONSOR**

1. **Performance.** Recognize the Role and Responsibilities of the Local Sponsor.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall recognize the role and responsibilities of the local sponsor.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Define sponsor and sponsoring committee.	Interactive Lecture	5 min	A0-040 p. 6/40
TP2	Describe the local sponsoring body, to include: <ol style="list-style-type: none"> <li>a. identifying the local sponsoring body, such as:               <ol style="list-style-type: none"> <li>(1) the Navy League;</li> <li>(2) the Air Force Association;</li> <li>(3) the Rotary Club;</li> <li>(4) the Legion; and</li> <li>(5) a parents committee, etc.; and</li> </ol> </li> <li>b. identifying positions and members of the local sponsoring body.</li> </ol>	Interactive Lecture	10 min	
TP3	Explain the role and responsibilities of the sponsoring committee, to include: <ol style="list-style-type: none"> <li>a. recruiting cadets;</li> <li>b. attracting officers to the squadron;</li> <li>c. screening volunteers; and</li> <li>d. providing adequate office and training facilities.</li> </ol>	Interactive Lecture	10 min	A0-040 A0-046

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Interactive Lecture: 25 min
  - c. Total: 30 min

6. **Substantiation.** The interactive lecture was chosen for this lesson to orient the cadets to the role and responsibilities of the local sponsor and to present basic material.

7. **References**

- a. A0-040 (2005-113124) *Memorandum of Understanding Between the DND and the Leagues (2005)*. Ottawa, ON. Department of National Defence.
- b. A0-046 Scott, M. (Ed.). (2003). Clarifying Civilian Roles in Cadet Corps and Squadrons. *Cadence: The Leadership Magazine of the Canadian Cadet Movement*, Issue 11, 30–32.

8. **Training Aids.** N/A.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks**

- a. This EO may be delivered by a member of the local sponsoring body.
- b. The guest speaker shall be briefed on the TPs prior to the lesson.

**EO M207.04 – IDENTIFY YEAR TWO CSTC TRAINING OPPORTUNITIES**

1. **Performance.** Identify Year Two CSTC Training Opportunities.
2. **Conditions**
  - a. Given:
    - (1) CATO 51-01, *Air Cadet Program Outline*;
    - (2) Supervision; and
    - (3) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify year two CSTC training opportunities, to include:
  - a. areas of interest;
  - b. courses within each area of interest; and
  - c. prerequisites for the courses within each area of interest.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Discuss the areas of interest of CSTC programming, to include: <ol style="list-style-type: none"> <li>a. sports and fitness;</li> <li>b. music;</li> <li>c. marksmanship;</li> <li>d. leadership;</li> <li>e. aviation;</li> <li>f. aviation technology;</li> <li>g. aerospace; and</li> <li>h. aircrew survival.</li> </ol>	Group Discussion	10 min	A0-010 A0-033 A3-029
TP2	Discuss selection of year two summer courses, to include: <ol style="list-style-type: none"> <li>a. all three-week courses offered within each area of common interest;</li> <li>b. all the three-week courses offered within each elementally-specific area; and</li> <li>c. prerequisites for each three-week course.</li> </ol>	Interactive Lecture	15 min	A0-010 A0-033 A3-003 A3-029



5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 5 min  |
| b. | Group Discussion:        | 10 min |
| c. | Interactive Lecture:     | 15 min |
| d. | Total:                   | 30 min |

6. **Substantiation**

- A group discussion was chosen for TP1 as it allows the cadets to interact with their peers and share their experiences, opinions, and feelings about year two CSTC training opportunities.
- An interactive lecture was chosen for TP2 to orient the cadets to year two CSTC training opportunities and to generate interest.

7. **References**

- A0-010 CATO 11-03 D Cdts 2. (2006). *Cadet Program Mandate*. Ottawa, ON: Department of National Defence.
- A0-033 CATO 14-21 D Cdts 3. (2004). *Music Training and Education With the Canadian Cadet Organizations*. Ottawa, ON: Department of National Defence.
- A3-003 CATO 54-20 D Cdts 3. (2000). *Summer Training Directive – Royal Canadian Air Cadets*. Ottawa, ON: Department of National Defence.
- A3-029 CATO 51-01 D Cdts 3. (2006). *Air Cadet Program Outline*. Ottawa, ON: Department of National Defence.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks**

- This EO should be conducted before the summer training application deadline is reached.
- It is strongly recommended that the summer training application forms be completed during a training session after this EO has been conducted.

**EO C207.01 – IDENTIFY THE RANK STRUCTURE OF THE ROYAL CANADIAN SEA AND ARMY CADETS**

1. **Performance.** Identify the Rank Structure of the Royal Canadian Sea and Army Cadets.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify the rank structure of:
  - a. the Royal Canadian Sea Cadets; and
  - b. the Royal Canadian Army Cadets.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Identify: <ol style="list-style-type: none"> <li>a. Sea Cadet rank structure, to include:               <ol style="list-style-type: none"> <li>(1) Ordinary Seaman (OS);</li> <li>(2) Able Seaman (AB);</li> <li>(3) Leading Seaman (LS);</li> <li>(4) Master Seaman (MS);</li> <li>(5) Petty Officer Second Class (PO2);</li> <li>(6) Petty Officer First Class (PO1);</li> <li>(7) Chief Petty Officer Second Class (CPO2);</li> <li>(8) Chief Petty Officer First Class (CPO1); and</li> </ol> </li> <li>b. Army Cadet rank structure, to include:               <ol style="list-style-type: none"> <li>(1) Cadet;</li> <li>(2) Private (Pte);</li> <li>(3) Corporal (Cpl);</li> <li>(4) Master Corporal (MCpl);</li> <li>(5) Sergeant (Sgt);</li> <li>(6) Warrant Officer (WO);</li> <li>(7) Master Warrant Officer (MWO); and</li> <li>(8) Chief Warrant Officer (CWO).</li> </ol> </li> </ol>	Interactive Lecture	10 min	A0-001 A1-003 A2-030

TP	Description	Method	Time	Ref
TP2	Conduct an activity to familiarize cadets with the Sea and Army Cadet rank structure.	Game	15 min	

5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 5 min  |
| b. | Interactive Lecture:     | 10 min |
| c. | Game:                    | 15 min |
| d. | Total:                   | 30 min |

6. **Substantiation**

- An interactive lecture was chosen for TP1 to orient the cadets to the sea and Army Cadet rank structure, to generate interest and to present basic material.
- A game was chosen for TP2 as it is an interactive way to provoke thought and stimulate interest among cadets.

7. **References**

- A0-001 A-AD-265-000/AG-001 DHH 3-2. (2001). *Canadian Forces Dress Instructions*. Ottawa, ON: The Department of National Defence.
- A1-003 A-CR-005-001/AG-001 D Cdts 4. (Draft). *Royal Canadian Sea Cadets Dress Instructions*. Ottawa, ON: Department of National Defence.
- A2-030 CATO 40-03 D Cdts 4. (2005). *Army Cadet Ranks and Cadet Corps*. Ottawa, ON: Department of National Defence.

8. **Training Aids**

- Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- Photocopies of annexes; and
- Tape.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**EO C207.02 – VISIT A ROYAL CANADIAN SEA/ARMY CADET CORPS OR AN AIR CADET SQUADRON**

1. **Performance.** Visit a Royal Canadian Sea/Army Cadet Corps or an Air Cadet Squadron.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: The squadron Commanding Officer will determine the conditions suitable for this training.
3. **Standard.** The cadet shall visit a cadet corps or squadron to identify:
  - a. the intra- and inter-elemental differences in cadet training;
  - b. the history and traditions of the following:
    - (1) the corps/squadron;
    - (2) the affiliated unit; and
    - (3) the sea/army element; and
  - c. trips/exchanges in which the corps/squadron has participated.
4. **Teaching Points.** The instructor is asked to:
  - a. conduct a tour of facilities of the corps/squadron;
  - b. identify the number of staff and cadets; and
  - c. describe the following:
    - (1) elemental mandatory training;
    - (2) history and traditions of:
      - (a) the element;
      - (b) the corps/squadron; and
      - (c) the affiliated unit; and
    - (3) some trips or exchanges in which the corps/squadron has participated.
5. **Time**
  - a. Introduction/Conclusion: 10 min
  - b. Field Trip: 80 min
  - c. Total: 90 min
6. **Substantiation.** A field trip was chosen for this lesson as it will reinforce the cadet's knowledge of material previously taught in EO M207.01 (Identify Proficiency Level Two Training Opportunities), EO M207.02

(Recognize Historical Aspects of the Royal Canadian Air Cadets (RCAC)) and EO C107.04 (Participate in an Activity About the History of the Squadron) through participation in a tour.

7. **References.** N/A.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. If this EO is chosen as complementary training, it is recommended that EO C207.01 (Identify the Rank Structure of the Royal Canadian Sea and Army Cadets) be conducted before this tour.
  - b. This field trip can be completed on a supported day or during a complementary session.
  - c. There is no instructional guide for the lesson.

**EO C207.03 – DESCRIBE THE AFFILIATED UNIT**

1. **Performance.** Describe the Affiliated Unit.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** The cadet shall describe the affiliated unit.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Describe the affiliated unit, to include: <ol style="list-style-type: none"> <li>a. its size;</li> <li>b. its location;</li> <li>c. its role within the broader CF mandate;</li> <li>d. its formation date;</li> <li>e. the building(s) it occupies;</li> <li>f. selected affiliated unit traditions;</li> <li>g. previous and future deployments;</li> <li>h. any special awards/medals awarded to its members; and</li> <li>i. other interesting facts.</li> </ol>	Interactive Lecture	25 min	
TP2	Conduct an activity on the affiliated unit.	In-class Activity	10 min	

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Interactive Lecture: 25 min
  - c. In-class Activity: 10 min
  - d. Total: 40 min

6. **Substantiation**
  - a. An interactive lecture was chosen for TP1 to orient the cadets to the history of the affiliated unit and to generate interest.
  - b. An in-class activity was chosen for TP2 as it is an interactive way to provoke thought and stimulate interest in the history of the affiliated unit among cadets.

7. **References.** N/A.
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. The instructor for this lesson may be a member of the squadron or the affiliated unit.
  - b. If the affiliated unit has access to promotional materials, these may be used as references and/or training/learning aids.
  - c. Topics found in TP1 may differ for each affiliated unit. The instructor should determine interesting facts of the affiliated unit prior to the lesson.
  - d. The posters created during this lesson may be used in a display at the annual ceremonial review.

## EO C207.04 – TOUR THE AFFILIATED UNIT

1. **Performance.** Tour the Affiliated Unit.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: The squadron Commanding Officer will determine conditions suitable for this training.
3. **Standard.** The cadet shall tour the affiliated unit to gain an awareness of the Canadian Forces' (CF) responsibility for supporting the Cadet Program.
4. **Teaching Points.** The tour guide is asked to explain:
  - a. the size of the affiliated unit;
  - b. the role the affiliated unit plays within the broader CF mandate;
  - c. the formation date of the affiliated unit;
  - d. the building(s) occupied by the affiliated unit;
  - e. any deployments in which the affiliated unit has participated;
  - f. any special awards/medals awarded to members of the affiliated unit; and
  - g. any other interesting facts.
5. **Time**
  - a. Introduction/Conclusion: 10 min
  - b. Field Trip: 80 min
  - c. Total: 90 min
6. **Substantiation.** A field trip was chosen for this lesson as it will enhance the cadet's knowledge of the broader mandate of the Canadian Forces.
7. **References.** N/A.
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. This EO is only to be conducted by squadrons with an affiliated unit that is located within the local training location as described in para 4b(1) in CATO-11-04, *Cadet Program Outline*.



- b. Cadet squadron personnel are to determine whether a guide will escort the group or if an instructor from the squadron will be responsible for conducting the tour. If an instructor from the squadron will conduct the tour, all teaching points are to be researched in advance.
- c. This field trip can be completed on a supported day or during a complementary session.
- d. If the affiliated unit has access to promotional materials, these may be used as references and/ training/learning aids.
- e. There is no Instructional Guide for the lesson.

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**SECTION 8****PO 208 – EXECUTE DRILL AS A MEMBER OF A SQUAD**

1. **Performance.** Execute Drill as a Member of a Squad.
2. **Conditions**
  - a. Given:
    - (1) words of command;
    - (2) supervision; and
    - (3) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: A drill hall or outdoor parade square in favourable weather.
3. **Standard.** In accordance with A-PD-201-000/PT-000, *The Canadian Forces Manual of Drill and Ceremonial*, the cadet will execute drill as a member of a squad, to include:
  - a. executing turns to the left and right on the march;
  - b. as a squad in threes, forming single file from the halt; and
  - c. as a squad in line, forming single file from the halt.
4. **Remarks.** Instructors are advised to conduct the EOs as listed, as subsequent EOs are dependent on previous EOs.
5. **Complementary Material**
  - a. Complementary material associated with PO 208 is designed to allow additional opportunities for cadet squadrons with an interest in drill to develop the cadet's skills in this area specifically:
    - (1) EO C208.01 (Practice Ceremonial Drill as a Review) provided to allow practice of Proficiency Level One mandatory training; and
    - (2) EO C208.02 (Execute Drill With Arms).
  - b. Some complementary training offered in the Proficiency Level One Program may be selected as complementary training in the Proficiency Level Two Program, specifically EO C108.01 (Execute Supplementary Drill Movements). Drill movements will be selected from A-PD-201-000/PT-000, Chapters 2 or 3.
  - c. Complementary training associated with PO 208 is limited to a total of nine periods, of which a maximum of six periods may be used in support of EO C108.01 (Execute Supplementary Drill Movements) and EO C208.01 (Practice Ceremonial Drill as a Review), to be conducted during sessions or on a supported day. Squadrons are not required to use all nine periods.

**EO M208.01 – EXECUTE LEFT AND RIGHT TURNS ON THE MARCH**

1. **Performance.** Execute Left and Right Turns on the March.
2. **Conditions**
  - a. Given:
    - (1) words of command;
    - (2) supervision; and
    - (3) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: A drill hall, or outdoor parade square in favourable weather.
3. **Standard.** In accordance with A-PD-201-000/PT-000, and as a member of a squad, the cadet shall execute left and right turns on the march.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain, demonstrate, and allow cadets time to practice left turns on the march.	Demonstration and Performance	25 min	A0-002 (pp. 3-29 and 3-30)
TP2	Explain, demonstrate, and allow cadets time to practice right turns on the march.	Demonstration and Performance	25 min	A0-002 (p. 3-31)

5. **Time**

- a. Introduction/Conclusion: 10 min
- b. Demonstration and Performance: 50 min
- c. Total: 60 min
6. **Substantiation.** Demonstration and performance was chosen for this lesson as it allows the instructor to explain and demonstrate turning on the march while providing an opportunity for the cadets to practice turning on the march under supervision.
7. **References.** A0-002 A-PD-201-000/PT-000 Directorate of History and Heritage 3-2. (2005). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. It is recommended that ongoing feedback be provided during drill practices, weekly parade nights, and ceremonial parades.

- b. Assistant instructors may be required for this lesson.

**EO M208.02 – FORM SINGLE FILE FROM THE HALT**

1. **Performance.** Form Single File from the Halt.
2. **Conditions**
  - a. Given:
    - (1) words of command;
    - (2) supervision; and
    - (3) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: A drill hall, or outdoor parade square in favourable weather.
3. **Standard.** In accordance with A-PD-201-000/PT-000, and as a member of a squad, the cadet shall form single file from the halt, to include:
  - a. forming single file from the halt as a squad in threes; and
  - b. forming single file from the halt as a squad in line.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain, demonstrate, and allow cadets to practice forming single file from the halt as a squad in threes.	Demonstration and Performance	15 min	A0-002 (pp. 3-43 and 3-44)
TP2	Explain, demonstrate, and allow cadets to practice forming single file from the halt as a squad in line.	Demonstration and Performance	10 min	A0-002 (pp. 3-45 and 3-46)

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Demonstration and Performance: 25 min
  - c. Total: 30 min
6. **Substantiation.** Demonstration and performance was chosen for this lesson as it allows the instructor to explain and demonstrate the skill the cadet is expected to acquire while providing an opportunity for the cadets to practice forming single file from the halt under supervision.
7. **References.** A0-002 A-PD-201-000/PT-000 Directorate of History and Heritage 3-2. (2005). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.

11. **Remarks**

- a. It is recommended that ongoing feedback be provided during drill practices, weekly parade nights, and ceremonial parades.
- b. Assistant instructors may be required for this lesson.

## EO C208.01 – PRACTICE CEREMONIAL DRILL AS A REVIEW

1. **Performance.** Practice Ceremonial Drill as a Review.
2. **Conditions**
  - a. Given:
    - (1) words of command;
    - (2) supervision; and
    - (3) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: A drill hall, or outdoor parade square in favourable weather.
3. **Standard.** In accordance with A-PD-201-000/PT-000, the cadet shall participate in a review of ceremonial drill, chosen from EOs M108.01 to M108.11.
4. **Teaching Points.** As per reference.
5. **Time**
  - a. Introduction/Conclusion: 10 min
  - b. Demonstration and Performance: 50 min
  - c. Total: 60 min
6. **Substantiation.** Demonstration and performance was chosen for this lesson as it allows the instructor to explain and demonstrate ceremonial drill while providing an opportunity for the cadets to practice these skills under supervision.
7. **References.** A0-002 A-PD-201-000/PT-000 Directorate of History and Heritage 3-2. (2005). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. It is recommended that ongoing feedback be provided during drill practices, weekly parade nights, and ceremonial parades.
  - b. A maximum of two periods have been allocated for this EO to review any mandatory drill from EOs M108.01 to M108.11.
  - c. Assistant instructors may be required for this lesson.
  - d. No instructional guide will be provided for this EO.



**EO C208.02 – EXECUTE DRILL WITH ARMS**

1. **Performance.** Execute Drill with Arms.
2. **Conditions**
  - a. Given:
    - (1) words of command;
    - (2) drill purpose rifle;
    - (3) supervision; and
    - (4) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: A drill hall, or outdoor parade square in favourable weather.
3. **Standard.** In accordance with A-CR-CCP-053/PT-001, *Royal Canadian Sea Cadets Manual of Drill and Ceremonial*, Chapter 2, and as a member of a squad, the cadet shall execute drill with arms.
4. **Teaching Points.** As per reference.
5. **Time**
  - a. Introduction/Conclusion: 10 min
  - b. Demonstration and Performance: 230 min
  - c. Total: 240 min
6. **Substantiation.** Demonstration and performance was chosen for this lesson as it allows the instructor to explain and demonstrate drill with arms while providing an opportunity for the cadets to practice these skills under supervision.
7. **References.** A0-038 A-CR-CCP-053/PT-001 D Cdts. (2000). *Royal Canadian Sea Cadets Manual of Drill and Ceremonial*. Ottawa, ON: Department of National Defence.
8. **Training Aids.** Drill purpose rifle.
9. **Learning Aids.** Drill purpose rifle.
10. **Test Details.** N/A.
11. **Remarks**
  - a. Assistant instructors may be required to provide demonstrations for this lesson.
  - b. The recommended basic breakdown of basic drill with arms lessons is as follows:

- (1) adopt the positions of attention, stand at ease, and stand easy with arms, to include (one period):
    - (a) the position of attention;
    - (b) stand at ease from attention;
    - (c) stand easy from stand at ease;
    - (d) stand at ease from stand easy; and
    - (e) attention from stand at ease;
  - (2) execute ground and take up arms (one period);
  - (3) execute slope arms from the order and order arms from the slope (one period);
  - (4) execute dressing a squad with arms (one period);
  - (5) execute paying compliments with arms at the halt, to include (two periods):
    - (a) salute at slope arms;
    - (b) present arms from the slope; and
    - (c) slope arms from the present; and
  - (6) march and halt in quick time with arms (one period).
- c. No instructional guide will be provided for this EO.

**SECTION 9****PO C211A – PARTICIPATE IN COMPETITIVE SUMMER BIATHLON ACTIVITIES**

1. **Performance.** Participate in Competitive Summer Biathlon Activities.
2. **Conditions**
  - a. Given:
    - (1) cadet air rifle;
    - (2) safety glasses/goggles;
    - (3) approved cadet air rifle pellets;
    - (4) containers to hold pellets;
    - (5) biathlon Air Rifle Target (BART);
    - (6) local Range Standing Orders;
    - (7) supervision; and
    - (8) assistance as required.
  - b. Denied: N/A.
  - c. Environmental:
    - (1) Air rifle range constructed IAW A-CR-CCP-177/PT-001, Chapter 1, Section 8; and
    - (2) Established running route of approximately 500-1000 m.
3. **Standard.** In accordance with specified references and, as a member of a section, the cadet will participate in competitive summer biathlon activities, to include:
  - a. running a loop of 500-1000 m;
  - b. firing eight rounds in an effort to activate all five targets of the BART;
  - c. running a second loop of 500-1000 m;
  - d. firing eight rounds in an effort to activate all five targets of the BART;
  - e. running a final loop of 500-1000 m; and
  - f. finishing the event.
4. **Remarks**
  - a. Cadets must have completed PO C111 (Participate in a Summer Biathlon Activity) prior to competing in the competitive summer biathlon activity.
  - b. Assistance may be given to cadets who have difficulty pumping the cadet air rifle.
  - c. All range activities must be conducted by a Range Safety Officer (RSO).

**5. Complementary Material**

- a. PO 211 (Participate in Competitive Summer Biathlon Activities) is a complementary package designed to provide an opportunity for the cadet to participate in competitive summer biathlon activities.
- b. Squadrons choosing PO 211 as complementary training may complete EOs C211.01-C211.03 or the complete package, EOs C211.01-C211.04. Squadrons cannot conduct EO C211.04 (Participate in a Competitive Summer Biathlon Activity), unless cadets have completed EOs C211.01-C211.03.
- c. Complementary training associated with PO 211 is limited to a total of nine periods which may be conducted during sessions or on a supported day.

**EO C211.01 – IDENTIFY CIVILIAN BIATHLON OPPORTUNITIES**

1. **Performance.** Identify Civilian Biathlon Opportunities.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify civilian biathlon opportunities, to include:
  - a. training opportunities; and
  - b. competitive events.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Introduce local, provincial/territorial, national, and international biathlon training opportunities.	Interactive Lecture	10 min	C0-082 C0-148 C0-149
TP2	Introduce local, provincial/territorial, national, and international competitive biathlon opportunities.	Interactive Lecture	10 min	C0-082 C0-148
TP3	Identify famous biathletes who were introduced to the sport through the Canadian Cadet Program.	Interactive Lecture	5 min	A0-049 C0-082 C0-153

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Interactive Lecture: 25 min
  - c. Total: 30 min
6. **Substantiation.** An interactive lecture was chosen for this lesson to orient the cadets to civilian biathlon opportunities and to generate interest.
7. **References**
  - a. A0-042 Regional Cadet Support Unit (Central). (2007). *Cadet Marksmanship and Firearms Safety Program*. Retrieved 18 April 2007, from [http://www.central.cadets.ca/events/biath\\_cadetmarksman\\_e.html](http://www.central.cadets.ca/events/biath_cadetmarksman_e.html).

- b. C0-082 Biathlon Canada. (2007). *Biathlon Canada*. Retrieved 12 February 2007, from <http://www.biathloncanada.ca>.
  - c. C0-148 International Biathlon Union. (2007). *International Biathlon Union*. Retrieved 18 April 2007, from <http://www.biathlonworld.com>.
  - d. C0-149 Biathlon Canada. (2005). *Biathlon Bears: Community Coaching*. Ottawa, ON: Biathlon Canada.
  - e. C0-153 Library and Archives Canada. (2000). *Myriam Bédard*. Retrieved 30 April 2007, from <http://www.collectionscanada.ca/women/002026-223-e.html>.
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks.** N/A.

**EO C211.02 – RUN ON ALTERNATING TERRAIN**

1. **Performance.** Run on Alternating Terrain.
2. **Conditions**
  - a. Given:
    - (1) supervision; and
    - (2) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Training area of alternating terrain large enough to set up a running course of 20-40 m.
3. **Standard.** In accordance with specified references, the cadet shall:
  - a. participate in a warm-up;
  - b. practice running on alternating terrain; and
  - c. participate in a cool-down.
4. **Teaching Points**

<b>TP</b>	<b>Description</b>	<b>Method</b>	<b>Time</b>	<b>Ref</b>
TP1	Describe running techniques for alternating terrain, to include: <ol style="list-style-type: none"> <li>a. posture/body alignment;</li> <li>b. foot position; and</li> <li>c. endurance.</li> </ol>	Interactive Lecture	5 min	C0-080
TP2	Conduct a warm-up session, composed of light cardiovascular exercises, meant to: <ol style="list-style-type: none"> <li>a. stretch the muscles;</li> <li>b. gradually increase respiratory action and heart rate;</li> <li>c. expand the muscles' capillaries to accommodate the increase in blood circulation; and</li> <li>d. raise muscle temperature to facilitate reactions in muscle tissue.</li> </ol>	Practical Activity	5 min	C0-002 (pp. 109 to 113) C0-089
TP3	Supervise while cadets run on alternating terrain.	Practical Activity	5 min	
TP4	Conduct a cool-down session, composed of light cardiovascular exercises, meant to: <ol style="list-style-type: none"> <li>a. allow the body time to slowly recover from physical activity and to help prevent injury;</li> </ol>	Practical Activity	5 min	C0-002 (pp. 109 to 113) C0-089

TP	Description	Method	Time	Ref
	b. prepare the respiratory and cardiovascular systems to return to their normal state; and c. stretch the muscles.			
TP5	Describe how to create and implement a running schedule.	Interactive Lecture	5 min	C0-146

## 5. Time

a.	Introduction/Conclusion:	5 min
b.	Interactive Lecture:	10 min
c.	Practical Activity:	15 min
d.	Total:	30 min

## 6. Substantiation

- An interactive lecture was chosen for TPs 1 and 5 to introduce the cadets to running techniques on alternating terrain and on how to implementing a running program.
- A practical activity was chosen for TPs 2-4 as it is an interactive way to introduce the cadets to running on alternating terrain in a safe and controlled environment.

## 7. References

- C0-002 (ISBN 0-88962-630-8) LeBlanc, J. and Dickson, L. (1997). *Straight Talk About Children and Sport: Advice for Parents, Coaches, and Teachers*. Oakville, ON and Buffalo, NY: Mosaic Press.
- C0-057 Martha Jefferson Hospital. (2001). *Warm-ups*. Retrieved 16 October 2006, from <http://www.marthajefferson.org/warmup.php>.
- C0-058 Webb Physiotherapists Inc. (ND). *Running Exercises*. Retrieved 26 October 2006 from <http://www.physioline.co.za/conditions/article.asp?id=46>.
- C0-059 Webb Physiotherapists Inc. (ND). *Exercise Programme for Squash, Tennis, Softball, Handball*. Retrieved 25 October 2006 from <http://www.physioline.co.za/conditions/article.asp?id=49>.
- C0-060 Impacto Protective Products Inc. (1998). *Exercises*. Retrieved 25 October 2006, from <http://www.2protect.com/work3b.htm>.
- C0-061 City of Saskatoon, Community Services Department. (ND). *Stretch Your Limits: A Smart Guide to Stretching for Fitness*. Retrieved 26 October 2006, from <http://in-motion.ca/walkingworkout/plan/flexibility/>.
- C0-080 Cool Running. (2007). *Fitness and Performance*. Retrieved 12 February 2007, from [http://www.coolrunning.com/engine/2/2\\_3/181.shtml](http://www.coolrunning.com/engine/2/2_3/181.shtml).
- C0-089 (ISBN 0-936070-22-6) Anderson, B. (2000). *Stretching: 20<sup>th</sup> Anniversary* (Rev. ed.). Bolinas, CA: Shelter Publications, Inc.
- C0-146 Will-Weber, M. (2006). *Runner's World: Beginner's: Training: First Steps*. Retrieved 18 April 2007, from <http://www.runnersworld.com/article/printer/1,7124,s6-380-381-386-678-0,00.html>.



- j. C0-154 Hansen, B. (1999). *Moving on the Spot: Fun and Physical Activity: A Collection of 5 Minute Stretch and Movement Sessions*. Retrieved 26 October 2006, from <http://lin.ca/resource/html/dn3.htm#1>.

8. **Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart) appropriate for the training area; and
- b. Whistle.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** Stairs may be used in place of alternating terrain.

**EO C211.03 – FIRE THE CADET AIR RIFLE USING A SLING FOLLOWING PHYSICAL ACTIVITY**

1. **Performance.** Fire the Cadet Air Rifle Using a Sling Following Physical Activity.
2. **Conditions**
  - a. Given:
    - (1) cadet air rifle;
    - (2) cadet air rifle sling;
    - (3) biathlon air rifle target (BART);
    - (4) safety glasses/goggles;
    - (5) Shooting Mat;
    - (6) supervision; and
    - (7) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall fire the cadet air rifle using the cadet air rifle sling following physical activity.

4. **Teaching Point**

TP	Description	Method	Time	Ref
TP1	In accordance with EO C206.01 (Practice Holding Techniques), review holding techniques using the cadet air rifle sling.	Interactive Lecture	5 min	A0-027 (pp. 2-7 and 2-8)
TP2	Conduct a warm-up session composed of light cardiovascular exercises.	Practical Activity	5 min	C0-002 (pp. 109 to 113) C0-089
TP3	Conduct an activity where cadets will fire the cadet air rifle using a sling following physical activity.	Practical Activity	10 min	
TP4	Conduct a cool-down session composed of light cardiovascular exercises.	Practical Activity	5 min	C0-002 (pp. 109 to 113) C0-089

5. **Time**

- a. Introduction/Conclusion: 5 min
- b. Interactive Lecture: 5 min
- c. Practical Activity: 20 min
- d. Total: 30 min

## 6. Substantiation

- a. An interactive lecture was chosen for TP1 to review holding techniques using the cadet air rifle sling.
- b. A practical activity was chosen for TP2-4 as it is an interactive way to allow the cadets to experience firing the cadet air rifle using a sling following physical activity.

## 7. References

- a. A0-027 A-CR-CCP-177/PT-001 D Cds 3. (2001). *Cadet Marksmanship Program: Reference Manual*. Ottawa, ON: Department of National Defence.
- b. C0-002 (ISBN 0-88962-630-8) LeBlanc, J. and Dickson, L. (1997). *Straight Talk About Children and Sport: Advice for Parents, Coaches, and Teachers*. Oakville, ON and Buffalo, NY: Mosaic Press.
- c. C0-057 Martha Jefferson Hospital. (2001). *Warm-ups*. Retrieved 16 October 2006, from <http://www.marthajefferson.org/warmup.php>.
- d. C0-058 Webb Physiotherapists Inc. (ND). *Running Exercises*. Retrieved 26 October 2006 from <http://www.physioline.co.za/conditions/article.asp?id=46>.
- e. C0-059 Webb Physiotherapists Inc. (ND). *Exercise Programme for Squash, Tennis, Softball, Handball*. Retrieved 25 October 2006 from <http://www.physioline.co.za/conditions/article.asp?id=49>.
- f. C0-060 Impacto Protective Products Inc. (1998). *Exercises*. Retrieved 25 October 2006, from <http://www.2protect.com/work3b.htm>
- g. C0-061 City of Saskatoon, Community Services Department. (2006). *Stretch Your Limits: A Smart Guide to Stretching For Fitness*. Retrieved 26 October 2006, from <http://in-motion.ca/walkingworkout/plan/flexibility/>.
- h. C0-080 Cool Running. (2007). *Cool Running*. Retrieved 12 February 2007, from [http://www.coolrunning.com/engine/2/2\\_3/181.shtml](http://www.coolrunning.com/engine/2/2_3/181.shtml).
- i. C0-085 Daisy Outdoor Products. (2006). *AVANTI competition pellet rifle: Operation manual: AVANTI legend model 853*. Rogers, AR: Daisy Outdoor Products.
- j. C0-089 (ISBN 0-936070-22-6) Anderson, B. (2000). *Stretching: 20<sup>th</sup> anniversary* (Rev. ed.). Bolinas, CA: Shelter Publications, Inc.
- k. C0-154 Hansen, B. (1999). *Moving on the Spot: Fun and Physical Activity: A Collection of 5 Minute Stretch and Movement Sessions*. Retrieved 26 October 2006, from <http://lin.ca/resource/html/dn3.htm#11>.

## 8. Training Aids

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- b. Shooting mats;
- c. Cadet air rifle; and
- d. Cadet air rifle sling.

## 9. Learning Aids

- a. Cadet air rifle;

- b. Biathlon air rifle target (BART);
  - c. Safety glasses/goggles;
  - d. Target frames; and
  - e. Cadet air rifle sling.
10. **Test Details.** N/A.
11. **Remarks.** EO C206.01 must be completed prior to this lesson.

**EO C211.04 – PARTICIPATE IN A COMPETITIVE SUMMER BIATHLON ACTIVITY**

1. **Performance.** Participate in a Competitive Summer Biathlon Activity.
2. **Conditions**
  - a. Given:
    - (1) cadet air rifle;
    - (2) cadet air rifle sling;
    - (3) safety glasses/goggles;
    - (4) .177 air rifle pellets;
    - (5) biathlon air rifle target (BART);
    - (6) supervision; and
    - (7) assistance as required.
  - b. Denied: N/A.
  - c. Environmental:
    - (1) Air rifle range constructed IAW A-CR-CCP-177/PT-001; and
    - (2) Running route of approximately 500-1000 m on alternating terrain.
3. **Standard.** In accordance with specified references, the cadet shall participate in a recreational summer biathlon activity, to include:
  - a. running a route of 500-1000 m;
  - b. shooting five to eight rounds in an effort to activate all five targets of the BART;
  - c. running a second route of 500-1000 m;
  - d. shooting five to eight rounds in an effort to activate all five targets of the BART;
  - e. running a final route of 500-1000 m; and
  - f. finishing the race.
4. **Teaching Points**
  - a. Explain the components of the competitive summer biathlon activity, to include:
    - (1) course layout;
    - (2) rules and regulations;
    - (3) scoring;
    - (4) penalties; and
    - (5) out of bounds areas.

- b. Conduct a warm-up session, composed of light cardiovascular activities, meant to:
  - (1) stretch the muscles;
  - (2) gradually increase respiratory action and heart rate;
  - (3) expand the muscles' capillaries to accommodate the increase in blood circulation; and
  - (4) raise muscle temperature to facilitate reactions in muscle tissue.
- c. Conduct a competitive summer biathlon activity in accordance with paragraph 3. Details on course/ range set-up are included in A-CR-CCP-802/PF-001.
- d. Conduct a cool-down session, composed of light cardiovascular activities, meant to:
  - (1) allow the body time to slowly recover from physical activity and to help prevent injury;
  - (2) prepare the respiratory and cardiovascular systems to return to their normal state; and
  - (3) stretch the muscles.

**5. Time**

- a. Introduction/Conclusion: 10 min
- b. Interactive Lecture: 15 min
- c. Practical Activity: 155 min
- d. Total: 180 min

**6. Substantiation**

- a. An interactive lecture was chosen for TP1 to illustrate the application of rules, principles and concepts of a summer biathlon.
- b. A practical activity was chosen for TP2-4 as it is an interactive way to introduce cadets to summer biathlon. This activity contributes to the development of these skills and knowledge in a fun and challenging setting.

**7. References**

- a. A0-027 A-CR-CCP-177/PT-001 D Cdts 3. (2001). *Cadet Marksmanship Program: Reference Manual*. Ottawa, ON: Department of National Defence.
- b. A0-032 Cadets Canada. (2002). *Biathlon Competition Rules And IBU/Cadet Disciplinary Rules*. Ottawa, ON: Department of National Defence.
- c. A0-036 Cadets Canada. (ND). *Canadian Cadet Movement: Biathlon Championship Series*. Ottawa, ON: Department of National Defence.
- d. C0-002 (ISBN 0-88962-630-8) LeBlanc, J. and Dickson, L. (1997). *Straight Talk About Children and Sport: Advice for Parents, Coaches, And Teachers*. Oakville, ON and Buffalo, NY: Mosaic Press.
- e. C0-057 Martha Jefferson Hospital. (2001). *Warm-ups*. Retrieved 26 October 2006, from <http://www.marthajefferson.org/warmup.php>.
- f. C0-058 Webb Physiotherapists Inc. (ND). *Running Exercises*. Retrieved 26 October 2006, from <http://www.physionline.co.za/conditions/article.asp?id=46>.

- g. C0-059 Webb Physiotherapists Inc. (ND). *Exercise Programme for Squash, Tennis, Softball, Handball*. Retrieved 25 October 2006, from <http://www.physionline.co.za/conditions/article.asp?id=49>.
- h. C0-060 Impacto Protective Products Inc. (1998). *Exercises*. Retrieved 25 October 2006, from <http://www.2protect.com/work3b.htm>.
- i. C0-061 City of Saskatoon, Community Services Department. (2006). *Stretch Your Limits: A Smart Guide to Stretching For Fitness*. Retrieved 26 October 2006, from <http://www.in-motion.ca/walkingworkout/plan/flexibility/>.
- j. C0-089 (ISBN 0-936070-22-6) Anderson, B. (2000). *Stretching: 20<sup>th</sup> Anniversary* (Rev. ed.). Bolinas, CA: Shelter Publications, Inc.
- k. C0-154 Hansen, B. (1999). *Moving on the Spot: Fun And Physical Activity: A Collection of 5 Minute Stretch and Movement Sessions*. Retrieved 26 October 2006, from <http://lin.ca/resource/html/dn3.htm#1>.

## 8. Training Aids

- a. Cadet air rifle (one per firing point);
- b. Cadet air rifle sling (one per firing point);
- c. Safety glasses/goggles (one per firing point);
- d. Shooting mat (two per firing point);
- e. Target frame (one per firing point);
- f. BART (one per firing point);
- g. Biathlon scoresheets located at A-CR-CCP-802/PF-001, Annex C;
- h. Course control sheets located at A-CR-CCP-802/PF-001, Annex C;
- i. Range recording sheets located at A-CR-CCP-802/PF-001, Annex C;
- j. Notice board; and
- k. Stopwatches.

## 9. Learning Aids

- a. Cadet air rifle;
- b. Cadet air rifle sling;
- c. Safety glasses/goggles;
- d. Shooting mats;
- e. Target frame;
- f. .177 air rifle pellets;
- g. Container to hold pellets;
- h. Target frame; and

i. BART.

10. **Test Details.** N/A.

11. **Remarks**

- a. Results should be posted for cadets to review. PO 211 is a complementary training activity. It is designed to provide an opportunity for the cadets to participate in a competitive summer biathlon activity.
- b. EOs C111.01 (Participate in a Biathlon Briefing), C111.02 (Run Short Wind Sprints), C111.03 (Introduction to Summer Biathlon Marksmanship Skills Using the Cadet Air Rifle), C211.01 (Identify Civilian Biathlon Opportunities), C211.02 (Run on Alternating Terrain), and C211.03 (Fire the Cadet Air Rifle Using the Cadet Air Rifle Sling Following Physical Activity) shall be taught prior to instructing this lesson.



**PO C211B – PARTICIPATE IN COMPETITIVE SUMMER BIATHLON ACTIVITIES**

1. **Performance.** Participate in Competitive Summer Biathlon Activities.
2. **Conditions**
  - a. Given:
    - (1) Cadet air rifle;
    - (2) Safety glasses/goggles;
    - (3) Approved cadet air rifle pellets;
    - (4) Containers to hold pellets;
    - (5) Biathlon Air Rifle Target (BART);
    - (6) Local Range Standing Orders;
    - (7) Supervision; and
    - (8) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental:
    - (1) Air rifle range constructed IAW A-CR-CCP-177/PT-001, Chapter 1, Section 8; and
    - (2) Established running route of approximately 500–1000 m.
3. **Standard.** In accordance with specified references and, as a member of a section, the cadet will participate in competitive summer biathlon activities, to include:
  - a. running a loop of 500–1000m;
  - b. firing eight rounds in an effort to activate all five targets of the BART;
  - c. running a second loop of 500–1000m;
  - d. firing eight rounds in an effort to activate all five targets of the BART;
  - e. running a final loop of 500–1000m; and
  - f. finishing the event.
4. **Remarks**
  - a. Cadets must have completed PO C111 (Participate in a Summer Biathlon Activity) prior to competing in the competitive summer biathlon activity.
  - b. Assistance may be given to cadets who have difficulty pumping the cadet air rifle.
  - c. All range activities must be conducted by a Range Safety Officer (RSO).
5. **Complementary Material**
  - a. PO 211 (Participate in Competitive Summer Biathlon Activities) is a complementary package designed to provide an opportunity for the cadet to participate in competitive summer biathlon activities.

- b. Squadrons choosing PO 211 as complementary training may complete EOs C211.01 to C211.03 or the complete package, EOs C211.01 to C211.04. Squadrons cannot conduct EO C211.04 (Participate in a Competitive Summer Biathlon Activity) unless cadets have completed EOs C211.01 to C211.03.
- c. Complementary training associated with PO 211 is limited to a total of nine periods which may be conducted during sessions or on a supported day.

**EO C211.01 – IDENTIFY CIVILIAN BIATHLON OPPORTUNITIES**

1. **Performance.** Identify Civilian Biathlon Opportunities.
2. **Conditions**
  - a. Given:
    - (1) Handouts;
    - (2) Supervision; and
    - (3) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify civilian biathlon opportunities, to include:
  - a. training opportunities; and
  - b. competitive events.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Introduce training opportunities to include provincial, territorial and international biathlon training camps and centres.  <b>Note:</b> A handout is located at A-CR-CCP-802/PF-001, Annex A.	Interactive Lecture	15 min	C0-082 C0-086 C0-087 C0-088
TP2	Introduce competitive events to include provincial, territorial and international competitions.  <b>Note:</b> A handout is located at A-CR-CCP-802/PF-001, Annex B.	Interactive Lecture	10 min	C0-082 C0-086 C0-087 C0-088

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Interactive Lecture: 25 min
  - c. Total: 30 min
6. **Substantiation.** An interactive lecture was chosen to orient the cadets to civilian biathlon opportunities and to generate interest.
7. **References**
  - a. C0-082 Biathlon Canada. (2007). *Biathlon Canada*. Retrieved 12 February 2007, from <http://www.biathloncanada.ca>.

- b. C0-086 Biathlon Canada. (2007). *Biathlon Canada*. Retrieved 16 February 2007, from <http://www.biathloncanada.ca/main.asp?cmd=cat&ID=314&lan=0>.
  - c. C0-087 Biathlon Canada. (2007). *Biathlon Canada*. Retrieved 12 February 2007, from <http://www.biathloncanada.ca/main.asp?cmd=cat&ID=315&lan=0>.
  - d. C0-088 Canada Winter Games. (2007). *Canada Winter Games*. Retrieved 16, February, from <http://www.canadawintergames.ca?content/HomePage.asp?langid=1>.
- 8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
  - 9. **Learning Aids.** Handouts of A-CR-CCP-802/PF-001, Annexes A and B.
  - 10. **Test Details.** N/A.
  - 11. **Remarks.** N/A.

**EO C211.02 – PARTICIPATE IN RUNNING DRILLS**

1. **Performance.** Participate in Running Drills.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Training area of alternating terrain large enough to set up a running course of 20 to 40 m.
3. **Standard.** In accordance with specified references, the cadet shall:
  - a. participate in a warm-up;
  - b. practice running drills to demonstrate body alignment for alternating terrain; and
  - c. participate in a cool-down.
4. **Teaching Points**

<b>TP</b>	<b>Description</b>	<b>Method</b>	<b>Time</b>	<b>Ref</b>
TP1	Conduct a warm-up session, composed of light cardiovascular exercises, meant to: <ol style="list-style-type: none"> <li>a. stretch the muscles;</li> <li>b. gradually increase respiratory action and heart rate;</li> <li>c. expand the muscles' capillaries to accommodate the increase in blood circulation; and</li> <li>d. raise muscle temperature to facilitate reactions in muscle tissue.</li> </ol>	Practical Activity	5 min	C0-002 (p. 109 to 113)
TP2	Explain, demonstrate and allow the cadets to perform running drills, to include: <ol style="list-style-type: none"> <li>a. practicing body alignment on alternating terrain, to include:               <ol style="list-style-type: none"> <li>(1) foot positioning; and</li> <li>(2) posture; and</li> </ol> </li> <li>b. increasing endurance on alternating terrain.</li> </ol>	Demonstration and Performance	10 min	C0-080
TP3	Conduct a cool-down session, composed of light cardiovascular exercises, meant to: <ol style="list-style-type: none"> <li>a. allow the body time to slowly recover from physical activity and to help prevent injury;</li> </ol>	Practical Activity	5 min	C0-002 (p. 109 to 113)

TP	Description	Method	Time	Ref
	b. prepare the respiratory and cardiovascular systems to return to their normal state; and c. stretch the muscles.			
TP4	Describe how to implement a running program to include: a. a running schedule; and b. the talk test.	Interactive Lecture	5 min	C0-080

5. **Time**

- |    |                                |        |
|----|--------------------------------|--------|
| a. | Introduction/Conclusion:       | 5 min  |
| b. | Practical Activity:            | 10 min |
| c. | Demonstration and Performance: | 10 min |
| d. | Interactive Lecture:           | 5 min  |
| e. | Total:                         | 30 min |

6. **Substantiation**

- A practical activity was chosen for TP1 and TP4 as it is an interactive way to introduce the cadet to a warm-up and cool-down in a safe, controlled environment.
- Demonstration and performance was chosen for TP2 and TP3 as it allows the instructor to explain and demonstrate the running skills the cadet is expected to acquire while providing an opportunity for the cadet to practice running under supervision.
- An interactive lecture was chosen for TP5 to orient the cadets to methods for increasing cardiovascular endurance.

7. **References**

- C0-002 (ISBN 0-88962-630-8) LeBlanc, J. and Dickson, L. (1997). *Straight Talk About Children and Sport: Advice for Parents, Coaches, and Teachers*. Oakville, ON and Buffalo, NY: Mosaic Press.
- C0-080 Cool Running. (2007). *Cool Running*. Retrieved 12 February 2007, from [http://www.coolrunning.com/engine/2/2\\_3/181.shtml](http://www.coolrunning.com/engine/2/2_3/181.shtml).

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart) appropriate for the training area.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** Stairs may be used in place of alternating terrain.

**EO C211.03 – DEMONSTRATE SUMMER BIATHLON MARKSMANSHIP SKILLS USING THE CADET AIR RIFLE**

1. **Performance.** Demonstrate Summer Biathlon Marksmanship Skills Using the Cadet Air Rifle.
2. **Conditions**
  - a. Given:
    - (1) Cadet air rifle;
    - (2) Cadet air rifle sling;
    - (3) Shooting mat;
    - (4) Supervision; and
    - (5) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall demonstrate marksmanship skills in a summer biathlon activity, to include:
  - a. adjusting the tension and pivot point on the cadet air rifle sling while in the prone position;
  - b. adjust sight alignment while in the prone position; and
  - c. identifying the firing sequence.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	In accordance with EO C206.01 (Practice Holding Techniques), review and allow the cadets to practice: <ol style="list-style-type: none"> <li>a. adjusting the position of the cadet air rifle sling on the arm while in the prone position; and</li> <li>b. adjusting the swing swivel while in the prone position.</li> </ol>	Demonstration and Performance	10 min	A0-027 (p. 1-5-14 to 1-5-16 and p. 2-15)
TP2	Following a short cardiovascular activity (e.g. 15 jumping jacks) allow the cadets to adopt the prone position and wear the cadet air rifle sling.	Practical Activity	5 min	A0-027 (p. 1-5-2 to 1-5-4 and p. 2-7 to 2-8)
TP3	In accordance with EO M106.03 (Apply Basic Marksmanship Techniques) review and allow the cadets to practice sight alignment while in the prone position.	Demonstration and Performance	5 min	A0-027 (p. 1-5-1 to 1-5-2 and p. 2-11 to 2-12)
TP4	Describe the firing sequence, to include:	Interactive Lecture	5 min	A0-082

TP	Description	Method	Time	Ref
	a. set up; b. natural alignment; c. attack; d. fire; and e. reload.  <b>Note:</b> If firing more than one pellet, the sequence is repeated from the attack step.			

#### 5. Time

a.	Introduction/Conclusion:	5 min
b.	Demonstration and Performance:	15 min
c.	Practical Activity:	5 min
d.	Interactive Lecture:	5 min
e.	Total:	30 min

#### 6. Substantiation

- Demonstration and performance was chosen for TP1 and TP3 as it allows the instructor to explain and demonstrate the use of the cadet air rifle sling, the adjustment of the pivot swivel, and sight alignment while giving the cadet the opportunity to practice these skills under supervision.
- A practical activity was chosen for TP2 as it is an interactive way to allow the cadets to experience adopting the prone position and using the cadet air rifle sling after performing cardiovascular activities, in a safe controlled environment. This activity contributes to the development of biathlon skills in a fun and challenging setting.
- An interactive lecture was chosen for TP4 to introduce the firing sequence.

#### 7. References

- A0-027 A-CR-CCP-177/PT-001 D Cdts 3. (2001). *Cadet Marksmanship Program: Reference Manual*. Ottawa, ON: Department of National Defence.
- C0-082 Koterlitzov, N. and Ball, A. (2000). *The Shooting Cookbook: Shooting Drills for Precision Shooting, Sequence Shooting, Biathlon and Summer Biathlon*. Vancouver, BC: Aball Software Inc.

#### 8. Training Aids

- Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- Shooting mat;
- Cadet air rifle; and
- Cadet air rifle sling.

#### 9. Learning Aids

- Cadet air rifle; and



b. Cadet air rifle sling.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**EO C211.04 – PARTICIPATE IN A COMPETITIVE SUMMER BIATHLON ACTIVITY**

1. **Performance.** Participate in a Competitive Summer Biathlon Activity.
2. **Conditions**
  - a. Given:
    - (1) Cadet air rifle;
    - (2) Safety glasses/goggles;
    - (3) Approved cadet air rifle pellets;
    - (4) Container to hold pellets;
    - (5) Biathlon air rifle target (BART);
    - (6) Supervision; and
    - (7) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental:
    - (1) Air rifle range constructed IAW A-CR-CCP-177/PT-001, Chapter 1, Section 8; and
    - (2) Established running route of approximately 500 to 1000 m.
3. **Standard.** In accordance with specified references, the cadet shall participate in a competitive summer biathlon activity, to include:
  - a. running a loop of 500 to 1000 m;
  - b. shooting a course of eight rounds in an effort to activate all five targets of the BART;
  - c. running a second loop of 500 to 1000 m;
  - d. shooting a course of eight rounds in an effort to activate all five targets of the BART;
  - e. running a final loop of 500 to 1000 m; and
  - f. finishing the race.

#### 4. Teaching Points

- a. Conduct a team captain's meeting, to include:
  - (1) role call;
  - (2) introduction of key appointments;
  - (3) timings;
  - (4) course layout;
  - (5) zeroing lanes;
  - (6) firing lanes;
  - (7) scoring;
  - (8) weather;
  - (9) out of bounds areas; and
  - (10) any other information that may arise.
- b. Explain the following rules and regulations for a summer biathlon:
  - (1) The run must be completed in proper sequence and on the marked route.
  - (2) Rifles must be placed on the firing point by the range staff and will remain on the firing point after each cadet has completed firing.
  - (3) The bolt and pumping handle must be left open by the cadet.
  - (4) All firing will be done in the prone position.
  - (5) Cadets must fire only in their designated lanes.
  - (6) Firing aids will not be permitted.
  - (7) Assistance may be given to cadets who have difficulty pumping the cadet air rifle.
  - (8) An inoperable rifle will be replaced by the range staff, the target will be reset, and the cadet will fire five shots with the new rifle.
  - (9) Safety infractions will result in the issuing of penalties. Penalties for this timed event include:
    - (a) Each very minor violation of the principles of fair play or good sportsmanship will result in a one-minute (60 second) penalty.
    - (b) Each missed target will result in a one-minute (60 second) penalty.
    - (c) Each safety infraction on the firing point will result in a one-minute (60 second) penalty.

- c. Conduct a warm-up session, composed of light cardiovascular activities, meant to:
  - (1) stretch the muscles;
  - (2) gradually increase respiratory action and heart rate;
  - (3) expand the muscles' capillaries to accommodate the increase in blood circulation; and
  - (4) raise muscle temperature to facilitate reactions in muscle tissue.
- d. Conduct the competitive summer biathlon activity IAW paragraph 3. Details on course/range set-up are included in the Instructional Guide to this EO.
- e. Conduct a cool-down session, composed of lights cardiovascular activities, meant to:
  - (1) allow the body time to slowly recover from physical activity and to help prevent injury;
  - (2) prepare the respiratory and cardiovascular systems to return to their normal state; and
  - (3) stretch the muscles.

**5. Time**

a. Introduction/Conclusion:	15 min
b. Interactive Lecture:	10 min
c. Practical Activity:	65 min
d. Subtotal:	90 min
e. Total (two sessions):	180 min

**6. Substantiation**

- a. An interactive lecture was chosen for this activity to illustrate the application of rules, for a summer biathlon.
- b. A practical activity was chosen for this activity as it is an interactive way to introduce cadets to summer biathlon. This activity contributes to the development of biathlon skills and knowledge in a fun and challenging setting.

**7. References**

- a. A0-027 A-CR-CCP-177/PT-001 D Cdts 3. (2001). *Cadet Marksmanship Program: Reference Manual*. Ottawa, ON: Department of National Defence.
- b. A0-032 Cadets Canada. (2002). *Biathlon Competition Rules and IBU/Cadet Disciplinary Rules*. Ottawa, ON: Department of National Defence.
- c. A0-036 Cadets Canada. *Canadian Cadet Movement: Biathlon Championship Series*. Ottawa, ON: Department of National Defence.
- d. C0-002 (ISBN 0-88962-630-8) LeBlanc, J. and Dickson, L. (1997). *Straight Talk About Children and Sport: Advice for Parents, Coaches, and Teachers*. Oakville, ON and Buffalo, NY: Mosaic Press.
- e. C0-057 Martha Jefferson Hospital. (2001). *Warm-ups*. Retrieved 26 October 2006, from <http://www.marthajefferson.org/warmup.php>

**8. Training Aids**

- a. Cadet air rifle (one per firing point);
- b. Cadet air rifle sling (attached to cadet air rifle);
- c. Safety glasses/goggles (one per firing point);
- d. Shooting mat (two per firing point);
- e. Target frame (one per firing point);
- f. Local Range Standing Orders;
- g. Scoring sheets;
- h. Pellets (eight rounds per firing bout);
- i. Container to hold pellets;
- j. BART;
- k. Notice board;
- l. Scoring template; and
- m. Stopwatches.

**9. Learning Aids**

- a. Cadet air rifle;
- b. Cadet air rifle sling;
- c. Safety glasses/goggles;
- d. Target frame;
- e. Pellets; and
- f. BART.

**10. Test Details.** N/A.

- 11. Remarks.** Results should be posted for cadets to review. PO 211 is a complementary training activity. It is designed to provide an opportunity for cadets to participate in a competitive summer biathlon activity.

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**SECTION 10**  
**PO 230A – DISCUSS CANADIAN AVIATION HISTORY**

1. **Performance.** Discuss Canadian Aviation History.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Any conditions.
3. **Standard.** In accordance with specified references, the cadet shall discuss Canadian aviation history as it pertains to:
  - a. the Battle of Britain;
  - b. Remembrance Day;
  - c. the Battle of the Atlantic; and
  - d. D-Day (Normandy – June 6, 1944).
4. **Remarks.** Cadets will participate in a discussion to enhance their knowledge of these historical events prior to the parade dates.
5. **Complementary Material**
  - a. Complementary material associated with PO 230 is designed to enhance the cadet's knowledge of historical Canadian aviation events:
    - (1) EO C230.01 (Participate on Presentation Given by a Member of the Memory Project Speakers Bureau);
    - (2) EO C230.02 (Tour a Local Aviation Museum);
    - (3) EO C230.03 (Discuss Significant Canadian Historical Events Relative to Aviation); and
    - (4) EO C130.03 (Watch On *Canadian Wings* Video).
  - b. Some complementary training offered in Proficiency Level One may be selected as complementary training in Proficiency Level Two, specifically EO C130.03 (Watch On *Canadian Wings* Video).
  - c. Complementary training associated with PO 230 is limited to a total of 6 periods, which may be conducted during sessions or on a supported day. Squadrons are not required to use all 6 periods.

**EO M230.01 – DISCUSS AIRCRAFT FLOWN DURING WWI AND WWII**

1. **Performance.** Discuss Aircraft Flown During WWI and WWII.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall discuss aircraft flown during WWI and WWII battles, to include:
  - a. the Battle of the Atlantic; and
  - b. the Battle of Britain.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Discuss the aircraft flown during WWI, to include: <ol style="list-style-type: none"> <li>a. the Sopwith Triplane; and</li> <li>b. the Bristol F.2B Fighter “Brisfit”.</li> </ol>	Interactive Lecture	5 min	C3-103
TP2	Discuss the importance of the Battle of the Atlantic, to include: <ol style="list-style-type: none"> <li>a. the duration of the battle from Sept 1, 1939–May 8, 1945; and</li> <li>b. the battle between Allied Forces and Axis powers for control of the sea routes between the Americas, Europe and Africa.</li> </ol>	Interactive Lecture	5 min	A3-038 A3-039 C3-079
TP3	Discuss the aircraft flown during the Battle of the Atlantic, to include: <ol style="list-style-type: none"> <li>a. B-24 Liberator Bombers; and</li> <li>b. the Curtiss Kittyhawk Mk.1 Fighter-Bomber.</li> </ol>	Interactive Lecture	5 min	A3-038 A3-039
TP4	Discuss the importance of the Battle of Britain, to include: <ol style="list-style-type: none"> <li>a. the duration of the battle fought from August 8, 1940–October 31, 1940; and</li> <li>b. the battle between the Allied Forces and Axis powers.</li> </ol>	Interactive Lecture	5 min	C3-078
TP5	Discuss the aircraft flown during the Battle of Britain, to include:	Interactive Lecture	5 min	C3-078



TP	Description	Method	Time	Ref
	a. the Hawker Hurricane Mark 1; and b. the Spitfire Mark 1.			

5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 5 min  |
| b. | Interactive Lecture:     | 25 min |
| c. | Total:                   | 30 min |

6. **Substantiation.** An interactive lecture was chosen for this lesson to present background material to the cadets and promote an interest in aircraft flown during WWI and WWII.

7. **References**

- a. A3-038 VAC Canada Remembers. (1998). *The Battle of the Atlantic*. Retrieved 19 February 2007, from <http://www.vac-acc.gc.ca/remember/sub.cfm?source=history/secondwar/canada2/batat1>.
- b. A3-039 Canada's Air Force. (2004). *World War II – 1939-45*. Retrieved 19 February 2007, from [http://www.airforce.forces.ca/hist/ww\\_2\\_e.asp](http://www.airforce.forces.ca/hist/ww_2_e.asp).
- c. C3-078 Canadian War Museum. (2004). *The Invasion Threat to Britain and the Battle of Britain, 1940*. Retrieved 16 February 2007, from [http://www.warmuseum.ca/cwm/newspapers/operations/Britain\\_e.html](http://www.warmuseum.ca/cwm/newspapers/operations/Britain_e.html).
- d. C3-079 Canadian War Museum. (2004). *The Battle of the Atlantic*. Retrieved 9 February 2007, from [http://www.warmuseum.ca/cwm/newspapers/operations/atlantic\\_e.html](http://www.warmuseum.ca/cwm/newspapers/operations/atlantic_e.html).
- e. C3-103 Ace Pilots. (2007). *Legendary Aviators and Aircraft of World War One*. Retrieved 26 February 2007, from <http://www.acepilots.com/wwi/main.html>.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** If the squadron is participating in the parades listed in TP2 and TP4 this EO should be conducted prior to the parade dates.

**EO M230.02 – DISCUSS SIGNIFICANT EVENTS IN 20<sup>th</sup> CENTURY CANADIAN MILITARY HISTORY**

1. **Performance.** Discuss Significant Events in 20<sup>th</sup> Century Canadian Military History.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall discuss significant events in 20<sup>th</sup> century Canadian military history, to include:
  - a. Armistice Day (Remembrance Day); and
  - b. D-Day.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Discuss the importance of Armistice Day (Remembrance Day), to include: <ol style="list-style-type: none"> <li>a. explaining that an annual day of commemoration for Canada's war dead began after the First World War;</li> <li>b. explaining what the term Armistice Day denotes; and</li> <li>c. explaining the name change from Armistice Day to Remembrance Day in 1931. The term Remembrance Day is a more flexible and inclusive term which accommodates the remembrance of war dead from WWI, WWII, the Korean War, other conflicts, and peacekeeping.</li> </ol>	Interactive Lecture	10 min	A3-042 C3-080 C3-081 C3-126
TP2	Discuss how Canadians commemorate Remembrance Day by organizing ceremonies yearly at cenotaphs in cities and towns across the country.	Interactive Lecture	5 min	C3-081
TP3	Discuss the importance of D-Day, to include: <ol style="list-style-type: none"> <li>a. June 6, 1944 - the conflict between the Allied Forces and Germany. The Allied forces landed on the open beaches of Normandy, north and west of the city of Caen; and</li> </ol>	Interactive Lecture	5 min	A3-040 A3-041 C3-083

TP	Description	Method	Time	Ref
	b. Canadian soldiers landing at Juno beach.			
TP4	Discuss aircraft flown during D-Day, to include: a. Black and white striped MK 1XB; b. Halifax LW170; and c. RCAF Lancaster.	Interactive Lecture	5 min	A3-033 A3-040 A3-041 C3-082

5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 5 min  |
| b. | Interactive Lecture:     | 25 min |
| c. | Total:                   | 30 min |

6. **Substantiation.** An interactive lecture was chosen for this lesson to present background material to the cadets and promote an interest in aircraft flown during significant events in history.

7. **References**

- a. A3-033 *Canada's Air Force, Aircraft: Historical Aircraft*. (2006) Retrieved 31 October 2006, from [http://www.airforce.forces.gc.ca/equip/historical/hist\\_e.asp](http://www.airforce.forces.gc.ca/equip/historical/hist_e.asp).
- b. A3-040 Halifax 57 Rescue. (Canada). *LW170 Proposal*. Retrieved 20 February 2007, from [http://www.57rescuecanada.com/LocatingLW170/LW170\\_Proj\\_Proposal.htm](http://www.57rescuecanada.com/LocatingLW170/LW170_Proj_Proposal.htm).
- c. A3-041 DND. (2005). *D-day*. Retrieved 20 February 2007, from [http://forces.gc.ca/site/Feature-Story/2003/jun03/06\\_f\\_e.asp](http://forces.gc.ca/site/Feature-Story/2003/jun03/06_f_e.asp).
- d. A3-042 Milberry, L. and Halliday, H. (1990). *The Royal Canadian Air Force at War 1939-1945*. Toronto, ON: CANAV Books.
- e. A3-043 National Defence. (2004). *Halifax Bomber*. Retrieved 22 March 2007, from [http://www.airforce.gc.ca/equip/historical/Halifax\\_e.asp](http://www.airforce.gc.ca/equip/historical/Halifax_e.asp).
- f. C3-080 Canada War Museum. (2003). *Remembrance Day: Armistice Day*. Retrieved 19 February 2007, from [http://www.warmuseum.ca/cwm/remember/armisticeday\\_e.html](http://www.warmuseum.ca/cwm/remember/armisticeday_e.html).
- g. C3-081 Canada War Museum. (2003). *Remembrance Day: Armistice Day Becomes Remembrance Day*. Retrieved 19 February 2007, from [http://www.warmuseum.ca/cwm/remember/1931remembrance\\_e.html](http://www.warmuseum.ca/cwm/remember/1931remembrance_e.html).
- h. C3-082 Rich Thistle Studio. (1993). *The Fire at Canadian Warplane Heritage Museum*. Retrieved 20 February 2007, from [http://www.richthistle.com/article\\_include.php?i=a12\\_into\\_the\\_blue.php](http://www.richthistle.com/article_include.php?i=a12_into_the_blue.php).
- i. C3-083 Canada War Museum. (2003). *D-Day and the Normandy Campaigns*. Retrieved 16 February 2007, from [http://www.civilization.ca/cwm/newspapers/operations/ddaynormandy\\_e.html](http://www.civilization.ca/cwm/newspapers/operations/ddaynormandy_e.html).
- j. C3-126 Brigadier C.N. Barclay. (1968). *Armistice 1918*. London, UK: Dent, J. M. & Sons LTD.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.
11. **Remarks.** This class should be taught before the Remembrance Day parade so cadets may gain an appreciation and full understanding of the significance behind this event.

## EO C230.01 – PARTICIPATE IN A PRESENTATION GIVEN BY A MEMBER OF THE MEMORY PROJECT SPEAKERS BUREAU

1. **Performance.** Participate in a Presentation Given by a Member of the Memory Project Speakers Bureau.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities large enough to accommodate the entire group.
3. **Standard.** The cadet shall participate in a presentation given by a member of the Memory Project Speakers Bureau so that they may further develop their knowledge of Canadian aviation history.
4. **Teaching Points.** The guest speaker is asked to:
  - a. present their years of service;
  - b. describe highlights of their military career;
  - c. relate anecdotes linking their service to aviation history; and
  - d. bring items to display, to include:
    - (1) uniforms;
    - (2) photographs;
    - (3) medals;
    - (4) letters; and
    - (5) any other items of interest.
5. **Time**

a.	Introduction/Conclusion:	5 min
b.	Interactive Lecture:	55 min
c.	Total:	60 min
6. **Substantiation.** The interactive lecture was chosen for this lesson to orient the cadets to the topic and generate an interest in aviation history.
7. **References.** N/A.
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/ presentation area.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.

11. **Remarks**

- a. Training aids should be determined by contacting the speaker prior to the presentation.
- b. There is no instructional guide for this EO.
- c. When requesting a speaker, squadrons will use the "Request a Speaker" form on the Dominion Institute's Website <http://thememoryproject.com/index.asp>
- d. If resources permit, squadron staff should research and display the digital archives from the Dominion Institute's Website.

**EO C230.02 – TOUR A LOCAL AVIATION MUSEUM**

1. **Performance.** Tour a Local Aviation Museum.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: The squadron Commanding Officer shall determine the conditions suitable for this training.
3. **Standard.** The cadet shall tour a local aviation museum to gain knowledge of Canadian aviation history.
4. **Teaching Points.** The tour guide is asked to explain:
  - a. aircraft flown during WWI and WWII;
  - b. aircraft flown during significant events in history, to include:
    - (1) Battle of the Atlantic; and
    - (2) Battle of Britain; and
  - c. the significance of ceremonial parades, to include:
    - (1) Armistice Day (Remembrance Day); and
    - (2) D-Day.
5. **Time**

a.	Introduction/Conclusion:	10 min
b.	Field Trip:	80 min
c.	Total:	90 min
6. **Substantiation.** A field trip was chosen for this lesson to reinforce the cadet's knowledge of material previously taught in EO M230.01 (Discuss Aircraft Flown During WWI and WWII) and EO M230.02 (Discuss Significant Events in 20<sup>th</sup> Century Canadian Military History) through participation in a tour.
7. **References.** N/A.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. Cadet squadron personnel are to determine whether a guide will escort the group or if an instructor from the squadron will be responsible for conducting the tour, all teaching points are to be researched in advance.

- b. This field trip can be completed on a supported day or during a complementary session.
- c. Any museum with an aviation display would be sufficient for completion of this EO. Contact the museum in advance to determine conditions for this tour.
- d. There is no instructional guide for this EO.



**EO C230.03 – DISCUSS SIGNIFICANT CANADIAN HISTORICAL EVENTS RELATIVE TO AVIATION**

1. **Performance.** Discuss Significant Canadian Historical Events Relative to Aviation.
2. **Conditions**
  - a. Given:
    - (1) *On Canadian Wings* Video or DVD;
    - (2) TV;
    - (3) VCR or DVD player;
    - (4) Supervision; and
    - (5) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities large enough to accommodate the entire group.
3. **Standard.** In accordance with *On Canadian Wings* [Series], the cadet shall discuss significant Canadian historical events relative to aviation.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	<p>Explain the purpose of the <i>On Canadian Wings</i> videos, which assist Canadians in developing an appreciation for Canadian Aviation history and significant historical events.</p> <p>Show a series of video clips, which are relevant to this particular PO and lead a discussion on the subject presented in each.</p>	Activity/Group Discussion	25 min	C3-039

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Activity/Group Discussion: 25 min
  - c. Total: 30 min
6. **Substantiation**
  - a. The activity was selected to allow for maximum participation in the learning process.
  - b. The group discussion method was chosen to allow cadets to share their knowledge, opinions, and feelings about the subject matter while still allowing the instructor to control the direction of the discussion. The instructor must ensure that points not brought forth by the class are presented. If the instructor follows the instructional guide, including the questions posed, this will allow the cadets to express, in their own words, what they learned from this lesson and how they may apply the information.
7. **References.** C3-039 Squires, C. (1999). *On Canadian Wings* [Series]. Winnipeg, MB: PWGSC.

8. **Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- b. *On Canadian Wings* videos; and
- c. TV/VCR or DVD player.

9. **Learning Aids.** *On Canadian Wings* video.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**PO 230B – PARTICIPATE IN A DISCUSSION ON CANADIAN AVIATION HISTORY**

1. **Performance.** Participate in a Discussion on Canadian Aviation History.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Any conditions.
3. **Standard.** In accordance with specified references, the cadet shall participate in a discussion on Canadian aviation history as it pertains to:
  - a. the Battle of Britain;
  - b. Remembrance Day;
  - c. the Battle of the Atlantic; and
  - d. D-Day (Normandy–June 6, 1944).
4. **Remarks.** Cadets will participate in a discussion to enhance their knowledge of these historical events prior to the parade dates.
5. **Complementary Material**
  - a. Complementary material associated with PO 230 is designed to enhance the cadet's knowledge of historical Canadian aviation events:
    - (1) EO C230.01 allows the cadet to participate in a presentation by a guest speaker from the Speaker's Bureau from The Memory Project.
    - (2) EO C230.02 allows the cadet to tour a local aviation museum.
    - (3) EO C230.03 allows the cadet to discuss significant Canadian historical events by watching a segment of On Canadian Wings.
  - b. Complementary training associated with PO 230 is limited to a total of 6 periods, which may be conducted during sessions or on a supported day. Squadrons are not required to use all 6 periods.

**EO M230.01 – PARTICIPATE IN A DISCUSSION ON AIRCRAFT FLOWN DURING WWI AND WWII**

1. **Performance.** Participate in a Discussion on Aircraft Flown During WWI and WWII.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall participate in a discussion on aircraft flown during WWI and WWII, to include:
  - a. the Battle of the Atlantic; and
  - b. the Battle of Britain.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Discuss the aircraft flown during WWI, to include: <ol style="list-style-type: none"> <li>a. the Sopwith Triplane; and</li> <li>b. the Bristol F.2B Fighter “Brisfit”.</li> </ol>	Interactive Lecture	5 min	C3-103
TP2	Discuss the importance of the Battle of the Atlantic, to include: <ol style="list-style-type: none"> <li>a. the duration of the battle from September 1, 1939–May 8, 1945; and</li> <li>b. the battle between Allied Forces and Axis powers for control of the sea routes between the Americas, Europe and Africa.</li> </ol>	Interactive Lecture	5 min	A3-038 A3-039 C3-079
TP3	Discuss the aircraft flown during the Battle of the Atlantic, to include: <ol style="list-style-type: none"> <li>a. B 24 Liberator Bombers; and</li> <li>b. the Kittyhawk Fighter-Bomber.</li> </ol>	Interactive Lecture	5 min	A3-038 A3-039
TP4	Discuss the importance of the Battle of Britain, to include: <ol style="list-style-type: none"> <li>a. the duration of the battle fought from July 10, 1940–October 31, 1940; and</li> <li>b. the battle between the Allied Forces and Axis powers.</li> </ol>	Interactive Lecture	5 min	C3-078
TP5	Discuss the aircraft flown during the Battle of Britain, to include:	Interactive Lecture	5 min	C3-078

TP	Description	Method	Time	Ref
	a. the Hawker Hurricane; and b. the Spitfire.			

5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 5 min  |
| b. | Interactive Lecture:     | 25 min |
| c. | Total:                   | 30 min |

6. **Substantiation.** An interactive lecture was chosen for this lesson to present background material to the cadets and promote an interest in aircraft flown during WWI and WWII.

7. **References**

- a. A3-038 VAC Canada Remembers. (1998). *The Battle of the Atlantic*. Retrieved 19 February 2007, from <http://www.vac-acc.gc.ca/remember/sub.cfm?source=history/secondwar/canada2/batat1>.
- b. A3-039 Canada's Air Force. (2004). *World War II – 1939–45*. Retrieved 19 February 2007, from [http://www.airforce.forces.ca/hist/ww\\_2\\_e.asp](http://www.airforce.forces.ca/hist/ww_2_e.asp).
- c. C3-078 Canadian War Museum. (2004). *The Invasion Threat to Britain and the Battle of Britain, 1940*. Retrieved 16 February 2007, from [http://www.warmuseum.ca/cwm/newspapers/operations/Britain\\_e.html](http://www.warmuseum.ca/cwm/newspapers/operations/Britain_e.html).
- d. C3-079 Canadian War Museum. (2004). *The Battle of the Atlantic*. Retrieved 09 February 2007, from [http://www.warmuseum.ca/cwm/newspapers/operations/atlantic\\_e.html](http://www.warmuseum.ca/cwm/newspapers/operations/atlantic_e.html).
- e. C3-103 Ace Pilots. (2007). *Legendary Aviators and Aircraft of World War One*. Retrieved 26 February 2007, from <http://www.acepilots.com/wwi/main.html>.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** If the squadron is participating in the parades listed in TP2 and TP4 this EO should be conducted prior to the parade dates.

**EO M230.02 – PARTICIPATE IN A DISCUSSION ON AIRCRAFT FLOWN DURING SIGNIFICANT EVENTS IN HISTORY**

1. **Performance.** Participate in a Discussion on Aircraft Flown During Significant Events in History.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall participate in a discussion on aircraft flown during significant events in history, to include:
  - a. Armistice Day (Remembrance Day); and
  - b. D-Day.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Discuss the importance of Armistice Day (Remembrance Day), to include: <ol style="list-style-type: none"> <li>a. explaining that an annual day of commemoration for Canada's war dead began after the First World War;</li> <li>b. explaining what the term 'Armistice Day' denotes; and</li> <li>c. explaining the name change from Armistice Day to Remembrance Day in 1931. The term 'Remembrance Day' is a more flexible and inclusive term which accommodates the remembrance of war dead from WWI, WWII, the Korean war, other conflicts, and peacekeeping.</li> </ol>	Interactive Lecture	5 min	C3-080 C3-081
TP2	Discuss how Canadians commemorate Remembrance Day by organizing ceremonies yearly at cenotaphs in cities and towns across the country. Ceremonies involve prayer, recitations, and playing the traditional military bugle calls of "Last Post" followed by "Reveille."	Interactive Lecture	5 min	C3-081
TP3	Discuss the importance of Remembrance Day ceremonies which offer veterans the opportunity to remember and salute fallen comrades, and for all	Interactive Lecture	5 min	C3-081

TP	Description	Method	Time	Ref
	Canadians, an occasion to reflect on the sacrifices made and the tragedies endured in their name.			
TP4	Discuss the importance of D-Day, to include: <ul style="list-style-type: none"> <li>a. June 6, 1944;</li> <li>b. Canadian soldiers landing at Juno beach; and</li> <li>c. the conflict between the Allied Forces and Germany. The Allied forces landed on the open beaches of Normandy, north and west of the city of Caen.</li> </ul>	Interactive Lecture	5 min	A3-040 A3-041 C3-083
TP5	Discuss aircraft flown during D-Day, to include: <ul style="list-style-type: none"> <li>a. Black and white striped MK 1XB;</li> <li>b. Halifax LW170; and</li> <li>c. RCAF Lancaster.</li> </ul>	Interactive Lecture	5 min	A3-040 A3-041 C3-082

#### 5. Time

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 5 min  |
| b. Interactive Lecture:     | 25 min |
| c. Total:                   | 30 min |

6. **Substantiation.** An interactive lecture was chosen for this lesson to present background material to the cadets and promote an interest in aircraft flown during significant events in history.

#### 7. References

- a. A3-040 Halifax 57 Rescue. (Canada). *LW170 Proposal*. Retrieved 20 February 2007, from [http://www.57rescuecanada.com/LocatingLW170/LW170\\_Proj\\_Proposal.htm](http://www.57rescuecanada.com/LocatingLW170/LW170_Proj_Proposal.htm).
- b. A3-041 DND. (2005). *D-Day*. Retrieved 20 February 2007, from [http://forces.gc.ca/site/Feature-Story/2003/jun03/06\\_f\\_e.asp](http://forces.gc.ca/site/Feature-Story/2003/jun03/06_f_e.asp).
- c. C3-080 Canada War Museum. (2003). *Remembrance Day: Armistice Day*. Retrieved 19 February 2007, from [http://www.warmuseum.ca/cwm/remember/armisticeday\\_e.html](http://www.warmuseum.ca/cwm/remember/armisticeday_e.html).
- d. C3-081 Canada War Museum. (2003). *Remembrance Day: Armistice Day Becomes Remembrance Day*. Retrieved 19 February 2007, from [http://www.warmuseum.ca/cwm/remember/1931remembrance\\_e.html](http://www.warmuseum.ca/cwm/remember/1931remembrance_e.html).
- e. C3-082 Rich Thistle Studio. (1993). *The Fire at Canadian Warplane Heritage Museum*. Retrieved 20 February 2007, from [http://www.richthistle.com/article\\_include.php?i=a12\\_into\\_the\\_blue.php](http://www.richthistle.com/article_include.php?i=a12_into_the_blue.php).
- f. C3-083 Canada War Museum. (2003). *D-Day and the Normandy Campaigns*. Retrieved 16 February 2007, from [http://www.civilization.ca/cwm/newspapers/operations/ddaynormandy\\_e.html](http://www.civilization.ca/cwm/newspapers/operations/ddaynormandy_e.html).

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.
11. **Remarks.** This class should be taught before the Remembrance Day parade so cadets may gain an appreciation and full understanding of the significance behind this event.



## EO C230.01 – PARTICIPATE IN A PRESENTATION GIVEN BY A MEMBER OF THE MEMORY PROJECT SPEAKERS BUREAU

1. **Performance.** Participate in a Presentation Given by a Member of the Memory Project Speakers Bureau.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities large enough to accommodate the entire group.
3. **Standard.** The cadet shall participate in a presentation given by a member of the Memory Project Speakers Bureau so that they may further develop their knowledge of Canadian aviation history.
4. **Teaching Points.** The guest speaker is asked to:
  - a. present their years of service;
  - b. describe highlights of their military career;
  - c. relate anecdotes linking their service to aviation history; and
  - d. bring items to display, to include:
    - (1) uniforms;
    - (2) photographs;
    - (3) medals;
    - (4) letters; and
    - (5) any other items of interest.
5. **Time**

a.	Introduction/Conclusion:	5 min
b.	Interactive Lecture:	55 min
c.	Total:	60 min
6. **Substantiation.** The interactive lecture was chosen for this lesson to orient the cadets to the topic and generate an interest in aviation history.
7. **References.** N/A.
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/ presentation area.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.

11. **Remarks**

- a. Training aids should be determined by contacting the speaker prior to the presentation.
- b. There is no instructional guide for this EO.
- c. When requesting a speaker, squadrons will use the "Request a Speaker" form on the Dominion Institute's Website <http://thememoryproject.com/index.asp>
- d. If resources permit, squadron staff should research and display the digital archives from the Dominion Institute's Website.

**EO C230.02 – PARTICIPATE IN A TOUR OF A LOCAL AVIATION MUSEUM**

1. **Performance.** Participate in a Tour of a Local Aviation Museum.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: The squadron Commanding Officer shall determine the conditions suitable for this training.
3. **Standard.** The cadet shall participate in a tour of a local aviation museum to gain knowledge of Canadian aviation history.
4. **Teaching Points.** The tour guide is asked to explain:
  - a. aircraft flown during WWI and WWII;
  - b. aircraft flown during significant events in history, to include:
    - (1) Battle of the Atlantic; and
    - (2) Battle of Britain; and
  - c. the significance of ceremonial parades, to include:
    - (1) Armistice Day (Remembrance Day); and
    - (2) D-Day.
5. **Time**

a.	Introduction/Conclusion:	10 min
b.	Field Trip:	80 min
c.	Total:	90 min
6. **Substantiation.** A field trip was chosen for this lesson to reinforce the cadet's knowledge of material previously taught in EO M230.01 (Participate in a Discussion on Aircraft Flown During WWI and WWII) and EO M230.02 (Participate in a Discussion on Aircraft Flown During Significant Events in History) through participation in a tour.
7. **References.** N/A.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.

11. **Remarks**

- a. Cadet squadron personnel are to determine whether a guide will escort the group or if an instructor from the squadron will be responsible for conducting the tour, all teaching points are to be researched in advance.
- b. This field trip can be completed on a supported day or during a complementary session.
- c. Any museum with an aviation display would be sufficient for completion of this EO. Contact the museum in advance to determine conditions for this tour.
- d. There is no instructional guide for this EO.

**EO C230.03 – PARTICIPATE IN A DISCUSSION ON SIGNIFICANT CANADIAN HISTORICAL EVENTS**

1. **Performance.** Participate in a Discussion on Significant Canadian Historical Events.
2. **Conditions**
  - a. Given:
    - (1) On *Canadian Wings* Video or DVD;
    - (2) TV;
    - (3) VCR or DVD player;
    - (4) Supervision; and
    - (5) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities large enough to accommodate the entire group.
3. **Standard.** In accordance with *On Canadian Wings* [Series], the cadet shall participate in a discussion on significant Canadian historical events.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	<p>Explain the purpose of the <i>On Canadian Wings</i> videos, which assists Canadians in developing an appreciation for Canadian Aviation history and significant historical events.</p> <p>Show a series of video clips, which are relevant to this particular PO and lead a discussion on the subject presented in each.</p>	Activity/Group Discussion	25 min	C3-039

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Activity: 15 min
  - c. Group Discussion: 10 min
  - d. Total: 30 min
6. **Substantiation**
  - a. The activity was selected to allow for maximum participation in the learning process.
  - b. The group discussion method was chosen to allow cadets to share their knowledge, opinions, and feelings about the subject matter while still allowing the instructor to control the direction of the discussion. The instructor must ensure that points not brought forth by the class are presented. If the instructor follows the instructional guide, including the questions posed, this will allow the cadets to express, in their own words, what they learned from this lesson and how they may apply the information.
7. **References.** C3-039 Squires, C. (1999). *On Canadian Wings* [Series]. Winnipeg, MB: PWGSC.

8. **Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- b. *On Canadian Wings* videos; and
- c. TV/VCR or DVD player.

9. **Learning Aids.** *On Canadian Wings* video.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**SECTION 11**  
**PO 231 – EXPLAIN PRINCIPLES OF FLIGHT**

1. **Performance.** Explain Principles of Flight.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Any conditions.
3. **Standard.** In accordance with specified references, the cadet will explain the principles of flight by:
  - a. identifying the four forces that act upon an aircraft;
  - b. describing the production of lift;
  - c. describing the types of drag;
  - d. describing aircraft axis movement; and
  - e. describing aircraft control surfaces.
4. **Remarks.** N/A.
5. **Complementary Material**
  - a. Complementary material associated with PO 231 is designed to enhance the cadet's knowledge of principles of flight:
    - (1) EO C231.01 (Operate an Experimental Wing);
    - (2) EO C231.02 (Fly a Paper Colditz Glider);
    - (3) EO C231.03 (Tour a Flight School);
    - (4) EO C231.04 (Participate in a Presentation Given by a Guest Speaker from the Local Aviation Community);
    - (5) EO C231.05 (Tour a Flight Simulator); and
    - (6) EO C231.06 (Tour a Local Air Show).
  - b. Complementary training associated with PO 231 is limited to a total of 12 periods, which may be conducted during sessions or on a supported day. Squadrons are not required to use all 12 periods.

**EO M231.01 – IDENTIFY THE FOUR FORCES THAT ACT UPON AN AIRCRAFT**

1. **Performance.** Identify the Four Forces That Act Upon an Aircraft.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify the four forces that act upon an aircraft, to include:
  - a. weight;
  - b. drag;
  - c. thrust; and
  - d. lift.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain that every aircraft has weight and that a glider on tow gains energy as it gains altitude.	Interactive Lecture	5 min	C3-116 (p. 22, p. 34) C3-090
TP2	Explain that a glider experiences drag from the air as it returns to Earth after being released.	Interactive Lecture	5 min	C3-017 (p. 20)
TP3	Fold and fly a simple paper glider. Introduce Newton's first law of motion, "an object in motion tends to stay in motion", with regard to aircraft.	In-class Activity	15 min	C3-058 C3-116 (p. 21)
TP4	Explain that a descending glider converts the energy of raised weight into forward thrust by acting upon the passing air.	Interactive Lecture	10 min	C3-116 (p. 23) C3-017 (p. 21)
TP5	Explain that a glider's wings are designed to convert the energy of the glider's descent from downward motion to lift.	Interactive Lecture	5 min	C3-017 (p. 20)
TP6	Explain that a powered aircraft has weight and, when in flight, also experiences: <ol style="list-style-type: none"> <li>a. drag;</li> <li>b. thrust; and</li> <li>c. lift.</li> </ol>	Interactive Lecture	10 min	C3-116 (p. 22)



TP	Description	Method	Time	Ref
TP7	Explain that thrust and lift allow an aircraft to fly by overcoming drag and weight.	Interactive Lecture	5 min	C3-116 (p. 21)

5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 5 min  |
| b. | Interactive Lecture:     | 40 min |
| c. | In-class Activity:       | 15 min |
| d. | Total:                   | 60 min |

6. **Substantiation**

- An interactive lecture was chosen for TP1 and TP2 and TP4 to TP7 to introduce the forces that act on an aircraft and give an overview of them.
- An in-class activity was chosen for TP3 as it is an interactive way to provoke thought and stimulate interest among cadets.

7. **References**

- C3-017 (ISBN 1-895569-23-0) Schmidt, N. (1998). *Fabulous Paper Gliders*. New York, NY: Sterling Publishing.
- C3-058 (ISBN 1-4027-3034-9) Schmidt, N. (2005). *Paper Creations Paper Airplanes*. New York, NY: Sterling Publishing.
- C3-090 National Aeronautics and Space Administration (NASA). (2007). *Virtual Skies*. Retrieved 22 February 2007, from <http://virtualskies.arc.nasa.gov/aeronautics/tutorial/intro.html>
- C3-116 A-CR-CCP-263/PT-001 (ISBN 0-9680390-5-7) MacDonald, A. F. and Pepler, I. L. (2000). *From the Ground Up: Millennium Edition*. Ottawa, ON: Aviation Publishers Co. Limited.

8. **Training Aids**

- Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area; and
- Model of a light fixed-wing aircraft with wing struts, fixed gear and control surface detail.

9. **Learning Aids.** 8.5 x 11 inch paper.

10. **Test Details.** N/A.

11. **Remarks.** It is recommended that the two periods required for this EO be scheduled consecutively.

**EO M231.02 – DESCRIBE THE PRODUCTION OF LIFT BY AN AIRCRAFT WING**

1. **Performance.** Describe the Production of Lift by an Aircraft Wing.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall describe the production of lift by an aircraft wing, to include:
  - a. the airfoil camber; and
  - b. angle of attack.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain that air acts like a fluid insofar as it has: <ol style="list-style-type: none"> <li>a. inertia;</li> <li>b. speed; and</li> <li>c. pressure.</li> </ol>	Interactive Lecture	5 min	C3-116 (p. 21)
TP2	Introduce Bernoulli's Principle, which states that a liquid's pressure drops when its speed increases (venturi effect).	Interactive Lecture	10 min	C3-116 (p. 22)
TP3	Have the cadets explore Bernoulli's Principle by blowing: <ol style="list-style-type: none"> <li>a. over a curved sheet of paper; and</li> <li>b. between two suspended balloons.</li> </ol> <p><b>Note:</b> Explain that airfoil camber increases air speed above the wing, thereby reducing pressure; the venturi effect.</p>	In-class Activity	10 min	C3-017 (p. 18) C3-116 (p. 26)
TP4	Introduce angle of attack. Explain that: <ol style="list-style-type: none"> <li>a. when air particles encounter the wing, air pressure increases under the wing; and</li> <li>b. the greater the angle of attack and the greater the wing's speed, the more lift will be produced, until the wing stalls.</li> </ol>	Interactive Lecture	5 min	C3-116 (p. 22)
TP5	Have each cadet:		25 min	C3-091 (p. 31)

TP	Description	Method	Time	Ref
	a. create an airfoil from an index card; and b. experiment with lift using a fan or hair dryer to "fly" the airfoil from a "sting" launch pad.	In-class Activity		

#### 5. Time

a.	Introduction/Conclusion:	5 min
b.	Interactive Lecture:	20 min
c.	In-class Activity:	35 min
d.	Total:	60 min

#### 6. Substantiation

- An interactive lecture was chosen for TP1, TP2 and TP4 to introduce the production of lift and give an overview of it.
- An in-class activity was chosen for TP3 and TP5 as it is an interactive way to provoke thought and stimulate interest among cadets.

#### 7. References

- C3-017 (ISBN 1-895569-23-0) Schmidt, N. (1998). *Fabulous Paper Gliders*. New York, NY: Sterling Publishing.
- C3-058 (ISBN 1-4027-3034-9) Schmidt, N. (2005). *Paper Creations Paper Airplanes*. New York, NY: Sterling Publishing.
- C3-091 (ISBN 1-55652-477-3) Carson, M. K. (2003). *The Wright Brothers for Kids: How They Invented the Airplane*. Chicago, IL: Chicago Review Press.
- C3-116 A-CR-CCP-263/PT-001 (ISBN 0-9680390-5-7) MacDonald, A. F. and Pepler, I. L. (2000). *From the Ground Up: Millennium Edition*. Ottawa, ON: Aviation Publishers Co. Limited.

#### 8. Training Aids

- Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- Model of a light fixed-wing aircraft with wing struts, fixed gear and control surface detail; and
- Electric fan or hairdryer.

#### 9. Learning Aids

- Index cards;
- Tape;
- Hole punch or sharp pencil;
- Scissors;
- Plastic drinking straw;
- Bamboo skewers or large straightened paper clips;

- g. Styrofoam or corrugated cardboard;
  - h. Balloons; and
  - i. String.
10. **Test Details.** N/A.
11. **Remarks.** It is recommended that the two periods required for this EO be scheduled consecutively.

**EO M231.03 – DESCRIBE THE TYPES OF DRAG THAT ACT UPON AN AIRCRAFT**

1. **Performance.** Describe the Types of Drag That Act Upon an Aircraft.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall describe the types of drag that act upon an aircraft, to include:
  - a. parasite drag; and
  - b. induced drag.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain that drag is an important and useful force which allows a pilot to control the aircraft's flight. Introduce the two types of drag: a. parasite drag; and b. induced drag.	Interactive Lecture	5 min	C3-116 (p. 23)
TP2	Define the components of parasite drag, including: a. form drag; and b. skin friction.	Interactive Lecture	5 min	C3-116 (p. 23)
TP3	Demonstrate form drag.	In-class Activity	15 min	C3-092 (p. 14)
TP4	Explain that induced drag results from aircraft parts which actively produce lift, such as wings and that both drag and lift increase with angle of attack.	Interactive Lecture	10 min	C3-116 (p. 23)
TP5	Conduct an activity to demonstrate induced drag.	In-class Activity	20 min	C3-116 (p. 23)

5. **Time**

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 5 min  |
| b. Interactive Lecture:     | 20 min |
| c. In-class Activity:       | 35 min |
| d. Total:                   | 60 min |

6. **Substantiation**

- a. An interactive lecture was chosen for TP1, TP2 and TP4 to introduce the subject of drag and give an overview of it.
- b. An in-class activity was chosen for TP3 and TP5 as it is an interactive way to provoke thought and stimulate interest among cadets.

7. **References**

- a. C3-017 (ISBN 1-895569-23-0) Schmidt, N. (1998). *Fabulous Paper Gliders*. New York, NY: Sterling Publishing.
- b. C3-058 (ISBN 1-4027-3034-9) Schmidt, N. (2005). *Paper Creations Paper Airplanes*. New York, NY: Sterling Publishing.
- c. C3-092 (ISBN 0-7460-0978-)X Edom, H., Butterfield, M., Heddle, R. and Unwin, M. (1992). *The Usborne Book of Science Activities: Volume Two*. Tulsa OK: EDC Publishing.
- d. C3-116 A-CR-CCP-263/PT-001 (ISBN 0-9680390-5-7) MacDonald, A. F. and Peppler, I. L. (2000). *From the Ground Up: Millennium Edition*. Ottawa, ON: Aviation Publishers Co. Limited.

8. **Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area; and
- b. Model of a light fixed-wing aircraft with wing struts, fixed gear and control surface detail.

9. **Learning Aids**

- a. 8.5 x 11 paper;
- b. Bristol board; and
- c. Tape.

10. **Test Details.** N/A.

11. **Remarks.** It is recommended that the two periods required for this EO be scheduled consecutively.

**EO M231.04 – DESCRIBE THE AXIAL MOVEMENTS OF AN AIRCRAFT**

1. **Performance.** Describe the Axial Movements of an Aircraft.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall describe the axial movements of an aircraft, to include:
  - a. the three axes of an aircraft; and
  - b. the three corresponding axial movements.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain that aircraft operate in a three-dimensional space. Identify the three axes of aircraft movement, to include: <ol style="list-style-type: none"> <li>a. the longitudinal axis;</li> <li>b. the lateral axis; and</li> <li>c. the vertical axis.</li> </ol>	Interactive Lecture	5 min	C3-116 (p. 30)
TP2	Using a model aircraft, describe the three movements that aircraft make around their three axes, to include: <ol style="list-style-type: none"> <li>a. roll about the longitudinal axis;</li> <li>b. pitch about the lateral axis; and</li> <li>c. yaw about the vertical axis.</li> </ol>	Interactive Lecture	10 min	C3-116 (p. 30) C3-017 (p. 22)
TP3	Discuss movement that may take place about multiple axes simultaneously in a turn.	Group Discussion	5 min	C3-116 (pp. 34-35)
TP4	Have the cadets brainstorm how aircraft flight might be controlled.  <b>Note:</b> Explain that the aircraft surfaces which control these movements will be covered in the next lesson.	Group Discussion	5 min	C3-116 (pp. 14–16)

5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 5 min  |
| b. | Interactive Lecture:     | 15 min |
| c. | Group Discussion:        | 10 min |
| d. | Total:                   | 30 min |

6. **Substantiation**

- a. An interactive lecture was chosen for TP1 and TP2 to introduce the subject of axial movement of an aircraft and give an overview of it.
- b. A group discussion was chosen for TP3 and TP4 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions, and feelings about axial movement of an aircraft.

7. **References**

- a. C3-017 (ISBN 1-895569-23-0) Schmidt, N. (1998). *Fabulous Paper Gliders*. New York, NY: Sterling Publishing.
- b. C3-116 A-CR-CCP-263/PT-001 (ISBN 0-9680390-5-7) MacDonald, A. F. and Pepler, I. L. (2000). *From the Ground Up: Millennium Edition*. Ottawa, ON: Aviation Publishers Co. Limited.

8. **Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area; and
- b. Model of a light fixed-wing aircraft with wing struts, fixed gear and control surface detail.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** N/A.



**EO M231.05 – DESCRIBE AIRCRAFT CONTROL SURFACES**

1. **Performance.** Describe Aircraft Control Surfaces.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with A-CR-CCP-263/PT-001, *From the Ground Up: Millennium Edition*, the cadet shall describe aircraft control surfaces, to include:
  - a. the location, operation and purpose of:
    - (1) empennage control surfaces;
    - (2) a main wing's control surfaces; and
    - (3) trim tabs; and
  - b. the method and purpose of balanced controls.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Identify the control surfaces of the empennage, to include: <ol style="list-style-type: none"> <li>a. the horizontal/vertical stabilizers;</li> <li>b. the rudder; and</li> <li>c. the elevator.</li> </ol>	Interactive Lecture	5 min	C3-116 (pp. 11–16)
TP2	Explain how stabilizers reduce unwanted axial movement.	Interactive Lecture	5 min	C3-116 (pp. 11–16)
TP3	Explain that the rudder rotates the aircraft about its vertical (yaw) axis by pushing the tail to either left or right.	Interactive Lecture	5 min	C3-116 (pp. 11–16)
TP4	Explain that the elevator rotates the aircraft about its lateral (pitch) axis by pushing the tail up or down.	Interactive Lecture	5 min	C3-116 (pp. 11–16)
TP5	Describe the cockpit controls that move the associated empennage control surfaces. Have the cadets enact control movements with a “pilot” calling out pedal and stick movements to the	In-class Activity	5 min	C3-116 (pp. 11–16)

TP	Description	Method	Time	Ref
	remainder of the class, who then act as pitch and yaw control surfaces.			
TP6	Identify the wing control surfaces, to include: a. ailerons; and b. flaps.	Interactive Lecture	5 min	C3-116 (pp. 11–16)
TP7	Explain that the ailerons lift one wing and lower the opposite wing simultaneously as the one cockpit control is operated to control roll.	Interactive Lecture	5 min	C3-116 (pp. 11–16)
TP8	Explain that flaps are used to generate lift at the expense of airspeed and that both left and right flaps operate simultaneously.	Interactive Lecture	5 min	C3-116 (pp. 11–16)
TP9	Explain that trim tabs were developed to hold control surfaces in position without constant control pressure from the pilot. Identify common locations of trim tabs.	Interactive Lecture	5 min	C3-116 (pp. 11–16)
TP10	Explain that dynamically balanced control surfaces use air pressure to assist the pilot moving the controls by having a portion of the control surface in front of its hinge to catch the passing air.	Interactive Lecture	5 min	C3-116 (pp. 11–16)
TP11	Colour and label the control surfaces in a drawing of an aircraft.	In-class Activity	5 min	C3-116 (pp. 11–16)

## 5. Time

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 5 min  |
| b. Interactive Lecture:     | 45 min |
| c. In-class Activity:       | 10 min |
| d. Total:                   | 60 min |

## 6. Substantiation

- An interactive lecture was chosen for TP1 to TP4 and TP6 to TP10 to introduce aircraft control surfaces and give an overview of them.
- An in-class activity was chosen for TP5 and TP11 as it is an interactive way to provoke thought and stimulate an interest among the cadets.

## 7. References. C3-116 A-CR-CCP-263/PT-001 (ISBN 0-9680390-5-7) MacDonald, A. F. and Pepler, I. L. (2000). *From the Ground Up: Millennium Edition*. Ottawa, ON: Aviation Publishers Co. Limited.

## 8. Training Aids

- Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area; and
- Model of a light fixed-wing aircraft with wing struts, fixed gear and control surface detail.

## 9. Learning Aids. Coloured pencils.

10. **Test Details.** N/A.
11. **Remarks.** It is recommended that the two periods required for this EO be scheduled consecutively.

**EO C231.01 – OPERATE AN EXPERIMENTAL WING**

1. **Performance.** Operate an Experimental Wing.
2. **Conditions**
  - a. Given:
    - (1) Materials to create airfoils for testing;
    - (2) Material and plans for constructing a wind tunnel;
    - (3) Two multi-speed fans;
    - (4) Supervision; and
    - (5) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references the cadet shall:
  - a. build an experimental wing; and
  - b. operate the experimental wing.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Identify the five parts of a wind tunnel, to include: <ol style="list-style-type: none"> <li>a. settling chamber;</li> <li>b. contraction cone;</li> <li>c. test section;</li> <li>d. diffuser; and</li> <li>e. drive section.</li> </ol>	Interactive Lecture	5 min	C-093
TP2	Have the cadets, working as a team, assemble a wind tunnel.	In-class Activity	15 min	C-093
TP3	Have the cadets, as a member of a group of no more than four, form airfoil shapes for testing in the wind tunnel.	In-class Activity	10 min	C3-091 (p. 31) C3-116 (p. 21)
TP4	Have the cadets place airfoils in the wind tunnel and compare lift and drag.	In-class Activity	25 min	C3-093

5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 5 min  |
| b. | Interactive Lecture:     | 5 min  |
| c. | In-class Activity:       | 50 min |
| d. | Total:                   | 60 min |

6. **Substantiation**

- An interactive lecture was chosen for TP1 to introduce wind tunnels and give an overview of them.
- An in-class activity was chosen for TP2 to TP4 as it is an interactive way to provoke thought and stimulate interest among cadets.

7. **References**

- C3-091 (ISBN 1-55652-477-3) Carson, M.K. (2003). *The Wright Brothers for Kids: How They Invented the Airplane*. Chicago, IL: Chicago Review Press.
- C3-093 NASA. (1996). *NASA's Observatory Teacher's Guide*. Retrieved 12 February 2007, from [http://observe.arc.nasa.gov/nasa/aero/tunnel/tunnel\\_parts.html](http://observe.arc.nasa.gov/nasa/aero/tunnel/tunnel_parts.html).
- C3-116 A-CR-CCP-263/PT-001 (ISBN 0-9680390-5-7) MacDonald, A. F. and Pepler, I. L. (2000). *From the Ground Up: Millennium Edition*. Ottawa, ON: Aviation Publishers Co. Limited.

8. **Training Aids**

- Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- Cardboard boxes;
- Blank OHP slides;
- Duct tape;
- Two multi-speed fans; and
- Box cutter.

9. **Learning Aids**

- File folders (letter-size);
- Tape;
- Stapler; and
- Locally available materials for constructing experimental wings.

10. **Test Details.** N/A.

11. **Remarks.** It is recommended that the two periods required for this EO be scheduled consecutively.

**EO C231.02 – FLY A PAPER COLDITZ GLIDER**

1. **Performance.** Fly a Paper Colditz Glider.
2. **Conditions**
  - a. Given:
    - (1) Directions and materials required to construct a paper Colditz glider;
    - (2) Supervision; and
    - (3) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental:
    - (1) Suitable classroom facilities or training area large enough to accommodate the entire group; and
    - (2) Suitable area for flying paper gliders.
3. **Standard.** In accordance with specified references, the cadet shall:
  - a. construct a paper Colditz glider; and
  - b. fly the paper Colditz glider.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain the history and design of a paper Colditz glider, to include: <ol style="list-style-type: none"> <li>a. history;</li> <li>b. construction;</li> <li>c. trimming for flight; and</li> <li>d. flying tips.</li> </ol>	Interactive Lecture	15 min	C3-094 C3-058 (pp. 5–9)
TP2	Supervise the cadets' construction of a paper model of the Colditz glider.	In-class Activity	20 min	C3-017 (pp. 52–56) C3-058 (pp. 52–55)
TP3	Supervise the cadets flying their paper Colditz gliders.	In-class Activity	15 min	C3-058 (pp. 9–11)
TP4	Discuss flying paper Colditz gliders.	Group Discussion	5 min	C3-058 (pp. 9–11)

**5. Time**

a.	Introduction/Conclusion:	5 min
b.	Interactive Lecture:	15 min
c.	In-class Activity:	35 min
d.	Group Discussion:	5 min
e.	Total:	60 min

**6. Substantiation**

- An interactive lecture was chosen for TP1 as it introduces paper gliders, orients the cadets to the topic and generates interest.
- An in-class activity was chosen for TP2 and TP3 as it is an interactive way to provoke thought and stimulate interest among cadets and confirm the cadets' comprehension of the material.
- A group discussion was chosen for TP4 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions and feelings about paper gliders.

**7. References**

- C3-017 (ISBN 1-895569-23-0) Schmidt, N. (1998). *Fabulous Paper Gliders*. New York, NY: Sterling Publishing.
- C3-058 (ISBN 1-4027-3034-9) Schmidt, N. (2005). *Paper Creations Paper Airplanes*. New York, NY: Sterling Publishing.
- C3-094 Colditz Museum. (2005). *Colditz Glider*. Retrieved 23 February 2007, from <http://www.colditz-4c.com/glider.htm>.

**8. Training Aids**

- Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- Completed paper Colditz glider for demonstration purposes;
- Directions to construct a paper glider located at A-CR-CCP-802/PF-001, Annexes A, B and C; and
- Materials required to construct a paper glider.

**9. Learning Aids**

- Directions to construct a paper Colditz glider located at A-CR-CCP-802/PF-001, Annexes A, B and C;
- Card stock (4 x 5 inch);
- Glue stick;
- Scissors;
- Ruler;
- Pencil; and
- Coloured markers.

**10. Test Details. N/A.**

11. **Remarks**

- a. It is recommended that the two periods required for this EO be scheduled consecutively.
- b. If the weather is not suitable to fly the paper gliders outdoors, flights may take place indoors.



**EO C231.03 – TOUR A FLIGHT SCHOOL**

1. **Performance.** Tour a Flight School.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: The squadron Commanding Officer will determine the conditions suitable for this training.
3. **Standard.** The cadet shall tour a flight school to identify aspects of flight training.
4. **Teaching Points.** The tour guide is asked to explain the:
  - a. length of time for the Ministry of Transport ground school requirement;
  - b. training schedule at the flight school;
  - c. topics to be covered during training;
  - d. availability of training aircraft and instructors;
  - e. certifications that are offered;
  - f. costs associated with training; and
  - g. control surfaces and parts of an airplane using a static example.
5. **Time**

a.	Introduction/Conclusion:	10 min
b.	Field Trip:	80 min
c.	Total:	90 min
6. **Substantiation.** A field trip approach was chosen for this lesson to reinforce cadets' knowledge of material previously taught in EO M231.01 (Identify the Four Forces That Act Upon an Aircraft), EO M231.02 (Describe the Production of Lift by an Aircraft Wing), EO M231.03 (Describe the Types of Drag That Act Upon an Aircraft), EO M231.04 (Describe the Axial Movements of an Aircraft) and EO M231.05 (Describe Aircraft Control Surfaces) through participation in a tour.
7. **References.** N/A.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.

11. **Remarks**

- a. Cadet squadron personnel are to determine whether a guide will escort the group or if an instructor from the squadron will be responsible for conducting the tour. If an instructor from the squadron will conduct the tour, all teaching points are to be researched in advance.
- b. This field trip can be completed on a supported day or during a complementary session.
- c. There is no instructional guide for this lesson.

**EO C231.04 – PARTICIPATE IN A PRESENTATION GIVEN BY A GUEST SPEAKER FROM THE LOCAL AVIATION COMMUNITY**

1. **Performance.** Participate in a Presentation Given by a Guest Speaker From the Local Aviation Community.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough for the entire group.
3. **Standard.** The cadet will participate in a presentation, given by a guest speaker from the local aviation community, to gain exposure to an aspect of aviation.
4. **Teaching Points.** The guest speaker is asked to:
  - a. describe the service or facility of which they are a member;
  - b. describe their duties;
  - c. explain the role of their service or facility in the community; and
  - d. facilitate a question and answer period.
5. **Time**

a.	Introduction/Conclusion:	10 min
b.	Interactive Lecture:	50 min
c.	Total:	60 min
6. **Substantiation.** An interactive lecture method was chosen for this lesson to review, clarify, emphasize and summarize the teaching points.
7. **References.** N/A.
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. Required training aids should be determined by contacting the speaker prior to the presentation.
  - b. There is no instructional guide for this EO.

## EO C231.05 – TOUR A FLIGHT SIMULATOR

1. **Performance.** Tour a Flight Simulator.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: The squadron Commanding Officer will determine the conditions suitable for this training.
3. **Standard.** The cadet shall tour a flight simulator to identify aspects of flight training.
4. **Teaching Points.** The tour guide is asked to explain the:
  - a. procedure for booking the flight simulator;
  - b. procedure for operating the flight simulator;
  - c. availability of the flight simulator;
  - d. conditions which can be simulated;
  - e. availability of instructors; and
  - f. costs associated with using the flight simulator.
5. **Time**
  - a. Introduction/Conclusion: 10 min
  - b. Field Trip: 80 min
  - c. Total 90 min
6. **Substantiation.** A field trip approach was chosen for this lesson to reinforce cadets' knowledge of material previously taught in EO M231.01 (Identify the Four Forces That Act Upon an Aircraft), EO M231.02 (Describe the Production of Lift by an Aircraft Wing), EO M231.03 (Describe the Types of Drag That Act Upon an Aircraft), EO M231.04 (Describe the Axial Movements of an Aircraft) and EO M231.05 (Describe Aircraft Control Surfaces) through participation in a tour.
7. **References.** N/A.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. Cadet squadron personnel are to determine whether a guide will escort the group or if an instructor from the squadron will be responsible for conducting the tour. If an instructor from the squadron will conduct the tour, all teaching points are to be researched in advance.

- b. This field trip can be completed on a supported day or during a complementary session.
- c. There is no instructional guide for this lesson.

## EO C231.06 – TOUR A LOCAL AIR SHOW

1. **Performance.** Tour a Local Air Show.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: The squadron Commanding Officer will determine the conditions suitable for this training.
3. **Standard.** The cadet shall tour a local air show to identify aspects of aircraft and aircraft components that have been described in the classroom.
4. **Teaching Points.** The tour guide is asked to identify and explain:
  - a. types of aircraft on display at the show;
  - b. general aircraft components;
  - c. aircraft parts that contribute to the development of lift;
  - d. aircraft parts that contribute to drag;
  - e. aircraft control surfaces; and
  - f. types of engines used in aircraft on display at the show.
5. **Time**

a. Introduction/Conclusion:	10 min
b. Field Trip:	170 min
c. Total:	180 min
6. **Substantiation.** A field trip approach was chosen for this lesson to reinforce cadets' knowledge of material previously taught in EO M231.01 (Identify the Four Forces That Act Upon an Aircraft), EO M231.02 (Describe the Production of Lift by an Aircraft Wing), EO M231.03 (Describe the Types of Drag That Act Upon an Aircraft), EO M231.04 (Describe the Axial Movements of an Aircraft) and EO M231.05 (Describe Aircraft Control Surfaces) through participation in a tour.
7. **References.** N/A.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. Cadet squadron personnel are to determine whether a guide will escort the group or if an instructor from the squadron will be responsible for conducting the tour. If an instructor from the squadron will conduct the tour, all teaching points are to be researched in advance.

- b. This field trip can be completed on a supported day or during a complementary session.
- c. There is no instructional guide for this lesson.

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**SECTION 12****PO 232 – IDENTIFY CHARACTERISTICS OF PISTON-POWERED AIRCRAFT**

1. **Performance.** Identify Characteristics of Piston-Powered Aircraft.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facility to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet will identify the characteristics of piston-powered aircraft, to include:
  - a. types of engines;
  - b. the components of an internal combustion engine;
  - c. the four-stroke cycle; and
  - d. the functions of oil.
4. **Remarks.** N/A.
5. **Complementary Material**
  - a. Complementary material associated with PO 232 is designed to enhance the cadet's knowledge about how other aircraft are powered:
    - (1) EO C232.01 (Identify the Characteristics of Gas Turbine Engines);
    - (2) EO C232.02 (Identify the Characteristics of Rocket Engines); and
    - (3) EO C232.03 (Identify the Characteristics of Helicopter Engines).
  - b. Complementary training associated with PO 232 is limited to a total of six periods, which may be conducted during sessions or on a supported day. Squadrons are not required to use all six periods.

**EO M232.01 – IDENTIFY TYPES OF AIRCRAFT ENGINES**

1. **Performance.** Identify Types of Aircraft Engines.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify types of aircraft engines, to include:
  - a. rocket engines;
  - b. gas turbine engines; and
  - c. piston-powered engines.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain that a powered aircraft needs a means of propulsion to overcome drag and allow the wings to generate lift. Identify common engine types used for propulsion, to include: <ol style="list-style-type: none"> <li>a. rocket engines;</li> <li>b. gas turbine jet engines; and</li> <li>c. piston-powered engines.</li> </ol>	Interactive Lecture	10 min	C3-116 (p. 51) C3-084 C3-086 C3-087 C3-088
TP2	Explain combustion in rocket, gas turbine and piston-powered engines.	Interactive Lecture	5 min	C3-087
TP3	Explain the oxidization process for the different types of engines.	Interactive Lecture	5 min	C3-084 C3-088
TP4	Identify aircraft and associated engine types.	Interactive Lecture	5 min	C3-116

5. **Time**

- a. Introduction/Conclusion: 5 min
- b. Interactive Lecture: 25 min
- c. Total: 30 min

6. **Substantiation.** An interactive lecture was chosen for this lesson to introduce types of aircraft engines and give an overview of them.

**7. References**

- a. A3-031 Canadian Forces. *Aircraft*. (2006). Retrieved 20 November 2006, from [http://www.airforce.gc.ca/equip/equip1\\_e.asp](http://www.airforce.gc.ca/equip/equip1_e.asp).
  - b. C3-084 NASA Glenn Research Center. *Engines 101*. Retrieved 21 February 2007, from <http://www.ueet.nasa.gov/Engines101.html#Aeronautics>.
  - c. C3-086 NASA Glenn Research Center. *Engines 101*. Retrieved 21 February 2007, from <http://www.grc.nasa.gov/WWW/K-12/airplane/icengine.html>.
  - d. C3-087 NASA Glenn Research Center. *Propulsion Index*. Retrieved 21 February 2007, from <http://www.grc.nasa.gov/WWW/K-12/airplane/shortp.html>.
  - e. C3-088 NASA *Welcome to the Beginner's Guide to Rockets*. Retrieved 21 February 2007, from <http://exploration.grc.nasa.gov/education/rocket/bgmr.html>.
  - f. C3-116 A-CR-CCP-263/PT-001/(ISBN 0-9680390-5-7) MacDonald, A. F. and Pepler, I. L. (2000). *From the Ground Up: Millennium Edition*. Ottawa, ON: Aviation Publishers Co. Limited.
  - g. C3-120 Pratt & Whitney Canada. (2006). *Imagine the Power*. Retrieved 18 March 2007, from [http://www.pwc.ca/en/3\\_0/3\\_0\\_3/3\\_0\\_3\\_3\\_1.asp](http://www.pwc.ca/en/3_0/3_0_3/3_0_3_3_1.asp).
  - h. C3-121 NASA. (2007). *Missions: Space Shuttle Main Engines*. Retrieved 18 March 2007, from [http://www.nasa.gov/returntoflight/system/system\\_SSME.html](http://www.nasa.gov/returntoflight/system/system_SSME.html).
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks.** If a computer and projector are available, software to demonstrate engine operation can be found at the Websites listed under reference para 7c.

**EO M232.02 – IDENTIFY THE COMPONENTS OF PISTON-POWERED INTERNAL COMBUSTION ENGINES**

1. **Performance.** Identify the Components of Piston-Powered Internal Combustion Engines.
2. **Conditions**
  - a. Given:
    - (1) List of questions and answers at Annex E;
    - (2) Coin;
    - (3) One large die;
    - (4) Coloured poster board;
    - (5) Masking tape;
    - (6) Supervision; and
    - (7) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify the components of piston-powered internal combustion engines, to include:
  - a. stationary engine parts;
  - b. moving engine parts;
  - c. timing system components;
  - d. fuel/air delivery components; and
  - e. electrical spark distribution system components.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Identify and explain the operation of the major components of a piston-powered four-stroke internal combustion engine, to include: <ol style="list-style-type: none"> <li>a. the cylinder;</li> <li>b. the piston;</li> <li>c. the connecting rod;</li> <li>d. the crankshaft;</li> <li>e. the camshaft;</li> <li>f. the distributor;</li> <li>g. the carburetor; and</li> </ol>	Interactive Lecture	25 min	C3-116 (pp. 41–71) C3-086

TP	Description	Method	Time	Ref
	h. the oil sump.			
TP2	Explain that some early aircraft engines used rotary engines in which the cylinders themselves rotated around the central crankshaft. These were different than the later radial engines in which the stationary cylinders were arranged around the rotating crankshaft.	Interactive Lecture	5 min	C3-087
TP3	Describe other piston-powered engine arrangements that have been used in aircraft, to include: a. engines with in-line cylinders; and b. engines with horizontally-opposed cylinders.	Interactive Lecture	10 min	C3-116
TP4	Play a game of piston-powered baseball.	In-class Activity	15 min	C3-003 (p. 70)

#### 5. Time

a. Introduction/Conclusion:	5 min
b. Interactive Lecture:	40 min
c. In-class Activity:	15 min
d. Total:	60 min

#### 6. Substantiation

- An interactive lecture was chosen for TP1 to TP3 to introduce the components of internal combustion engines and give an overview of them.
- An in-class activity was chosen for TP4 as it is an interactive way to provoke thought and stimulate interest among cadets.

#### 7. References

- C3-003 (ISBN 0-943210-44-5) Pike, B. and Busse, C. (1995). *101 More Games for Trainers*. Minneapolis, MN: Lakewood Books.
- C3-086 NASA Glenn Research Center. *Engines 101*. Retrieved 21 February 2007, from <http://www.grc.nasa.gov/WWW/K-12/airplane/icengine.html>.
- C3-087 NASA Glenn Research Center. *Propulsion Index*. Retrieved 21 February 2007, from <http://www.grc.nasa.gov/WWW/K-12/airplane/shortp.html>.
- C3-116 A-CR-CCP-263/PT-001 (ISBN 0-9680390-5-7) MacDonald, A. F. and Pepler, I. L. (2000). *From the Ground Up: Millennium Edition*. Ottawa, ON: Aviation Publishers Co. Limited.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks**

- a. It is recommended that the two periods required for this EO be scheduled consecutively.
- b. If a computer and projector are available, software to demonstrate engine operation can be found at the Websites listed under reference para 7c.

**EO M232.03 – EXPLAIN THE CYCLES OF A FOUR-STROKE PISTON-POWERED ENGINE**

1. **Performance.** Explain the Cycles of a Four-stroke Piston-powered Engine.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall explain the cycles of a four-stroke piston-powered engine, to include:
  - a. the purpose of each stroke;
  - b. the intake/exhaust valve operations; and
  - c. the ignition spark timing methods.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain the purposes of the strokes of a four-stroke piston, to include: <ol style="list-style-type: none"> <li>a. the intake (induction) stroke is responsible for drawing fuel and air into the combustion chamber;</li> <li>b. the compression stroke forces the fuel and air into the combustion chamber;</li> <li>c. the power (combustion) stroke transmits the energy of the exploding fuel to the crankshaft; and</li> <li>d. the exhaust stroke cleans the cylinder of exhaust fumes and prepares it for the next intake stroke.</li> </ol>	Interactive Lecture	15 min	C3-116 (p. 43) C3-086
TP2	Identify and explain the operation of: <ol style="list-style-type: none"> <li>a. valves; and</li> <li>b. cam shafts.</li> </ol>	Interactive Lecture	5 min	C3-116 (p. 43) C3-086
TP3	Explain the timing of electrical ignition spark distribution, to include: <ol style="list-style-type: none"> <li>a. the time required for the complete combustion;</li> <li>b. a unique time for each cylinder's detonation; and</li> </ol>	Interactive Lecture	10 min	C3-116 (p. 43) C3-086

TP	Description	Method	Time	Ref
	c. the mechanical arrangements providing timing.			
TP4	Explain that all the engine operations must proceed precisely in order and list those operations in order, with emphasis on the simultaneous events, to include: a. fuel and air mixture; b. intake stroke; c. intake valve operation; d. compression stroke; e. electrical points operation; f. power stroke; g. exhaust stroke; h. exhaust valve operation; and i. camshaft operation.	Interactive Lecture	10 min	C3-116 (p. 43) C3-086
TP5	Enact the performance of the four-stroke engine operation in teams of six.	In-class Activity	15 min	C3-086

#### 5. Time

a. Introduction/Conclusion:	5 min
b. Interactive Lecture:	40 min
c. In-class Activity:	15 min
d. Total:	60 min

#### 6. Substantiation

- An interactive lecture was chosen for TP1 to TP4 to introduce the cycles of a four-stroke piston-powered engine and give an overview of them.
- An in-class activity was chosen for TP5 as it is an interactive way to provoke thought and stimulate interest among the cadets.

#### 7. References

- C3-086 NASA Glenn Research Center. *Engines 101*. Retrieved 21 February 2007, from <http://www.grc.nasa.gov/WWW/K-12/airplane/icengine.html>.
- C3-087 NASA Glenn Research Center. *Propulsion Index*. Retrieved 21 February 2007, from <http://www.grc.nasa.gov/WWW/K-12/airplane/shortp.html>.
- C3-116 A-CR-CCP-263/PT-001 (ISBN 0-9680390-5-7) MacDonald, A. F. and Peppler, I. L. (2000). *From the Ground Up: Millennium Edition*. Ottawa, ON: Aviation Publishers Co. Limited.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** N/A.



10. **Test Details.** N/A.

11. **Remarks**

- a. It is recommended that the two periods required for this EO be scheduled consecutively.
- b. If a computer and projector are available, software to demonstrate engine operation can be found at the Websites listed under reference para 7.b.

**EO M232.04 – RECOGNIZE THE FUNCTIONS OF OIL IN A FOUR-STROKE PISTON-POWERED ENGINE**

1. **Performance.** Recognize the Functions of Oil in a Four-stroke Piston-powered Engine.
2. **Conditions**
  - a. Given:
    - (1) Hand cream;
    - (2) Supervision; and
    - (3) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with A-CR-CCP-263/PT-001, the cadet shall recognize the functions of oil in a four-stroke piston-powered engine, to include:
  - a. lubricating;
  - b. sealing;
  - c. cooling; and
  - d. flushing.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain how oil lubricates the engine and aspects of lubrication, to include: <ol style="list-style-type: none"> <li>a. grades and viscosities of oil; and</li> <li>b. thinning of oil as temperature increases.</li> </ol>	Interactive Lecture	5 min	C3-116 (pp. 57–59)
TP2	Allow the cadets to compare the friction and heat.	In-class Activity	5 min	C3-116 (pp. 57–59)
TP3	Explain that oil seals the combustion chamber to prevent the expanding gases from leaking out during the power stroke.	Interactive Lecture	5 min	C3-116 (pp. 57–59)
TP4	Explain how oil cools hot spots in the engine.	Interactive Lecture	5 min	C3-116 (pp. 57–59)
TP5	Explain that oil removes and holds particles harmful to the engine.	Interactive Lecture	5 min	C3-116 (pp. 57–59)

**5. Time**

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 5 min  |
| b. Interactive Lecture:     | 20 min |
| c. In-class Activity:       | 5 min  |
| d. Total:                   | 30 min |

**6. Substantiation**

- a. An interactive lecture was chosen for TP1 and TP3 to TP5 to introduce the functions of oil in a four-stroke piston-powered engine and to give an overview of them.
- b. An in-class activity was chosen for TP2 as it is an interactive way to provoke thought and stimulate interest among cadets.

7. **References.** C3-116 A-CR-CCP-263/PT-001 (ISBN 0-9680390-5-7) MacDonald, A. F. and Peppler, I. L. (2000). *From the Ground Up: Millennium Edition*. Ottawa, ON: Aviation Publishers Co. Limited.

**8. Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area; and
- b. Hand cream.

9. **Learning Aids.** Hand cream.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**EO C232.01 – IDENTIFY THE CHARACTERISTICS OF GAS TURBINE ENGINES**

1. **Performance.** Identify the Characteristics of Gas Turbine Engines.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify the characteristics of gas turbine engines, to include:
  - a. describing general gas turbine theory; and
  - b. identifying various aspects of gas turbines.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain that a jet engine is a reactive engine that propels by ejecting material as per Newton's third law of motion.	Interactive Lecture	5 min	C3-116 (p. 85)
TP2	Have the cadets explore Newton's third law of motion by making and operating a Pop Can Hero Engine.	In-class Activity	15 min	C3-016 (p. 29) C3-057 (p. 11)
TP3	Describe the history of reaction engine development, to include: <ol style="list-style-type: none"> <li>a. Hero's aeolipile toy;</li> <li>b. Chinese gunpowder rockets;</li> <li>c. Leonardo Da Vinci's chimney jack;</li> <li>d. Branca's stamping mill;</li> <li>e. Stolze's first gas turbine engine;</li> <li>f. Whittle's gas turbine for jet propulsion;</li> <li>g. the flight of the Heinkel HE-178;</li> <li>h. Whittle's Gloster Meteor turbojet; and</li> <li>i. Anslem's axial-flow turbojet.</li> </ol>	Interactive Lecture	10 min	C3-088
TP4	Explain the advantages of using a turbine, to include: <ol style="list-style-type: none"> <li>a. compression requirement;</li> <li>b. running at static conditions; and</li> </ol>	Interactive Lecture	5 min	C3-084 C3-087

TP	Description	Method	Time	Ref
	c. power to operate ancillary systems.			
TP5	Identify and describe the parts of a gas turbine turbofan engine, to include: a. fan; b. compressor; c. combustor; d. turbine; e. nozzle; and f. afterburner.	Interactive Lecture	5 min	C3-086
TP6	Conduct a crossword game based on jet power.	In-class Activity	15 min	C0-003 (p. 70)

#### 5. Time

a.	Introduction/Conclusion:	5 min
b.	Interactive Lecture:	25 min
c.	In-class Activity:	30 min
d.	Total:	60 min

#### 6. Substantiation

- a. An interactive lecture was chosen for TP1 and TP3 to TP5 to introduce the characteristics of gas turbine engines and give an overview of them.
- b. An in-class activity was chosen for TP2 and TP6 as it is an interactive way to provoke thought and stimulate interest among cadets.

#### 7. References

- a. C0-003 (ISBN 0-943210-44-5) Pike, B. and Busse, C. (1995). *101 More Games for Trainers*. Minneapolis, MN: Lakewood Books.
- b. C3-016 EG-2003-01-108-HQ NASA. (2003). *Rockets: A Teacher's Guide With Activities in Science, Mathematics, and Technology*. Washington, DC: NASA.
- c. C3-057 ISBN-10 1-59647-055-0 Sobey, E. (2006). *Rocket-powered Science*. Tucson, AZ: Good Year Books.
- d. C3-084 NASA Glenn Research Center. *Engines 101 – Ultra-Efficient Engine Technology (UEET)*. Retrieved February 21, 2007, from <http://www.ueet.nasa.gov/Engines101.html#Aeronautics>.
- e. C3-086 NASA Glenn Research Center. *Engines 101*. Retrieved 21 February 2007, from <http://www.grc.nasa.gov/WWW/K-12/airplane/icengine.html>.
- f. C3-087 NASA Glenn Research Center. *Propulsion Index*. Retrieved 21 February 2007, from <http://www.grc.nasa.gov/WWW/K-12/airplane/shortp.html>.
- g. C3-088 NASA Glenn Research Center. *Beginner's Guide to Rockets*. Retrieved 21 February 2007, from <http://exploration.grc.nasa.gov/education/rocket/bgmr.html>

- h. C3-116 A-CR-CCP-263/PT-001 (ISBN 0-9680390-5-7) MacDonald, A. F. and Peppler, I.L. (2000). *From the Ground Up: Millennium Edition*. Ottawa, ON: Aviation Publishers Co. Limited.

8. **Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area; and
- b. Coloured marking pens.

9. **Learning Aids**

- a. Straight pin;
- b. Empty pop can;
- c. Nail;
- d. Scissors; and
- e. Pencils with erasers.

10. **Test Details.** N/A.

11. **Remarks.** It is recommended that the two periods required for this EO be scheduled consecutively.

**EO C232.02 – IDENTIFY THE CHARACTERISTICS OF ROCKET ENGINES**

1. **Performance.** Identify the Characteristics of Rocket Engines.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify the characteristics of rocket engines, to include:
  - a. general rocket theory; and
  - b. liquid and solid fuel oxidization methods.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain aspects of reactive thrust in various methods of propulsion, to include: <ol style="list-style-type: none"> <li>a. jet systems;</li> <li>b. propeller systems;</li> <li>c. wheeled vehicles; and</li> <li>d. walking.</li> </ol>	Interactive Lecture	5 min	C3-087 C3-016 (pp. 13–17) C3-037
TP2	Have the cadets explore Newton’s third law of motion by staging and operating balloon rockets on a string, followed by a discussion.	In-class Activity	20 min	C3-016 (pp. 63–64) C3-057 (pp. 42)
TP3	Explain how rocket systems operate in space because they are self-contained and require no atmospheric oxygen.	Interactive Lecture	5 min	C3-016 (pp. 18–24)
TP4	Explain the differences between solid-fuel and liquid-fuel rocket engine systems, to include: <ol style="list-style-type: none"> <li>a. construction;</li> <li>b. vehicle applications; and</li> <li>c. fuels and oxidation.</li> </ol>	Interactive Lecture	10 min	C3-016 (pp. 5–12)
TP5	Discuss launch vehicles, to include: <ol style="list-style-type: none"> <li>a. American;</li> <li>b. Russian;</li> <li>c. European; and</li> </ol>	Interactive Lecture	15 min	C3-100 C3-112 C3-113 C3-114

TP	Description	Method	Time	Ref
	d. Chinese.			

## 5. Time

a.	Introduction/Conclusion:	5 min
b.	Interactive Lecture:	35 min
c.	In-class Activity:	20 min
d.	Total:	60 min

## 6. Substantiation

- An interactive lecture was chosen for TP1, TP3, TP4 and TP5 to introduce characteristics of rocket engines and give an overview of them.
- An in-class activity was chosen for TP2 as it is an interactive way to provoke thought and stimulate an interest among cadets.

## 7. References

- C3-016 (ISBN EG-2003-01-108-HQ) NASA. (2003). *Rockets: A Teacher's Guide With Activities in Science, Mathematics, and Technology*. Washington, DC: NASA.
- C3-037 *Space Exploration*. (2006). Retrieved 25 May 2006, from <http://www.space.gc.ca/asc/eng/exploration/exploration.asp>.
- C3-057 (ISBN 10-1-59647-055-0) Sobey, E. (2006). *Rocket-powered Science*. Tucson, AZ. Good Year Books.
- C3-087 NASA Glenn Research Center. *Propulsion Index*. Retrieved 21 February 2007, from <http://www.grc.nasa.gov/WWW/K-12/airplane/shortp.html>.
- C3-088 NASA Glenn Research Center. *Beginner's Guide to Rockets*. Retrieved 21 February 2007, from <http://exploration.grc.nasa.gov/education/rocket/bgmr.html>.
- C3-100 China In Space. *The Long March Space Rockets*. Retrieved 26 February 2007, from <http://www.spacetoday.org/China/ChinaRockets.html>.
- C3-112 Federal Space Agency. *Rocket1Show*. Retrieved 26 February 2007, from <http://www.roscosmos.ru/RocketsMain.asp>.
- C3-113 European Space Agency. *ESA Launch Vehicles*. Retrieved 26 February 2007, from <http://www.esa.int/esaCP/index.html>.
- C3-114 NASA. *Countdown! NASA Launch Vehicles and Facilities*. Retrieved 27 February 2007, from <http://www-pao.ksc.nasa.gov/kscpao/nasafact/count1.htm#nasa>.

## 8. Training Aids

- Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area; and
- Slides of American, Russian, European and Chinese launch vehicles.

## 9. Learning Aids

- Balloons;



- b. String;
- c. Straw;
- d. Tape; and
- e. Paper or Styrofoam cup.

10. **Test Details.** N/A.

11. **Remarks**

- a. It is recommended that the two periods required for this EO be scheduled consecutively.
- b. Website references should be made available for cadets to explore on their own time.

**EO C232.03 – IDENTIFY THE CHARACTERISTICS OF HELICOPTER ENGINES**

1. **Performance.** Identify the Characteristics of Helicopter Engines.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify the characteristics of helicopter engines, to include:
  - a. technical development of early helicopter engines;
  - b. challenges of rotary-wing flight; and
  - c. categories of engines in CF helicopters.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain technological developments that made helicopters viable.	Interactive Lecture	5 min	C3-061
TP2	Have the cadets make and fly a paper helicopter.	In-class Activity	20 min	C3-056
TP3	Explain why helicopters have a top speed and why helicopter rotors have constant speed.	Interactive Lecture	10 min	C3-055
TP4	Explain how lift of the main rotor is changed during flight.	Interactive Lecture	5 min	C3-061 C3-054
TP5	Explain that most helicopters use turboshaft engines.	Interactive Lecture	5 min	C3-061
TP6	Have the cadets identify the following CF helicopters and discuss each engine of: <ol style="list-style-type: none"> <li>a. CH-149 Cormorant;</li> <li>b. CH-148 Cyclone;</li> <li>c. CH-146 Griffon;</li> <li>d. CH-139 Jet Ranger; and</li> <li>e. CH-124 Sea King.</li> </ol>	Interactive Lecture	10 min	C3-050

## 5. Time

a.	Introduction/Conclusion:	5 min
b.	Interactive Lecture:	35 min
c.	In-class Activity:	20 min
d.	Total:	60 min

## 6. Substantiation

- An interactive lecture was chosen for TP1 and TP3 to TP6 to introduce characteristics of helicopter engines and give an overview of them.
- An in-class activity was chosen for TP2 as it is an interactive way to provoke thought and stimulate interest among cadets.

## 7. References

- C3-050 Department of National Defence. (2006). *Canada's Air Force, Aircraft Main Page*. Retrieved 11 October 2006, from [http://www.airforce.forces.gc.ca/equip/equip1\\_e.asp](http://www.airforce.forces.gc.ca/equip/equip1_e.asp).
- C3-054 Frost, M. (2004). *Force and Movement: Making a Helicopter*. Retrieved 11 October 2006, from [http://www.teacherresourcesgalore.com/physics\\_files/helicopter.doc](http://www.teacherresourcesgalore.com/physics_files/helicopter.doc).
- C3-055 University of Sydney. *Helicopters*. (2006). Retrieved 12 October 2006, from <http://alex.edfac.usyd.edu.au/blp/websites/Machan/heli.htm>.
- C3-056 US Centennial of Flight Commission. *Helicopters*. (2003). Retrieved 12 October 2006, from <http://www.centennialofflight.gov/essay/Dictionary/helicopter/DI27.htm>.
- C3-061 Leishman, J.G. (2000). *A History of Helicopter Flight*. Retrieved 1 November 2006, from <http://www.glue.umd.edu/~leishman/Aero/history/html>.

## 8. Training Aids

- Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- Completed paper helicopter for demonstration purposes;
- Model helicopter with tail-rotor (e.g. Jet Ranger); and
- Helium-filled balloon.

## 9. Learning Aids

- Directions to construct and fold a paper helicopter (A-CR-CCP-802/PF-001, Annex D); and
- Materials required to construct a paper helicopter.

## 10. Test Details. N/A.

## 11. Remarks. It is recommended that the two periods required for this EO be scheduled consecutively.

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**SECTION 13**  
**PO 240 – PARTICIPATE IN AEROSPACE ACTIVITIES**

1. **Performance.** Participate in Aerospace Activities.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Any conditions.
3. **Standard.** In accordance with specified references, the cadet will participate in aerospace activities, to include:
  - a. exploring current advancements in aerospace technology;
  - b. inventing a space technology item; and
  - c. participating in a space survival scenario.
4. **Remarks.** N/A.
5. **Complementary Material**
  - a. Complementary material associated with PO 240 is designed to enhance the cadet's knowledge of aerospace technology:
    - (1) EO C240.01 (Participate in a Non-Verbal Communication Activity);
    - (2) EO C240.02 (Invent a Communication System for Space);
    - (3) EO C240.03 (Identify Parts of a Rocket);
    - (4) EO C240.04 (Navigate With a Global Positioning System [GPS]);
    - (5) EO C240.05 (Simulate Survival in Space); and
    - (6) EO C240.06 (Determine Direction Using Constellations on a Field Exercise).
  - b. Complementary training associated with PO 240 is limited to a total of ten periods, which may be conducted during sessions or on a supported day. Squadrons are not required to use all ten periods.

**EO M240.01 – EXPLORE CURRENT ADVANCEMENTS IN AEROSPACE TECHNOLOGY**

1. **Performance.** Explore Current Advancements in Aerospace Technology.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities large enough to accommodate the entire group.
3. **Standard.** In accordance with *Space on Earth: How Technology Transfer Benefits Humanity*, and in groups of no more than four, the cadet shall explore current advancements in aerospace technology.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Conduct an activity to explore current advancements in aerospace technology. Cadets may come up with the following: <ol style="list-style-type: none"> <li>a. satellite radio;</li> <li>b. video image stabilization and registration;</li> <li>c. satellite TV;</li> <li>d. DeBakey blood pump;</li> <li>e. global positioning system;</li> <li>f. temper foam;</li> <li>g. advanced communications technology;</li> <li>h. fire-resistant aircraft seats;</li> <li>i. excimer angioplasty system; and</li> <li>j. liquid-cooled garments, etc.</li> </ol> <p><b>Note:</b> Refer to <a href="http://www.space.com">http://www.space.com</a> for up-to-date advancements in space technology.</p>	In-class Activity	25 min	C3-110

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. In-class Activity: 25 min
  - c. Total: 30 min
6. **Substantiation.** An in-class activity was chosen for this lesson as it is an interactive way to present advancements in aerospace technology and stimulate interest among cadets.
7. **References.** C3-110 Space.com. (2006). *Space on Earth: How Technology Transfer Benefits Humanity*. Retrieved 27 February 2007, from [http://www.space.com/business/technology/tech\\_hallofame\\_030101-1.html](http://www.space.com/business/technology/tech_hallofame_030101-1.html).

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
9. **Learning Aids.** Information cards.
10. **Test Details.** N/A.
11. **Remarks.** N/A.

**EO M240.02 – INVENT A SPACE TECHNOLOGY ITEM**

1. **Performance.** Invent a Space Technology Item.
2. **Conditions**
  - a. Given:
    - (1) Consumable items for construction;
    - (2) Supervision; and
    - (3) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with Goodman, P., *Arty Facts: Space and Art Activities*, Crabtree Publishing, and in groups of no more than four, the cadet shall invent a space technology item, to include:
  - a. brainstorming ideas about the invention;
  - b. designing the idea on paper; and
  - c. constructing the item out of consumable items.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain that there are many challenges astronauts encounter while in space, such as: <ol style="list-style-type: none"> <li>a. transportation to and from space; and</li> <li>b. the living environment.</li> </ol>	Interactive Lecture	5 min	C3-040 (p. 36)
TP2	Conduct an activity where cadets invent and construct a space technology item.	In-class Activity	35 min	
TP3	Conduct a group discussion where cadets share their space technology item with the entire group.	Group Discussion	15 min	

5. **Time**

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 5 min  |
| b. Interactive Lecture:     | 5 min  |
| c. In-class Activity:       | 35 min |
| d. Group Discussion:        | 15 min |
| e. Total:                   | 60 min |

6. **Substantiation**

- a. An interactive lecture was chosen for TP1 to orient the cadets to space technology and to give an overview of it.



- b. An in-class activity was chosen for TP2 as it is an interactive way to provoke thought and stimulate interest among cadets.
  - c. A group discussion was chosen for TP3 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions and feelings about space technology.
7. **References.** C3-040 (ISBN 0-7787-1140-4) Goodman, P. (2002). *Arty Facts: Space and Art Activities*. St. Catharines, ON. Crabtree Publishing.
  8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
  9. **Learning Aids.** Consumable items for construction.
  10. **Test Details.** N/A.
  11. **Remarks.** N/A.

**EO M240.03 – PARTICIPATE IN A SPACE SURVIVAL SCENARIO**

1. **Performance.** Participate in a Space Survival Scenario.
2. **Conditions**
  - a. Given:
    - (1) Survival kit list;
    - (2) Survival scenario;
    - (3) Supervision; and
    - (4) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with *Space Survival Challenge* and in groups of no more than four, the cadets shall participate in a space survival scenario, to include:
  - a. choosing a limited number of survival items from a given list; and
  - b. discussing chosen survival items.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	In groups of no more than four have cadets choose five items from the following survival list to survive in space: <ol style="list-style-type: none"> <li>a. a box of matches;</li> <li>b. 2 x 50 kg tanks of oxygen;</li> <li>c. 20 litre of water;</li> <li>d. 15 m of nylon rope;</li> <li>e. a magnetic compass;</li> <li>f. a stellar map of the Moon's constellations;</li> <li>g. a solar-powered receiver-transmitter; and</li> <li>h. a reconstituted food package.</li> </ol>	In-class Activity	15 min	C3-111
TP2	Have the cadets explain why they chose their items for survival.	Group Discussion	10 min	

5. **Time**

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 5 min  |
| b. In-class Activity:       | 15 min |
| c. Group Discussion:        | 10 min |
| d. Total:                   | 30 min |

6. **Substantiation**

- a. An in-class activity was chosen for TP1 as it is an interactive way to provoke thought and stimulate an interest in space survival among cadets.
- b. A group discussion was chosen for TP2 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions, and feelings about the topic.

7. **References.** C3-111 Lakeland Central School District. (2007). *Space Survival Challenge*. Retrieved February 27, 2007, from <http://www.lakelandschools.org/EDTECH/leslie/space.htm>.

8. **Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- b. Survival kit list; and
- c. Survival scenario.

9. **Learning Aids**

- a. Survival kit list; and
- b. Survival scenario.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**EO C240.01 – PARTICIPATE IN A NON-VERBAL COMMUNICATION ACTIVITY**

1. **Performance.** Participate in a Non-verbal Communication Activity.
2. **Conditions**
  - a. Given:
    - (1) Cue cards;
    - (2) Supervision; and
    - (3) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with *Communication in the Workplace: Non-verbal Communication (Body Language)*, the cadet shall participate in a non-verbal communication activity to gain a familiarization with an alternate method of communication.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain the use of body language as a form of non-verbal communication.	Interactive Lecture	5 min	C3-104
TP2	Explain the use of gestures as a form of non-verbal communication, to include: <ol style="list-style-type: none"> <li>a. waving;</li> <li>b. making a fist;</li> <li>c. thumbs up; and</li> <li>d. pointing.</li> </ol>	Interactive Lecture	5 min	C3-104
TP3	Conduct an activity where the cadets name an emotion that they have shown in the last week, such as: <ol style="list-style-type: none"> <li>a. sorrow;</li> <li>b. fear;</li> <li>c. satisfaction;</li> <li>d. surprise;</li> <li>e. happiness; and</li> <li>f. anger.</li> </ol> <p><b>Note:</b> Have the cadets take turns acting out an emotion without verbal communication. Have the group determine the emotion.</p>	In-class Activity	15 min	C3-104

**5. Time**

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 5 min  |
| b. Interactive Lecture:     | 10 min |
| c. In-class Activity:       | 15 min |
| d. Total:                   | 30 min |

**6. Substantiation**

- a. An interactive lecture was chosen for TP1 and TP2 to orient the cadets to the topic, generate interest and to give an overview of non-verbal communication.
- b. An in-class activity was chosen for TP3 as it is an interactive way to provoke thought and stimulate interest among cadets.

7. **References.** C3-104 Australian Government, Department of Education, Science and Training. (2007). *Communication in the Workplace: Non-verbal Communication (Body Language)*. Retrieved 22 February 2007, from [http://www.dest.gov.au/nwt/hospitality/comm\\_non.htm](http://www.dest.gov.au/nwt/hospitality/comm_non.htm).

**8. Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area; and
- b. Cue cards.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**EO C240.02 – INVENT A COMMUNICATION SYSTEM FOR SPACE**

1. **Performance.** Invent a Communication System for Space.
2. **Conditions**
  - a. Given:
    - (1) Message cue cards;
    - (2) Supervision; and
    - (3) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with *Two-way Radio Communication Failure*, and in groups of no more than four, the cadets shall invent a communication system for space.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain that astronauts use radio communication while in space to communicate with other astronauts and ground control.	Interactive Lecture	5 min	C3-135
TP2	Conduct an activity where cadets invent a communication system for space, to include: <ol style="list-style-type: none"> <li>a. a system that does not require speech; and</li> <li>b. a system that does not allow for written words.</li> </ol>	In-class Activity	40 min	
TP3	Conduct a group discussion where cadets share their communication system invention with the entire group.	Group Discussion	10 min	

5. **Time**

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 5 min  |
| b. Interactive Lecture:     | 5 min  |
| c. In-class Activity:       | 40 min |
| d. Group Discussion:        | 10 min |
| e. Total:                   | 60 min |

6. **Substantiation**

- a. An interactive lecture was chosen for TP1 to orient the cadets to space communication, to give an overview of it and to generate interest in the subject.
- b. An in-class activity was chosen for TP2 as it is an interactive way to present the content and stimulate an interest among cadets.

- c. A group discussion was chosen for TP3 as it allows the cadets to interact with their peers and share their knowledge, experience, opinions and feelings about space communication.
7. **References.** C3-135 Virtual Skies. (2007). *Two-way Radio Communication Failure (Aeronautical Information Manual Section 6.4.1)*. Retrieved March 18, 2007, from [http://virtualskies.arc.nasa.gov/communication/youDecide/AIM6\\_4\\_1.html](http://virtualskies.arc.nasa.gov/communication/youDecide/AIM6_4_1.html).
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
9. **Learning Aids.** Message cue cards.
10. **Test Details.** N/A.
11. **Remarks.** N/A.

**EO C240.03 – IDENTIFY PARTS OF A ROCKET**

1. **Performance.** Identify Parts of a Rocket.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with *Rocket Parts*, the cadet shall identify parts of a rocket to become familiar with its components.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain the following parts of a rocket: <ol style="list-style-type: none"> <li>a. the structure system, to include:               <ol style="list-style-type: none"> <li>(1) the nose cone;</li> <li>(2) fuel;</li> <li>(3) the frame;</li> <li>(4) the oxidizer;</li> <li>(5) the pumps;</li> <li>(6) the nozzle; and</li> <li>(7) the fin;</li> </ol> </li> <li>b. the propulsion system;</li> <li>c. the payload system; and</li> <li>d. the guidance system.</li> </ol>	Interactive Lecture	15 min	C3-106
TP2	Conduct an activity naming the parts of a rocket.	In-class Activity	10 min	C3-106

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Interactive Lecture: 15 min
  - c. In-class Activity: 10 min
  - d. Total: 30 min

6. **Substantiation**

- a. An interactive lecture was chosen for TP1 to orient the cadets to the parts of a rocket, generate interest and present basic material.



- b. An in-class activity was chosen for TP2 as it is an interactive way to confirm the cadet's comprehension of the material.
7. **References.** C3-106 NASA. (2006). *Rocket Parts*. Retrieved 22 February 2007, from <http://exploration.grc.nasa.gov/education/rocket/rockpart.html#>.
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
9. **Learning Aids**
  - a. Rocket parts puzzle; and
  - b. Parts of a rocket handout.
10. **Test Details.** N/A.
11. **Remarks.** N/A.

**EO C240.04 – NAVIGATE WITH A GLOBAL POSITIONING SYSTEM (GPS)**

1. **Performance.** Navigate With a Global Positioning System (GPS).
2. **Conditions**
  - a. Given:
    - (1) GPS (one per five cadets) (Type TBD);
    - (2) Supervision; and
    - (3) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Field setting during the day, large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, and in a group of no more than five, the cadet shall navigate with a GPS on a field exercise.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Describe the GPS, to include: <ol style="list-style-type: none"> <li>a. what is a GPS;</li> <li>b. how accurate is a GPS;</li> <li>c. the GPS satellite system; and</li> <li>d. the source of GPS signal errors.</li> </ol>	Interactive Lecture	5 min	See Remarks para 11.b. C3-117
TP2	Explain what a GPS tells the user, to include: <ol style="list-style-type: none"> <li>a. standard features, to include:               <ol style="list-style-type: none"> <li>(1) your position – coordinates and elevation;</li> <li>(2) distance to a waypoint;</li> <li>(3) speed of travel;</li> <li>(4) direction of travel (may not work in low speeds);</li> <li>(5) estimated time of arrival; and</li> <li>(6) cross track error (lateral distance off a straight line course); and</li> </ol> </li> <li>b. extra features, to include:               <ol style="list-style-type: none"> <li>(1) built-in maps;</li> <li>(2) sunrise/sunset;</li> <li>(3) signal strength indicators;</li> <li>(4) battery strength indicators;</li> <li>(5) audible alarm; and</li> <li>(6) course deviation errors.</li> </ol> </li> </ol>	Demonstration and Performance	10 min	See Remarks para 11.b. C3-117

TP	Description	Method	Time	Ref
TP3	Operate the GPS, to include: a. turn on and initialize the GPS; b. review the various screens; c. identify battery strength; d. locate your current grid reference; e. identify your direction of travel; f. set your current waypoint; g. set a waypoint (not your current position); h. set the go-to to a preset waypoint; and i. turn off the GPS.	Practical Activity	20 min	See Remarks para 11.b. C3-117
TP4	Navigate a route.	Practical Activity	50 min	

#### 5. Time

a.	Introduction/Conclusion:	5 min
b.	Interactive Lecture:	5 min
c.	Demonstration and Performance:	10 min
d.	Practical Activity:	70 min
e.	Total:	90 min

#### 6. Substantiation

- a. An interactive lecture was chosen for TP1 to introduce a new subject and give an overview of GPS navigation.
- b. Demonstration and performance was chosen for TP2 as it allows the instructor to explain and demonstrate navigating with a GPS while providing an opportunity for the cadet to practice the skill under supervision.
- c. A practical activity was chosen for TP3 and TP4 as it is an interactive way to introduce cadets to navigating with a GPS. This activity contributes to the development of these skills and knowledge in a fun and challenging setting.

#### 7. References

- a. See Remarks 11.b.
- b. C3-117 (ISBN 0-96-522025-7) Ferguson, M. H. (1996). *GPS Land Navigation: A Complete Guide Book for Backcountry Users of the NAVSTAR Satellite System*. Calgary, AB: Glassford Publishing.
- c. C3-132 (ISBN 1-894765-48-6) Letham, L. (2003). *GPS Made Easy*. Surrey, BC: Rocky Mountain Books.

#### 8. Training Aids

- a. GPS (Type TBD); and
- b. GPS User's Guide.

9. **Learning Aids.** GPS (one per five cadets) (Type TBD).

10. **Test Details.** N/A.

11. **Remarks**

- a. This lesson will be presented during the field exercise associated with PO 290 (Participate in a Field Exercise).
- b. The reference information for this EO will be contained in the User's Guide for the GPS selected for training.

**EO C240.05 – SIMULATE SURVIVAL IN SPACE**

1. **Performance.** Simulate Survival in Space.
2. **Conditions**
  - a. Given:
    - (1) a box of matches;
    - (2) a magnetic compass;
    - (3) a stellar map of the Moon;
    - (4) two military water cans (to simulate oxygen tanks);
    - (5) four two-litre bottles to simulate water;
    - (6) ten metres of nylon rope;
    - (7) simulated food boxes;
    - (8) a radio;
    - (9) a fire blanket;
    - (10) a map of the training area;
    - (11) supervision; and
    - (12) assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable indoor or outdoor training area large enough to accommodate the entire group.
3. **Standard.** In accordance with *Space Survival Challenge* and in groups of no more than four, the cadet shall simulate survival in space.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Conduct an in-class activity where cadets choose any five of the following items to survive in space: <ol style="list-style-type: none"> <li>a. a box of matches;</li> <li>b. a compass;</li> <li>c. 2 military water cans (to simulate oxygen tanks);</li> <li>d. 4 two-litre bottles to simulate water;</li> <li>e. 10 metres of nylon rope;</li> <li>f. simulated food boxes;</li> <li>g. a radio;</li> <li>h. a fire blanket; and</li> </ol>	In-class Activity	35 min	C3-111

TP	Description	Method	Time	Ref
	i. a map of the training area.			
TP2	Conduct a group discussion and have the groups explain why they chose their items for survival.	Group Discussion	20 min	

5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 5 min  |
| b. | In-class Activity:       | 35 min |
| c. | Group Discussion:        | 20 min |
| d. | Total:                   | 60 min |

6. **Substantiation**

- An in-class activity was chosen for TP1 as it is an interactive way to reinforce survival in space, provoke thought and stimulate an interest among cadets.
- A group discussion was chosen for TP2 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions, and feelings about survival in space.

7. **References.** C3-111 Lakeland Central School District. (2007). *Space Survival Challenge*. Retrieved 27 February 2007, from <http://www.lakelandschools.org/EDTECH/leslie/space.htm>.

8. **Training Aids.** N/A.

9. **Learning Aids**

- a box of matches;
- a magnetic compass;
- a stellar map of the Moon;
- two military water cans (to simulate oxygen tanks);
- four two-litre bottles to simulate water;
- ten metres of nylon rope;
- simulated food boxes;
- a radio;
- a fire blanket; and
- a map of the training area.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**EO C240.06 – DETERMINE DIRECTION USING CONSTELLATIONS ON A FIELD EXERCISE**

1. **Performance.** Determine Direction Using Constellations on a Field Exercise.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Field setting during night large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall determine direction using constellations on a field exercise.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Determine direction at night using Polaris, to include: <ol style="list-style-type: none"> <li>a. locating Polaris using Cassiopeia and the Big Dipper; and</li> <li>b. determining north using Polaris.</li> </ol>	Demonstration and Performance	25 min	C2-008 (pp. 356–353) C2-041 (pp. 133–134)

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Demonstration and Performance: 25 min
  - c. Total: 30 min
6. **Substantiation.** Demonstration and performance was chosen for this lesson as it allows the instructor to explain and demonstrate determining direction while providing an opportunity for the cadet to practice this skill under supervision.
7. **References**
  - a. C2-008 (ISBN 0-00-265314-7) Wiseman, J. (1999). *The SAS Survival Handbook*. Hammersmith, London: HarperCollins Publishers.
  - b. C2-041 (ISBN 0-07-136110-3) Seidman, D. with Cleveland, P. (2001). *The Essential Wilderness Navigator*. Camden, ME: Ragged Mountain Press.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks.** This lesson is to be conducted at night however the knowledge portion of this lesson can be conducted during daylight hours.

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**SECTION 14****PO 260 – PARTICIPATE IN AERODROME OPERATIONS ACTIVITIES**

1. **Performance.** Participate in Aerodrome Operations Activities.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Any conditions.
3. **Standard.** In accordance with specified references, the cadet will participate in aerodrome operations activities, to include:
  - a. air traffic control; and
  - b. basic aerodrome operations.
4. **Remarks.** N/A.
5. **Complementary Material**
  - a. Complementary material associated with PO 260 is designed to enhance the cadet's knowledge about aerodrome operations:
    - (1) EO C260.01 (Tour an Aerodrome Security Facility);
    - (2) EO C260.02 (Tour an Air Traffic Control [ATC] Tower);
    - (3) EO C260.03 (Participate in a Presentation Given by an Employee of an Aerodrome);
    - (4) EO C260.04 (Perform Marshalling); and
    - (5) EO C260.05 (Tour an Aerodrome).
  - b. Complementary training associated with PO 260 is limited to a total of twelve periods, which may be conducted during sessions or on a supported day. Squadrons are not required to use all twelve periods.

**EO M260.01 – EXPLAIN ASPECTS OF AIR TRAFFIC CONTROL (ATC)**

1. **Performance.** Explain Aspects of Air Traffic Control (ATC).
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall explain aspects of ATC, to include:
  - a. the role of an air traffic controller;
  - b. a basic overview of radar technology used in ATC; and
  - c. NORDO (without radio) procedures at a controlled airport, to include light signals to aircraft on the ground.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain the role of an air traffic controller in an aerodrome, to include: <ol style="list-style-type: none"> <li>a. safety as their first concern;</li> <li>b. directing planes to minimize delays;</li> <li>c. preventing collisions by coordinating movement between:               <ol style="list-style-type: none"> <li>(1) aircraft;</li> <li>(2) aircraft and obstructions; and</li> <li>(3) aircraft and vehicles on the manoeuvring area; and</li> </ol> </li> <li>d. providing authorization for:               <ol style="list-style-type: none"> <li>(1) arrivals and departures of aircraft at an aerodrome; and</li> <li>(2) air traffic through controlled airspaces.</li> </ol> </li> </ol>	Interactive Lecture	10 min	C3-097 C3-116 (p. 110)
TP2	Provide a basic overview of radar technology used in ATC, to include: <ol style="list-style-type: none"> <li>a. explaining that the name “RADAR” is an abbreviation of “radio detection and ranging”; and</li> </ol>	Interactive Lecture	5 min	C3-116 (p. 249)

TP	Description	Method	Time	Ref
	b. the principal uses of radar in aviation, to include: <ul style="list-style-type: none"> <li>(1) ATC;</li> <li>(2) fixing positions of airplanes in flight;</li> <li>(3) detecting thunderstorm activity; and</li> <li>(4) approaching and landing guidance to airplanes.</li> </ul>			
TP3	Explain NORDO (without radio) procedures at a controlled airport, to include the following light signals: <ul style="list-style-type: none"> <li>a. departing aircraft; and</li> <li>b. arriving aircraft.</li> </ul>	Interactive Lecture	10 min	C3-116 (p. 98)

5. **Time**

- a. Introduction/Conclusion: 5 min
- b. Interactive Lecture: 25 min
- c. Total: 30 min

6. **Substantiation.** An interactive lecture was chosen for this lesson to orient the cadets to ATC, give an overview of it, and generate interest.

7. **References**

- a. C3-096 ISSN 1715-7382 Transport Canada. (2006). *Aeronautical Information Manual*. Ottawa, ON: Her Majesty the Queen in Right of Canada.
- b. C3-097 U.S. Department of Labour. (2007). *Air Traffic Controllers*. Retrieved 9 February 2007, from <http://www.bls.gov/oco/ocos108.htm>.
- c. C3-116 A-CR-CCP-263/PT-001/(ISBN 0-9680390-5-7) MacDonald, A. F. and Peppler, I. L. (2000). *From the Ground Up: Millennium Edition*. Ottawa, ON: Aviation Publishers Co. Ltd.

8. **Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area; and
- b. NORDO light signal flash cards.

9. **Learning Aids.** NORDO light signal flash cards.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**EO M260.02 – IDENTIFY ASPECTS OF BASIC AERODROME OPERATIONS**

1. **Performance.** Identify Aspects of Basic Aerodrome Operations.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify aspects of basic aerodrome operations at a civilian aerodrome, to include:
  - a. ground control duties and responsibilities;
  - b. the ground facilities that assist with aircraft arrivals and departures;
  - c. airport security; and
  - d. baggage handling security procedures.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Discuss basic aerodrome operations, to include: <ol style="list-style-type: none"> <li>a. air traffic control;</li> <li>b. ground control; and</li> <li>c. airport maintenance.</li> </ol>	Interactive Lecture	5 min	C3-099
TP2	Explain that the role of ground controllers includes: <ol style="list-style-type: none"> <li>a. providing to the pilot precise taxi information to passenger gates and jetways;</li> <li>b. providing marshalling personnel to assist aircraft when arriving and departing from passenger gates and jetways; and</li> <li>c. providing clearance for aircraft-to-taxi on the ground at the aerodrome.</li> </ol>	Interactive Lecture	5 min	C3-099
TP3	Explain that the following ground facilities and services assist with aircraft arrivals and departures, to include: <ol style="list-style-type: none"> <li>a. runway maintenance;</li> <li>b. runway lighting;</li> <li>c. baggage handling;</li> <li>d. fuel storage systems; and</li> </ol>	Interactive Lecture	5 min	C3-099

TP	Description	Method	Time	Ref
	e. de-icing/anti-icing.			
TP4	<p>Explain what the Canadian Air Transport Security Authority (CATSA) is and outline its duties.</p> <p>a. It is a crown corporation based in the national capital region and it reports to Parliament through the Minister of Transport.</p> <p>b. It works with ground control to protect the public by securing critical elements of the air transportation system as assigned by the government.</p> <p>c. It ensures passengers are aware of packing restrictions.</p> <p>d. Its duties and responsibilities include:</p> <ol style="list-style-type: none"> <li>(1) pre-board screening of passengers and their belongings;</li> <li>(2) the acquisition, deployment, operation and maintenance of explosive detection systems at airports;</li> <li>(3) contracting for RCMP policing services on selected flights and all flights to Reagan National Airport, Washington, DC;</li> <li>(4) the implementation of a restricted area identification card;</li> <li>(5) the screening of non-passengers entering airport restricted areas; and</li> <li>(6) making contributions for supplemental airport policing services.</li> </ol> <p><b>Note:</b> Refer to the CATSA Website for an up-to-date list of packing restrictions for air travellers.</p>	Interactive Lecture	10 min	C3-098

5. **Time**

a. Introduction/Conclusion:	5 min
b. Interactive Lecture:	25 min
c. Total:	30 min

6. **Substantiation.** An interactive lecture was chosen for this lesson to orient the cadets to basic aerodrome operations, to generate interest and to give an overview of it.

7. **References**

- a. C3-098 Canadian Air Transport Security Authority (CATSA). (2007). *Canadian Air Transport Security Authority-Mandate*. Retrieved 19 February 2007, from [http://www.catsa-acsta.gc.ca/english/about\\_propos/](http://www.catsa-acsta.gc.ca/english/about_propos/).
- b. C3-099 Airport Innovation. (2007). *Airport Ground Control Equipment*. Retrieved 21 February 2007, from [http://www.airportinnovation.com/airport\\_ground.php](http://www.airportinnovation.com/airport_ground.php).

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** This lesson is complemented by EO C260.05 (Tour an Aerodrome).

**EO C260.01 – TOUR AN AERODROME SECURITY FACILITY**

1. **Performance.** Tour an Aerodrome Security Facility.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: The squadron Commanding Officer will determine the conditions suitable for this training.
3. **Standard.** The cadet shall tour an aerodrome security facility to gain an awareness of security operations within an aerodrome.
4. **Teaching Points.** The tour guide is asked to explain:
  - a. the function of airport security; and
  - b. baggage handling security procedures.
5. **Time**

a.	Introduction/Conclusion:	10 min
b.	Field Trip:	80 min
c.	Total:	90 min
6. **Substantiation.** A field trip was chosen for this lesson as it will reinforce the cadet's knowledge of material previously taught in EO M260.02 (Identify Aspects of Basic Aerodrome Operations) through participation in a tour.
7. **References.** N/A.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. This field trip can be completed on a supported day or during a complementary session.
  - b. There is no instructional guide for this EO.

## **EO C260.02 – TOUR AN AIR TRAFFIC CONTROL (ATC) TOWER**

1. **Performance.** Tour an Air Traffic Control (ATC) Tower.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: The squadron Commanding Officer will determine the conditions suitable for this training.
3. **Standard.** The cadet shall tour an active CF/civilian ATC tower to gain an awareness of the importance of ATC within aerodrome activities.
4. **Teaching Points.** The tour guide is asked to explain:
  - a. the role of air traffic controller, to include:
    - (1) safety as their first concern;
    - (2) directing planes to minimize delays;
    - (3) preventing collisions by coordinating movement between:
      - (a) aircraft;
      - (b) aircraft and obstructions; and
      - (c) aircraft and vehicles on the manoeuvring area.
    - (4) providing authorization for:
      - (a) arrivals and departures of aircraft at an aerodrome; and
      - (b) air traffic through controlled airspaces;
  - b. a basic overview of radar technology used in air traffic control, to include:
    - (1) explaining that the name radar is an abbreviation of “radio detection and ranging”; and
    - (2) the principal uses of radar in aviation, to include:
      - (a) air traffic control;
      - (b) fixing positions of aircraft in flight;
      - (c) detecting thunderstorm activity; and
      - (d) approaching and landing guidance to aircraft; and
  - c. NORDO (without radio) procedures at a controlled airport, to include the following light signals:
    - (1) aircraft on the ground; and
    - (2) aircraft in the air.



5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 10 min |
| b. | Field Trip:              | 80 min |
| c. | Total:                   | 90 min |

6. **Substantiation.** A field trip was chosen for this lesson to reinforce the cadet's knowledge of material previously taught in EO M260.01 (Explain Aspects of Air Traffic Control [ATC]).

7. **References.** N/A.

8. **Training Aids.** N/A.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks**

- a. This field trip can be completed on a supported day or during a complementary session.
- b. There is no instructional guide for this EO.

**EO C260.03 – PARTICIPATE IN A PRESENTATION GIVEN BY AN EMPLOYEE OF AN AERODROME**

1. **Performance.** Participate in a Presentation Given by an Employee of an Aerodrome.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough for the entire group.
3. **Standard.** The cadet shall participate in a presentation given by an employee of an aerodrome to develop an awareness of the various occupational opportunities within aerodrome operations.
4. **Teaching Points.** The guest speaker is asked to:
  - a. describe their current occupation at the aerodrome, to include:
    - (1) their responsibilities in detail;
    - (2) their working environment; and
    - (3) the training and educational training required;
  - b. describe other occupations at the aerodrome; and
  - c. facilitate a question and answer period.
5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Presentation: 55 min
  - c. Total: 60 min
6. **Substantiation.** An interactive lecture method was chosen for this lesson to review, emphasize and summarize the teaching points.
7. **References.** N/A.
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. Required training aids should be determined by contacting the guest speaker prior to the presentation.
  - b. This EO can be conducted in conjunction with EO C260.05 (Tour an Aerodrome).
  - c. There is no instructional guide for this EO.

**EO C260.04 – PERFORM MARSHALLING**

1. **Performance.** Perform Marshalling.
2. **Conditions**
  - a. Given:
    - (1) Marshalling wands, or lighted hand-held wands;
    - (2) Supervision; and
    - (3) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Darkened work area suitable for practicing marshalling motions.
3. **Standard.** In accordance with specified references and as a member of a group of no more than four, the cadet shall perform marshalling movements, to include:
  - a. stop;
  - b. move ahead;
  - c. move back;
  - d. turn left;
  - e. turn right;
  - f. slow down;
  - g. all clear;
  - h. cut engines; and
  - i. start engines.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Discuss the importance of marshalling at an aerodrome, to include: <ol style="list-style-type: none"> <li>a. why it is used;</li> <li>b. when it is used; and</li> <li>c. where it is used.</li> </ol>	Interactive Lecture	5 min	C0-057 C3-133
TP2	Demonstrate and allow cadets to practice the following marshalling signals: <ol style="list-style-type: none"> <li>a. stop;</li> <li>b. move ahead;</li> <li>c. move back;</li> <li>d. turn left;</li> <li>e. turn right;</li> </ol>	Demonstration and Performance	10 min	C0-057 C3-116 (p. 98) C3-133

TP	Description	Method	Time	Ref
	f. slowdown; g. all clear; h. cut engines; and i. start engines.  <b>Note:</b> Cadets shall be told that in the real environment, marshalling signals are to be executed while positioned forward of the left wing tip and within view of the pilot.			
TP3	Allow cadets to practice the different marshalling signals, through: a. role-playing; or b. playing Simon Says.	Game	10 min	

#### 5. Time

a.	Introduction/Conclusion:	5 min
b.	Interactive Lecture:	5 min
c.	Demonstration and Performance:	10 min
d.	Game:	10 min
e.	Total:	30 min

#### 6. Substantiation

- An interactive lecture was chosen for TP1 to present basic material, to orient the cadets to marshalling and to generate interest.
- Demonstration and performance was chosen for TP2 as it allows the instructor to explain and demonstrate the marshalling skills the cadet is expected to acquire while providing an opportunity for the cadets to practice marshalling under supervision.
- A game was chosen for TP3 as it is a fun and challenging way to practice the marshalling skills taught during the lesson and confirm the cadets' knowledge of the material.

#### 7. References

- C0-057 Marshalling Signals. (2006). *Aeronautical Information Manual*. Retrieved 26 September 2006, from <http://www.tc.gc.ca/CivilAviation/publications/tp1437/AIR/1-1.htm#1-8>.
- C3-116 A-CR-CCP-263/PT-001 (ISBN 0-9680390-5-7) MacDonald, A. F. and Peppler, I. L. (2000). *From the Ground Up: Millennium Edition*. Ottawa, ON: Aviation Publishers Co. Ltd.

#### 8. Training Aids

- Flash cards; and
- Marshalling wands, or lighted hand-held wands.

9. **Learning Aids**
  - a. Flash cards; and
  - b. Marshalling wands, or lighted hand-held wands.
10. **Test Details.** N/A.
11. **Remarks.** Darkened work areas may include the outdoors at night or a darkened classroom during the day.

## EO C260.05 – TOUR AN AERODROME

1. **Performance.** Tour an Aerodrome.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: The squadron Commanding Officer will determine the conditions suitable for this training.
3. **Standard.** The cadet shall tour an active CF/civilian aerodrome in order to develop an appreciation for the aerodrome operations.
4. **Teaching Points.** The tour guide is asked to identify and give a brief explanation of:
  - a. the air traffic control facility;
  - b. baggage handling procedures on and off the aircraft;
  - c. airport security;
  - d. the ground facilities that assist with aircraft arrivals and departures; and
  - e. ground control procedures.
5. **Time**
  - a. Introduction/Conclusion: 10 min
  - b. Field Trip: 80 min
  - c. Total: 90 min
6. **Substantiation.** A field trip was chosen for this lesson as it will reinforce the cadets' knowledge of material previously taught in EO M260.02 (Identify Aspects of Basic Aerodrome Operations).
7. **References.** N/A.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. This field trip can be completed on a supported day or during a complementary session.
  - b. There is no instructional guide for this EO.

**SECTION 15****PO 270A – DISCUSS AIRCRAFT MANUFACTURING AND MAINTENANCE**

1. **Performance.** Discuss Aircraft Manufacturing and Maintenance.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Any conditions.
3. **Standard.** In accordance with specified references, the cadet shall discuss aircraft manufacturing and maintenance and education and employment opportunities in the industry.
4. **Remarks.** N/A.
5. **Complementary Material**
  - a. Complementary material associated with PO 270 is designed to enhance the cadet's knowledge of aircraft manufacturing and maintenance:
    - (1) EO C270.01 (Participate in a Presentation Given by an Employee in the Aircraft Manufacturing or Maintenance Industry).
    - (2) EO C270.02 (Identify Canadian Aviation Maintenance Council [CAMC] Interactive Multimedia Learning Tool (IMLT) Activities).
    - (3) EO C270.03 (Tour an Aircraft Manufacturing or Maintenance Facility).
    - (4) EO C270.04 (Watch *World's Biggest Airliner: The Airbus A380 – Coming Together*).
  - b. Complementary training associated with PO 270 is limited to a total of eight periods, which may be conducted during sessions or on a supported day. Squadrons are not required to use all eight periods.

**EO M270.01 – IDENTIFY ASPECTS OF AIRCRAFT MANUFACTURING**

1. **Performance.** Identify Aspects of Aircraft Manufacturing.
2. **Conditions**
  - a. Given:
    - (1) Career information cards;
    - (2) Supervision; and
    - (3) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify aspects of aircraft manufacturing, to include:
  - a. aircraft systems;
  - b. the materials used in aircraft manufacturing; and
  - c. careers within the aircraft manufacturing industry.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Identify aircraft systems, to include: <ol style="list-style-type: none"> <li>a. aircraft instrument systems;</li> <li>b. airframe electrical systems;</li> <li>c. hydraulic and pneumatic power systems;</li> <li>d. aircraft landing gear systems; and</li> <li>e. aircraft fuel systems.</li> </ol>	Interactive Lecture	15 min	C3-108 (p. 7-1, p. 8-1, p. 9-1, p. 11-1, p. 12-1, p. 15-1)
TP2	Identify the following materials used in aircraft manufacturing: <ol style="list-style-type: none"> <li>a. non-ferrous metals, to include:               <ol style="list-style-type: none"> <li>(1) aluminum and its alloys;</li> <li>(2) titanium;</li> <li>(3) nickel; and</li> <li>(4) cooper; and</li> </ol> </li> <li>b. composite fibres, to include:               <ol style="list-style-type: none"> <li>(1) graphite;</li> <li>(2) kevlar; and</li> <li>(3) fibreglass.</li> </ol> </li> </ol>	Interactive Lecture	15 min	C3-108 (p. 7-1)



TP	Description	Method	Time	Ref
TP3	Discuss careers within the aircraft manufacturing industry, to include: a. aircraft interior technician; b. aircraft maintenance engineer category "E" (avionics); c. aircraft maintenance engineer category "M" (maintenance); d. aircraft maintenance engineer category "S" (structures); e. aircraft mechanical component technician; and f. aircraft gas turbine technician.	Group Discussion	20 min	C3-107 C3-109

#### 5. Time

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 10 min |
| b. | Interactive Lecture:     | 30 min |
| c. | Group Discussion:        | 20 min |
| d. | Total:                   | 60 min |

#### 6. Substantiation

- An interactive lecture was chosen for TP1 and TP2 to introduce aircraft manufacturing and generate interest.
- A group discussion method was chosen for TP3 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions, and feelings about aircraft manufacturing.

#### 7. References

- C3-107 British Columbia Institute of Technology. (2007). *Programs and Courses*. Retrieved 8 February 2007, from <http://www.bcit.ca/study/programs/>.
- C3-108 (ISBN 0 88487 203 3) Jeppesen Sanderson Training Products. (2000). *A&P Technician: General*. Englewood, CO: Jeppesen Sanderson Inc.
- C3-109 (ISBN 1 894777 00 X) Canadian Aviation Maintenance Council (CAMC). (2002). *Aviation Maintenance Orientation Program*. Ottawa, ON: CAMC.

#### 8. Training Aids

- Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area; and
- Career information sheets.

#### 9. Learning Aids. Career information sheets.

#### 10. Test Details. N/A.

#### 11. Remarks. N/A.

**EO M270.02 – IDENTIFY REQUIREMENTS FOR AIRCRAFT MAINTENANCE**

1. **Performance.** Identify Requirements for Aircraft Maintenance.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom or training facility large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify requirements for aircraft maintenance, to include:
  - a. maintaining aircraft systems; and
  - b. aircraft system maintenance, repair and overhaul employers.
4. **Teaching Points**

<b>TP</b>	<b>Description</b>	<b>Method</b>	<b>Time</b>	<b>Ref</b>
TP1	Introduce aircraft maintenance, overhaul and repair, to include: <ol style="list-style-type: none"> <li>a. aircraft instrument systems;</li> <li>b. airframe electrical systems;</li> <li>c. hydraulic and pneumatic power systems;</li> <li>d. aircraft landing gear systems; and</li> <li>e. aircraft fuel systems.</li> </ol>	Interactive Lecture	10 min	C3-109
TP2	Discuss the maintenance of aircraft instruments, to include: <ol style="list-style-type: none"> <li>a. the altimeter;</li> <li>b. the air speed indicator;</li> <li>c. the gyroscope;</li> <li>d. the heading indicator;</li> <li>e. the attitude indicator;</li> <li>f. the vertical speed indicator; and</li> <li>g. the radar altimeter.</li> </ol>	Interactive Lecture	20 min	C3-116 (pp. 39–50)
TP3	Discuss landing gear maintenance, to include: <ol style="list-style-type: none"> <li>a. fixed undercarriage;</li> <li>b. retractable gear;</li> <li>c. nose wheel; and</li> <li>d. tail wheel.</li> </ol>	Interactive Lecture	20 min	C3-116 (pp. 12–14)

**5. Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 10 min |
| b. | Interactive Lecture:     | 50 min |
| c. | Total:                   | 60 min |

6. **Substantiation.** An interactive lecture was chosen for this lesson to orient the cadets to aircraft maintenance, generate an interest and present basic material.

**7. References**

- a. C3-109 (ISBN 1-894777-00-X) Canadian Aviation Maintenance Council (CAMC). (2002). *Aviation Maintenance Orientation Program*. Ottawa, ON: CAMC.
- b. C3-116 A-CR-CCP-263/PT-001 (ISBN 0-9680390-5-7) MacDonald, A. F. and Pepler, I. L. (2000). *From the Ground Up: Millennium Edition*. Ottawa, ON: Aviation Publishers Co. Ltd.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

## EO M270.03 – DISCUSS EDUCATION AND EMPLOYMENT OPPORTUNITIES IN AIRCRAFT MANUFACTURING AND MAINTENANCE

1. **Performance.** Discuss Education and Employment Opportunities in Aircraft Manufacturing and Maintenance.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with with the specified references, the cadet shall discuss education and employment opportunities in the aircraft manufacturing and maintenance industry, to include:
  - a. employers in Canada;
  - b. career options; and
  - c. education and training institutions in Canada.

### 4. Teaching Points

TP	Description	Method	Time	Ref
TP1	Conduct an in-class activity where cadets are introduced to the aircraft manufacturing and maintenance industry, to include: <ol style="list-style-type: none"> <li>a. employers in Canada;</li> <li>b. careers options; and</li> <li>c. education and training institutions.</li> </ol>	In-class Activity	50 min	C3-101 C3-102

5. **Time**
  - a. Introduction/Conclusion: 10 min
  - b. In-class Activity: 50 min
  - c. Total: 60 min
6. **Substantiation.** An in-class activity was chosen for this lesson as it is an interactive way to present education and employment opportunities in the aircraft manufacturing and maintenance industry and to stimulate an interest among cadets.
7. **References**
  - a. C3-101 Canadian Aviation Maintenance Council. (2006). *Careers in Aviation and Aerospace*. Ottawa, ON: Government of Canada's Sector Council Program.
  - b. C3-102 Canadian Aviation Maintenance Council. (2007). Index of Corporate Profiles. Retrieved 23 February 2007, from <http://www.camc.ca/en/CorporateProfiles/>.

8. **Training Aids**
  - a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area; and
  - b. Career reference sheets.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks.** N/A.

**EO C270.01 – PARTICIPATE IN A PRESENTATION GIVEN BY AN EMPLOYEE IN THE AIRCRAFT MANUFACTURING OR MAINTENANCE INDUSTRY**

1. **Performance.** Participate in a Presentation Given by an Employee in the Aircraft Manufacturing or Maintenance Industry.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough for the entire group.
3. **Standard.** The cadet shall participate in a presentation given by an employee in the aircraft manufacturing or maintenance industry to gain an awareness of the various occupational opportunities.
4. **Teaching Points.** The guest speaker is asked to:
  - a. familiarize the cadets with the occupational opportunities within the aircraft manufacturing and maintenance industry, to include:
    - (1) identifying the various occupations;
    - (2) explaining the duties and responsibilities of the various occupations; and
    - (3) identifying educational institutions that provide training for the various occupations; and
  - b. facilitate a question and answer period.
5. **Time**
  - a. Introduction/Conclusion: 10 min
  - b. Presentation: 50 min
  - c. Total: 60 min
6. **Substantiation.** An interactive lecture was chosen for this lesson to review, emphasize and summarize the teaching points.
7. **References.** N/A.
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. Required training aids should be determined by contacting the guest speaker prior to the presentation.
  - b. If the instructor cannot complete all teaching points in 4a for the various occupations, they can focus on their own occupation to complete the lesson.

- c. There is no instructional guide for this EO.

**EO C270.02 – IDENTIFY CANADIAN AVIATION MAINTENANCE COUNCIL (CAMC) INTERACTIVE MULTIMEDIA LEARNING TOOL (IMLT) ACTIVITIES**

1. **Performance.** Identify Canadian Aviation Maintenance Council (CAMC) Interactive Multimedia Learning Tool (IMLT) Activities.
2. **Conditions**
  - a. Given:
    - (1) PowerPoint presentation/handouts;
    - (2) CAMC IMLT log-on;
    - (3) Supervision; and
    - (4) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: The squadron Commanding Officer will determine the conditions suitable for this training.
3. **Standard.** In accordance with *CAMC Interactive Multimedia Learning Tool*, the cadet shall identify online interactive activities, to include:
  - a. aircraft; and
  - b. aircraft components.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain the following: <ol style="list-style-type: none"> <li>a. what is CAMC;</li> <li>b. what is Aviation Maintenance Orientation Program (AMOP); and</li> <li>c. what is IMLT.</li> </ol>	Interactive Lecture	10 min	C3-115
TP2	Explain the IMLT modules, to include: <ol style="list-style-type: none"> <li>a. Module 1 – Theory of Flight;</li> <li>b. Module 2 – Power Plants; and</li> <li>c. Module 3 – Aircraft Structures.</li> </ol>	Interactive Lecture	15 min	C3-115

5. **Time**

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 5 min  |
| b. Interactive Lecture:     | 25 min |
| c. Total:                   | 30 min |

6. **Substantiation.** An interactive lecture method was chosen for this lesson to review, clarify, emphasize and summarize the teaching points. An on-line visit to the IMLT will provide an overview of and promote interest in CAMC activities.



7. **References.** C3-115 Canadian Aviation Maintenance Council (CAMC). (2007). *CAMC Interactive Multimedia Learning Tool (IMLT)*. Retrieved 6 March 2007, from <http://3da.com/imlt/>.
8. **Training Aids**
  - a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area; and
  - b. PowerPoint presentation/handout.
9. **Learning Aids.** PowerPoint presentation/handout.
10. **Test Details.** N/A.
11. **Remarks**
  - a. Contact your Area Cadet Officer (ACO) to receive a log-on user ID and password.
  - b. Current instructions for exploring the IMLT are provided at <http://3da.com/imlt/>.
  - c. Before proceeding with this lesson, the instructor must become familiar with the procedures involved. The following procedures are to be researched in advance:
    - (1) accessing the internet;
    - (2) logging onto the CAMC IMLT; and
    - (3) operating the IMLT.

**EO C270.03 – TOUR AN AIRCRAFT MANUFACTURING OR MAINTENANCE FACILITY**

1. **Performance.** Tour an Aircraft Manufacturing or Maintenance Facility.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: The squadron Commanding Officer will determine the conditions suitable for this training.
3. **Standard.** The cadet shall tour an aircraft manufacturing or maintenance facility, to identify aspects of:
  - a. aircraft manufacturing systems;
  - b. aircraft systems maintenance; and
  - c. materials used in manufacturing.
4. **Teaching Points.** The tour guide is asked to explain:
  - a. aircraft manufacturing systems;
  - b. avionics;
  - c. aircraft systems maintenance; and
  - d. materials used in manufacturing.
5. **Time**
  - a. Introduction/Conclusion: 10 min
  - b. Field Trip: 80 min
  - c. Total: 90 min
6. **Substantiation.** A field trip was chosen for this lesson as it will reinforce the cadet's knowledge of material previously taught in EO M270.01 (Identify Aspects of Aircraft Manufacturing), EO M270.02 (Identify Requirements for Aircraft Maintenance) and EO M270.03 (Discuss Education and Employment Opportunities in Aircraft Manufacturing and Maintenance) through participation in a tour.
7. **References.** N/A.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. This field trip can be completed on a supported day or during a complementary session.
  - b. There is no instructional guide for this EO.

**EO C270.04 – WATCH WORLD’S BIGGEST AIRLINER: THE AIRBUS A380 – COMING TOGETHER**

1. **Performance.** Watch *World’s Biggest Airliner: The Airbus A380 – Coming Together*.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom or training facility large enough to accommodate the entire group.
3. **Standard.** In accordance with *World’s Biggest Airliner: The Airbus A380 – Coming Together*, the cadet shall watch the *World’s Biggest Airliner: The Airbus A380 – Coming Together*, to stimulate an interest in the aircraft manufacturing industry.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Watch and discuss the <i>World’s Biggest Airliner: The Airbus A380 – Coming Together</i> DVD, to include: <ol style="list-style-type: none"> <li>a. what is involved in manufacturing an aircraft; and</li> <li>b. what occupations contribute to the manufacturing of an aircraft.</li> </ol>	In-class Activity	45 min	C3-105
TP2	Conduct a group discussion on The Airbus A380.	Group Discussion	10 min	

5. **Time**

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 5 min  |
| b. In-class Activity:       | 45 min |
| c. Group Discussion:        | 10 min |
| d. Total:                   | 60 min |

6. **Substantiation**

- a. An in-class activity was chosen for TP1 as it is an interactive way to provoke thought and stimulate interest among cadets.
  - b. A group discussion was chosen for TP2 as it allows the cadet to interact with their peers and share their knowledge, experience, opinions and feelings about the topic.
7. **References.** C3-105 Brisley, T. Pascaud, S. (Executive Producer), and Bowie, B. (Writer/Director), (2003). *World’s Biggest Airliner: The Airbus A380* [Motion Picture]. United States: The Learning Channel.

8. **Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- b. *World's Biggest Airliner: The Airbus A380 – Coming Together* DVD;
- c. TV; and
- d. DVD player.

9. **Learning Aids.** Handout for each cadet.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**PO 270B – PARTICIPATE IN A DISCUSSION ON AIRCRAFT MANUFACTURING AND MAINTENANCE**

1. **Performance.** Participate in a Discussion on Aircraft Manufacturing and Maintenance.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Any conditions.
3. **Standard.** In accordance with specified references, the cadet will participate in a discussion on aircraft manufacturing and maintenance and employment opportunities in the industry.
4. **Remarks.** N/A.
5. **Complementary Material**
  - a. Complementary material associated with PO 270 is designed to enhance the cadet's knowledge of aircraft manufacturing and maintenance:
    - (1) EO C270.01 (Participate in a Presentation Given by an Employee in the Aircraft Manufacturing or Maintenance Industry).
    - (2) EO C270.02 (Identify Canadian Aviation Maintenance Council [CAMC] Interactive Multimedia Learning Tool (IMLT) Activities).
    - (3) EO C270.03 (Participate in a Tour of an Aircraft manufacturing or Maintenance Facility).
    - (4) EO C270.04 (Participate in a Discussion on Aircraft Assembly).
  - b. Complementary training associated with PO 270 is limited to a total of 8 periods, which may be conducted during sessions or on a supported day. Squadrons are not required to use all 8 periods.

**EO M270.01 – PARTICIPATE IN A DISCUSSION ON AIRCRAFT MANUFACTURING**

1. **Performance.** Participate in a Discussion on Aircraft Manufacturing.
2. **Conditions**
  - a. Given:
    - (1) Career information cards;
    - (2) Supervision; and
    - (3) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall participate in a discussion on aircraft manufacturing, to include:
  - a. aircraft manufacturing systems;
  - b. the materials used in aircraft manufacturing; and
  - c. careers within the aircraft manufacturing industry.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Identify aircraft manufacturing systems, to include: <ol style="list-style-type: none"> <li>a. aircraft instrument systems;</li> <li>b. airframe electrical systems;</li> <li>c. hydraulic and pneumatic power systems;</li> <li>d. aircraft landing gear systems; and</li> <li>e. aircraft fuel systems.</li> </ol>	In-class Activity	15 min	C3-108 (p. 7-1, p. 8-1, p. 9-1, p. 11-1, p. 12-1, p. 15-1)
TP2	Identify the following materials used in aircraft manufacturing: <ol style="list-style-type: none"> <li>a. metals, to include:               <ol style="list-style-type: none"> <li>(1) aluminum;</li> <li>(2) titanium;</li> <li>(3) inconel;</li> <li>(4) silver; and</li> <li>(5) nickel; and</li> </ol> </li> <li>b. composites, to include:               <ol style="list-style-type: none"> <li>(1) graphite;</li> <li>(2) kevlar; and</li> <li>(3) fibreglass.</li> </ol> </li> </ol>	In-class Activity	15 min	C3-108 (p. 7-1)

TP	Description	Method	Time	Ref
TP3	Discuss careers within the aircraft manufacturing industry, to include: a. aircraft structures manufacturing technician; b. aircraft maintenance engineer category "E" (avionics); c. aircraft maintenance engineer category "M" (maintenance); d. aircraft maintenance engineer category "S" (structures); e. aircraft mechanical component technician; and f. aircraft gas turbine technician.	Group Discussion	20 min	C3-107 C3-109

#### 5. Time

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 10 min |
| b. | In-class Activity:       | 30 min |
| c. | Group Discussion:        | 20 min |
| d. | Total:                   | 60 min |

#### 6. Substantiation

- An in-class activity was chosen for TP1 and TP2 to introduce aircraft manufacturing and generate interest.
- A group discussion method was chosen for TP3 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions, and feelings about aircraft manufacturing.

#### 7. References

- C3-107 British Columbia Institute of Technology. (2007). *Programs and Courses*. Retrieved 8 February 2007, from <http://www.bcit.ca/study/programs/>.
- C3-108 (ISBN 0 88487 203 3) Jeppesen Sanderson Training Products. (2000). *A&P Technician: General*. Englewood, CO: Jeppesen Sanderson Inc.
- C3-109 (ISBN 1 894777 00 X) Canadian Aviation Maintenance Council (CAMC). (2002). *Aviation Maintenance Orientation Program*. Ottawa, ON: CAMC.

#### 8. Training Aids

- Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area; and
- Career information cards.

#### 9. Learning Aids

- Aircraft manufacturing systems matching cards;
- Photos of metal information cards; and
- Career information cards.

10. **Test Details.** N/A.
11. **Remarks.** N/A.



**EO M270.02 – PARTICIPATE IN A DISCUSSION ON AIRCRAFT MAINTENANCE**

1. **Performance.** Participate in a Discussion on Aircraft Maintenance.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom or training facility large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall participate in a discussion on aircraft maintenance, to include:
  - a. maintaining aircraft systems; and
  - b. aircraft system maintenance, repair and overhaul employers.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Introduce aircraft maintenance, overhaul and repair, to include: <ol style="list-style-type: none"> <li>a. aircraft instrument systems;</li> <li>b. airframe electrical systems;</li> <li>c. hydraulic and pneumatic power systems;</li> <li>d. aircraft landing gear systems; and</li> <li>e. aircraft fuel systems.</li> </ol>	Interactive Lecture	10 min	C3-109
TP2	Discuss the maintenance of aircraft instruments, to include: <ol style="list-style-type: none"> <li>a. the altimeter;</li> <li>b. the air speed indicator;</li> <li>c. the heading indicator;</li> <li>d. the gyroscope;</li> <li>e. the attitude indicator;</li> <li>f. the vertical speed indicator; and</li> <li>g. the radar altimeter.</li> </ol>	Interactive Lecture	20 min	C3-116 (pp. 39–50)
TP3	Discuss the maintenance of the landing gear, to include: <ol style="list-style-type: none"> <li>a. fixed undercarriage;</li> <li>b. retractable gear;</li> <li>c. nose wheel; and</li> </ol>	Interactive Lecture	20 min	C3-116 (pp. 12–14)

TP	Description	Method	Time	Ref
	d. tail wheel.			

5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 10 min |
| b. | Interactive Lecture:     | 50 min |
| c. | Total:                   | 60 min |

6. **Substantiation.** An interactive lecture was chosen for this lesson to orient the cadets to aircraft maintenance, generate an interest and present basic material.

7. **References**

- a. C3-109 (ISBN 1 894777 00 X) Canadian Aviation Maintenance Council (CAMC). (2002). *Aviation Maintenance Orientation Program*. Ottawa, ON: CAMC.
- b. C3-116 A-CR-CCP-263/PT-001/(ISBN 0-9680390-5-7) MacDonald, A. F. and Peppler, I. L. (2000). *From the Ground Up*. Ottawa, ON: Aviation Publishers Co. Ltd.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

## EO M270.03 – PARTICIPATE IN A DISCUSSION ON EDUCATION AND EMPLOYMENT OPPORTUNITIES IN AIRCRAFT MANUFACTURING AND MAINTENANCE

1. **Performance.** Participate in a Discussion on Education and Employment Opportunities in Aircraft Manufacturing and Maintenance.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** In accordance with with the specified references, the cadet shall participate in a discussion on education and employment opportunities in the aircraft manufacturing and maintenance industry, to include:
  - a. employers in Canada;
  - b. career options; and
  - c. education and training institutions in Canada.

### 4. Teaching Points

TP	Description	Method	Time	Ref
TP1	Conduct an in-class activity where cadets are introduced to the aircraft manufacturing and maintenance industry, to include: <ol style="list-style-type: none"> <li>a. employers in Canada;</li> <li>b. careers options; and</li> <li>c. education and training institutions.</li> </ol>	In-class Activity	50 min	C3-101 C3-102

5. **Time**
  - a. Introduction/Conclusion: 10 min
  - b. In-class Activity: 50 min
  - c. Total: 60 min
6. **Substantiation.** An in-class activity was chosen for this lesson as it is an interactive way to present education and employment opportunities in the aircraft manufacturing and maintenance industry and stimulate an interest among cadets.
7. **References**
  - a. C3-101 Canadian Aviation Maintenance Council. (2006). *Careers in Aviation and Aerospace*. Ottawa, ON: Government of Canada's Sector Council Program.

- b. C3-102 Canadian Aviation Maintenance Council. (2007). Index of corporate profiles. Retrieved 23 February 2007, from <http://www.camc.ca/en/CorporateProfiles/>.

8. **Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- b. Career reference sheets.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

## **EO C270.01 – PARTICIPATE IN A PRESENTATION GIVEN BY AN EMPLOYEE IN THE AIRCRAFT MANUFACTURING OR MAINTENANCE INDUSTRY**

1. **Performance.** Participate in a Presentation Given by an Employee in the Aircraft Manufacturing or Maintenance Industry.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough for the entire group.
3. **Standard.** The cadet shall participate in a presentation given by an employee in the aircraft manufacturing or maintenance industry to gain an awareness of the various occupational opportunities.
4. **Teaching Points.** The guest speaker is asked to:
  - a. familiarize the cadets with the occupational opportunities within the aircraft manufacturing and maintenance industry, to include:
    - (1) identifying the various occupations;
    - (2) explaining the duties and responsibilities of the various occupations; and
    - (3) identifying educational institutions that provide training for the various occupations; and
  - b. facilitate a question and answer period.
5. **Time**

a. Introduction/Conclusion:	10 min
b. Presentation:	50 min
c. Total:	60 min
6. **Substantiation.** An interactive lecture was chosen for this lesson to review, emphasize and summarize the teaching points.
7. **References.** N/A.
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. Required training aids should be determined by contacting the guest speaker prior to the presentation.
  - b. If the instructor cannot complete all teaching points in 4a for the various occupations, they can focus on their own occupation to complete the lesson.

- c. There is no instructional guide for this EO.

## EO C270.02 – IDENTIFY CANADIAN AVIATION MAINTENANCE COUNCIL (CAMC) INTERACTIVE MULTIMEDIA LEARNING TOOL (IMLT) ACTIVITIES

1. **Performance.** Identify Canadian Aviation Maintenance Council (CAMC) Interactive Multimedia Learning Tool (IMLT) Activities.
2. **Conditions**
  - a. Given:
    - (1) PowerPoint presentation/handouts;
    - (2) CAMC IMLT log-on;
    - (3) Supervision; and
    - (4) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: The squadron Commanding Officer will determine the conditions suitable for this training.
3. **Standard.** In accordance with *CAMC Interactive Multimedia Learning Tool*, the cadet shall identify online interactive activities, to include:
  - a. aircraft; and
  - b. aircraft components.

### 4. Teaching Points

TP	Description	Method	Time	Ref
TP1	Explain the following: <ol style="list-style-type: none"> <li>a. what is CAMC;</li> <li>b. what is Aviation Maintenance Orientation Program (AMOP); and</li> <li>c. what is IMLT.</li> </ol>	Interactive Lecture	10 min	C3-115
TP2	Introduce the following: <ol style="list-style-type: none"> <li>a. Module 1 – Theory of Flight;</li> <li>b. Module 2 – Power Plants; and</li> <li>c. Module 3 – Aircraft Structures.</li> </ol>	Interactive Lecture	15 min	C3-115

### 5. Time

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 5 min  |
| b. Interactive Lecture:     | 25 min |
| c. Total:                   | 30 min |

6. **Substantiation.** An interactive lecture method was chosen for this lesson to review, clarify, emphasize and summarize the teaching points. An on-line visit to the IMLT will provide an overview of and promote interest in CAMC activities.

7. **References.** C3-115 Canadian Aviation Maintenance Council (CAMC). (2007). *CAMC interactive Multimedia Learning Tool (IMLT)*. Retrieved 6 March 2007, from <http://3da.com/imlt/>.
8. **Training Aids**
  - a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area; and
  - b. PowerPoint presentation/handout.
9. **Learning Aids.** PowerPoint presentation/handout.
10. **Test Details.** N/A.
11. **Remarks**
  - a. Squadron staff will be provided the CAMC user ID and password for the application from the Air Cadet League.
  - b. Current instructions for exploring the IMLT are provided at <http://3da.com/imlt/>.
  - c. Before proceeding with this lesson, the instructor must become familiar with the procedures involved. The following procedures are to be researched in advance:
    - (1) accessing the internet;
    - (2) logging onto the CAMC IMLT; and
    - (3) operating the IMLT.



## EO C270.03 – PARTICIPATE IN A TOUR OF AN AIRCRAFT MANUFACTURING OR MAINTENANCE FACILITY

1. **Performance.** Participate in a Tour of an Aircraft Manufacturing or Maintenance Facility.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: The squadron Commanding Officer will determine the conditions suitable for this training.
3. **Standard.** The cadet shall participate in a tour of an aircraft manufacturing or maintenance facility, to identify aspects of:
  - a. aircraft manufacturing systems;
  - b. aircraft systems maintenance; and
  - c. materials used in manufacturing.
4. **Teaching Points.** The tour guide is asked to explain:
  - a. aircraft manufacturing systems;
  - b. avionics;
  - c. aircraft systems maintenance; and
  - d. materials used in manufacturing.
5. **Time**

a.	Introduction/Conclusion:	10 min
b.	Field Trip:	80 min
c.	Total:	90 min
6. **Substantiation.** A field trip was chosen for this lesson as it will reinforce the cadet's knowledge of material previously taught in EO M270.01 (Participate in a Discussion on Aircraft Manufacturing), EO M270.02 (Participate in a Discussion on Aircraft Maintenance) and EO M270.03 (Participate in a Discussion on Education and Employment Opportunities in Aircraft Manufacturing and Maintenance) through participation in a tour.
7. **References.** N/A.
8. **Training Aids.** N/A.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.

11. **Remarks**

- a. This field trip can be completed on a supported day or during a complementary session.
- b. There is no instructional guide for this EO.

**EO C270.04 – PARTICIPATE IN A DISCUSSION ON AIRCRAFT ASSEMBLY**

1. **Performance.** Participate in a Discussion on Aircraft Assembly.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom or training facility large enough to accommodate the entire group.
3. **Standard.** In accordance with *World's Biggest Airliner: The Airbus A380 – Coming Together*, the cadet shall participate in a discussion on aircraft assembly and watch the *World's Biggest Airliner: The Airbus A380 – Coming Together*, to stimulate an interest in the aircraft manufacturing industry.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Watch and discuss the <i>World's Biggest Airliner: The Airbus A380 – Coming Together</i> DVD, to include: <ol style="list-style-type: none"> <li>a. what is involved in manufacturing an aircraft; and</li> <li>b. what occupations contribute to the manufacturing of an aircraft.</li> </ol>	In-class Activity	50 min	C3-105

5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 10 min |
| b. | In-class Activity:       | 50 min |
| c. | Total:                   | 60 min |

6. **Substantiation.** An in-class activity was chosen for this lesson as it is an interactive way to provoke thought and stimulate interest among cadets.

7. **References.** C3-105 *World's Biggest Airliner: The Airbus A380 – Coming Together*.

8. **Training Aids**

- a. Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/training area;
- b. *World's Biggest Airliner: The Airbus A380 – Coming Together* DVD;
- c. TV; and
- d. DVD player.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**SECTION 16**  
**PO 290 – PARTICIPATE IN A FIELD EXERCISE**

1. **Performance.** Participate in a Field Exercise.
2. **Conditions**
  - a. Given:
    - (1) Personal equipment;
    - (2) Backpack;
    - (3) Sleeping bag;
    - (4) Matches;
    - (5) Firewood/kindling/tinder;
    - (6) Fire extinguisher;
    - (7) Water;
    - (8) Shovel;
    - (9) Supervision; and
    - (10) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable outdoor training area large enough to accommodate the entire group with a Fire Service rating for lighting fires.
3. **Standard.** In accordance with specified references, the cadet will participate in a field exercise by:
  - a. constructing, lighting, maintaining and extinguishing a signal fire;
  - b. constructing a lean-to-style shelter;
  - c. constructing a simple snare;
  - d. constructing ground-to-air signals;
  - e. participating in a discussion on proper hiking techniques; and
  - f. operating a hand-held radio.
4. **Remarks.** Proficiency Level Two cadets are expected to take part in a minimum of one overnight aircrew survival exercise during the training year:
  - a. Activities during the exercise shall be structured to be group oriented.
  - b. PO 290 will be conducted as a supported weekend.

**5. Complementary Material**

- a. Complementary material associated with PO 290 is designed to enhance the cadet's aircrew survival skills:
  - (1) EO C190.01 (Participate in a Presentation Given by a Member of a Survival Organization);
  - (2) EO C290.02 (Participate in a Discussion on Skinning and Cooking a Small Animal);
  - (3) EO C290.03 (Construct a Snow Cave);
  - (4) EO C290.04 (Collect Drinking Water Using a Solar Still); and
  - (5) EO C290.05 (Participate in a Hike).
- b. Complementary training associated with PO 290 is limited to a total of 14 periods, which shall be conducted on a supported day. Squadrons are not required to use all 14 periods.

**EO M290.01 – CONSTRUCT, LIGHT, MAINTAIN AND EXTINGUISH A SIGNAL FIRE**

1. **Performance.** Construct, Light, Maintain and Extinguish a Signal Fire.
2. **Conditions**
  - a. Given:
    - (1) String;
    - (2) Matches;
    - (3) Wood/kindling/tinder;
    - (4) Water;
    - (5) Fire extinguishing equipment;
    - (6) Shovel;
    - (7) Supervision; and
    - (8) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Field setting large enough to accommodate the entire group and signal fire construction with a low to moderate rating under the Canadian Forest Fire Danger Rating System (CFFDRS).
3. **Standard.** In accordance with specified references and as a member of a group of no more than 15, the cadet shall construct, light, maintain, and extinguish a signal fire by:
  - a. selecting an appropriate site;
  - b. constructing a signal fire;
  - c. lighting the signal fire;
  - d. maintaining the signal fire for five minutes; and
  - e. extinguishing the signal fire.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Determine types of emergency signal fires that will attract rescue aircraft, to include: <ol style="list-style-type: none"> <li>a. a three fire triangle pattern;</li> <li>b. a torch tree; and</li> <li>c. a luminous cone fire.</li> </ol>	Interactive Lecture	5 min	C3-002 (pp. 504–507)
TP2	Identify a location to be seen from the air, to include: <ol style="list-style-type: none"> <li>a. elevated ground;</li> <li>b. highly visible; and</li> </ol>	Interactive Lecture	5 min	C2-016 (p. 240) C3-118

TP	Description	Method	Time	Ref
	c. a fuel source.			
TP3	Demonstrate and have cadets construct a luminous cone signal fire by: a. select and prepare combustible materials, such as: (1) tinder; (2) kindling; and (3) fuel; and b. construct a luminous cone signal fire in groups of no more than 15 and allow for sufficient ventilation.	Demonstration and Performance	20 min	C2-042 (pp. 194–195)
TP4	Explain, demonstrate, and have the cadets practice lighting, maintaining, and extinguishing one signal fire, to include: a. lighting a fire with a match; b. maintaining a fire, to include: (1) applying an appropriate amount of fuel; (2) ensuring an appropriate amount of ventilation; and (3) ensuring the fire is contained to a controllable size; and c. extinguishing a fire, by: (1) ensuring that all sparks have been put out thoroughly by smothering the fire with wet earth, sand and/or water; and (2) filling the fire pit with wet earth or sand.  <b>Note:</b> Fire safety equipment must be on hand during this activity. Additional supervision is required during the lighting of the signal fire.	Demonstration and Performance	20 min	C2-016 C3-002 (pp. 268–275) C3-003 (pp. 122–130)

## 5. Time

a. Introduction/Conclusion:	10 min
b. Interactive Lecture:	10 min
c. Demonstration and Performance:	40 min
d. Total:	60 min

## 6. Substantiation

- a. An interactive lecture was chosen for TP1 and TP2 to present basic material and give direction on emergency signal fires.



- b. Demonstration and performance was chosen for TP3 and TP4 as it allows the instructor to explain and demonstrate preparing a signal fire while providing an opportunity for the cadets to practice this skill under supervision

7. **References**

- a. C2-016 (ISBN 0-517-88783-5) Curtis, R. (1998). *The Backpacker's Field Manual: A Comprehensive Guide To Mastering Backcountry Skills*. New York, NY: Three Rivers Press.
- b. C2-042 (ISBN 0-7566-0946-1) Berger, K. (2005). *Backpacking & Hiking*. New York, NY: DK Publishing, Inc.
- c. C3-002 (ISBN 0-00-653140-7) Wiseman, J. (1999). *The SAS Survival Handbook*. Hammersmith, London: HarperCollins Publishers.
- d. C3-003 (ISBN 1-896713-00-9) Tawrell, P. (1996). *Camping and Wilderness Survival: The Ultimate Outdoors Book*. Green Valley, ON: Falcon Distribution.
- e. C3-118 Wilderness Survival. (2007). *Signalling Techniques*. Retrieved 12 March 2007, from <http://www.wilderness-survival.net/chpt19.php>.

8. **Training Aids**

- a. Matches;
- b. A three fire triangle;
- c. A torch tree;
- d. A luminous cone fire;
- e. Fire extinguishing equipment; and
- f. Shovel.

9. **Learning Aids**

- a. Matches;
- b. Signal fires;
- c. Wood/kindling/tinder; and
- d. Shovel.

10. **Test Details.** N/A.

11. **Remarks**

- a. The instructor shall demonstrate lighting the first of the prepared signal fires.
- b. Additional supervision is required during the lighting of the signal fires. Fire safety equipment shall also be present.

- c. Appropriate authorities (e.g. local police, forestry service, and/or airport authority) shall be notified of the lighting of the signal fire to include:
- (1) squadron contact name;
  - (2) squadron contact number;
  - (3) location including grid reference;
  - (4) estimated time of lighting; and
  - (5) the duration the fire is expected to be lit.

**EO M290.02 – CONSTRUCT A LEAN-TO-STYLE SHELTER**

1. **Performance.** Construct a Lean-to-style Shelter.
2. **Conditions**
  - a. Given:
    - (1) Groundsheets;
    - (2) Knife;
    - (3) Shovel;
    - (4) Pegs;
    - (5) Rope/twine;
    - (6) Natural materials;
    - (7) Supervision; and
    - (8) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Field setting during the day and large enough to accommodate the entire group and shelter construction.
3. **Standard.** In accordance with specified references and as a member of a group of no more than four, the cadet shall construct a lean-to-style shelter by:
  - a. gathering materials;
  - b. selecting a site; and
  - c. tying and lashing cross pieces and supports.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	<p>Explain the importance of site selection and assist cadets in selecting a site for their lean-to-style shelter. Review the following:</p> <ol style="list-style-type: none"> <li>a. Site selection. Site selection should begin before dark if possible. The shelter should be built near a source of water, building materials (trees, boughs) and fuel.</li> </ol>	Interactive Lecture	20 min	C3-002 (pp. 242–243) C3-003 (p. 101)

TP	Description	Method	Time	Ref
	<p>b. Land considerations. The following points are to be kept in mind:</p> <ol style="list-style-type: none"> <li>(1) The area must be large enough for the planned shelter.</li> <li>(2) The area should not be at the bottom of a hill. It should be relatively flat, but slightly sloped to allow for drainage.</li> <li>(3) Dry river gullies, canyons and flood plains should be avoided.</li> </ol> <p>c. Water considerations. The following points are to be kept in mind:</p> <ol style="list-style-type: none"> <li>(1) The shelter should be built away from the water in order to avoid insects.</li> <li>(2) The shelter should be built away from the source of drinking water.</li> </ol> <p>d. Animal and insect considerations. The following points are to be kept in mind:</p> <ol style="list-style-type: none"> <li>(1) Avoid setting up a shelter where there are animal trails or water holes.</li> <li>(2) Fast flowing streams will have fewer insects nearby than still water.</li> <li>(3) Avoid areas infested with ants or bees.</li> </ol> <p>e. Other considerations. The following points are to be kept in mind:</p> <ol style="list-style-type: none"> <li>(1) There should be an area nearby to construct signals.</li> <li>(2) The entrance of the shelter should face the sun to add warmth and to increase morale.</li> <li>(3) Very thick woods should be avoided as it will be hard to dry the shelter or fuel.</li> <li>(4) Try to find a natural windbreak or a place that is away from strong wind currents.</li> <li>(5) Avoid swampy terrain.</li> <li>(6) A place for a fire should be located in front of the opening of the shelter.</li> </ol>			
TP2	Explain and demonstrate the procedure for constructing a lean-to-style shelter, to include:	Demonstration	20 min	C3-002 (p. 250) C3-003 (p. 101) C3-118

TP	Description	Method	Time	Ref
	a. obtaining the appropriate supplies, to include: <ul style="list-style-type: none"> <li>(1) groundsheets;</li> <li>(2) knife;</li> <li>(3) shovel;</li> <li>(4) pegs;</li> <li>(5) rope/twine; and</li> <li>(6) natural materials; and</li> </ul> b. tying and lashing cross-pieces and vertical supports;			
TP3	Have the cadets, in groups of no more than four, construct a lean-to-style shelter, taking into account the site selection considerations.	Performance	40 min	A0-039

#### 5. Time

a. Introduction/Conclusion:	10 min
b. Interactive Lecture:	20 min
c. Demonstration:	20 min
d. Performance:	40 min
e. Total:	90 min

#### 6. Substantiation

- a. An interactive lecture was chosen for TP1 to present basic material and give direction on procedures.
- b. Demonstration was chosen for TP2 as it allows the instructor to explain and demonstrate the skill the cadet is expected to acquire.
- c. Performance was chosen for TP3 as it provides an opportunity for the cadets to practice building a lean-to-style shelter under supervision.

7. **References**

- a. A0-039 D Cdts 3. (1997). CATO 11-08. *Environmental Protection and Stewardship*. In *CATO Vol. 1 General* (pp.1–11). Ottawa, ON: Department of National Defence.
- b. C3-002 (ISBN 0-00-653140-7) Wiseman, J. (1999). *The SAS Survival Handbook*. Hammersmith, London: HarperCollins Publishers.
- c. C3-003 (ISBN 1-896713-00-9) Tawrell, P. (1996). *Camping and Wilderness Survival: The Ultimate Outdoors Book*. Green Valley, ON: Falcon Distribution.
- d. C3-118 Wilderness Survival. (2007). *Shelters*. Retrieved 9 March 2007, from <http://www.wilderness-survival.net/shelters-2.php>.

8. **Training Aids**

- a. Groundsheets;
- b. Example of a good shelter site;
- c. Example of a poor shelter site;
- d. Completed lean-to-style shelter for illustration purposes;
- e. Knife;
- f. Shovel;
- g. Pegs; and
- h. Rope/twine.

9. **Learning Aids**

- a. Groundsheets;
- b. Lengths of rope/twine;
- c. Shovel;
- d. Items found in a natural setting;
- e. Tree branches; and
- f. Pegs.

10. **Test Details.** N/A.

11. **Remarks**

- a. If lean-to-style shelters cannot be constructed, another style shelter (e.g. a bivouac tent, or a tarpaulin between trees) may be substituted.
- b. The directives found in CATO 11-08, *Environmental Protection and Stewardship*, are to be followed during this lesson.

**EO M290.03 – CONSTRUCT A SIMPLE SNARE**

1. **Performance.** Construct a Simple Snare.
2. **Conditions**
  - a. Given:
    - (1) Non-ferrous wire;
    - (2) Supervision; and
    - (3) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Field setting during the day large enough to accommodate the entire group and suitable for snare construction.
3. **Standard.** In accordance with specified references, and in groups of two, the cadet shall construct a simple snare by:
  - a. selecting a site;
  - b. constructing a simple snare in the selected location; and
  - c. disassembling the snare when completed.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain and demonstrate the procedure for constructing a simple snare, to include: <ol style="list-style-type: none"> <li>a. selecting a site;</li> <li>b. making the snare a fist width wide;</li> <li>c. setting it four fingers above the ground and one hand's width from an obstruction on the trail;</li> <li>d. checking that it is securely anchored, with twigs to support the loop in position if necessary; and</li> <li>e. setting the snare a hand's length from a stake or obstruction on a trail.</li> </ol>	Demonstration	15 min	C3-002 (pp. 186–187) C3-003 (p. 160)
TP2	Construct a simple snare.	Performance	35 min	C3-002 (pp. 186–187) C3-003 (p. 160)

5. **Time**

- |                             |        |
|-----------------------------|--------|
| a. Introduction/Conclusion: | 10 min |
| b. Demonstration:           | 15 min |
| c. Performance:             | 35 min |
| d. Total:                   | 60 min |

6. **Substantiation**

- a. Demonstration was chosen for TP1 as it allows the instructor to explain and demonstrate the skill the cadet is expected to acquire.
- b. Performance was chosen for TP2 as it is an interactive way to introduce cadets to constructing a simple snare.

7. **References**

- a. C3-002 (ISBN 0-00-653140-7) Wiseman, J. (1999). *The SAS Survival Handbook*. Hammersmith, London: HarperCollinsPublishers.
- b. C3-003 (ISBN 1-896713-00-9) Tawrell, P. (1996). *Camping and Wilderness Survival: The Ultimate Outdoors Book*. Green Valley, ON: Falcon Distribution.

8. **Training Aids**

- a. Non-ferrous wire; and
- b. Example of a simple snare.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** All snares will be disassembled immediately after completion of the practical exercise.



**EO M290.04 – CONSTRUCT GROUND-TO-AIR SIGNALS**

1. **Performance.** Construct Ground-to-air Signals.
2. **Conditions**
  - a. Given:
    - (1) Shovels;
    - (2) Completed ground-to-air signal for demonstration;
    - (3) Rope;
    - (4) Handout of ground-to-air signals;
    - (5) Supervision; and
    - (6) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Field setting during the day large enough to accommodate the entire group and signal construction.
3. **Standard.** In accordance with specified references, and as a member of a group of no more than four, the cadet shall construct a ground-to-air signal, by:
  - a. selecting a site;
  - b. constructing one of the following ground-to-air signals:
    - (1) require assistance;
    - (2) require medical assistance;
    - (3) proceeding in this direction;
    - (4) all is well; or
    - (5) require food and water; and
  - c. disassembling the signal when the lesson is completed.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Discuss ground-to-air signals employed to communicate with aircraft, to include: <ol style="list-style-type: none"> <li>a. signal dimensions;</li> <li>b. creating contrasting shades, or colours; and</li> </ol>	Interactive Lecture	15 min	C2-044 C3-003 (p. 233) C3-118

TP	Description	Method	Time	Ref
	c. signals, to include: (1) require assistance; (2) require medical assistance; (3) proceeding in this direction; (4) all is well; and (5) require food and water.			
TP2	Construct a ground-to-air signal as a member of group of no more than four.	Practical Activity	35 min	

#### 5. Time

a.	Introduction/Conclusion:	10 min
b.	Interactive Lecture:	15 min
c.	Practical Activity:	35 min
d.	Total:	60 min

#### 6. Substantiation

- a. An interactive lecture was chosen for TP1 to introduce methods of signalling to the cadets.
- b. A practical activity was chosen for TP2 as it is an interactive way to introduce cadets to methods of signalling and allows the cadets an opportunity to practice. This activity contributes to the development of survival skills in a fun and challenging setting.

#### 7. References

- a. C2-044 Transport Canada (2007). *Ground-to-Air Signals*. Retrieved 9 February 2007, from <http://www.tc.gc.ca/CivilAviation/publications/tp14371/SAS/4-0.htm>.
- b. C3-003 (ISBN 1-896713-00-9) Tawrell, P. (1996). *Camping and Wilderness Survival: The Ultimate Outdoors Book*. Green Valley, ON: Falcon Distribution.
- c. C3-118 Wilderness Survival. (2007). *Signalling Techniques*. Retrieved 12 March 2007, from <http://www.wilderness-survival.net/chpt19.php>.

#### 8. Training Aids

- a. Shovel;
- b. Completed ground to air signal for demonstration;
- c. Rope; and
- d. Handout.

#### 9. Learning Aids. N/A.

#### 10. Test Details. N/A.

11. **Remarks**

- a. All materials used in the construction of ground-to-air signals will be from the surrounding environment.
- b. All ground-to-air signals should be removed and returned to the environment after the completion of the practical activity.

**EO M290.05 – IDENTIFY HIKING TECHNIQUES**

1. **Performance.** Identify Hiking Techniques.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable indoor or outdoor training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall identify hiking techniques, to include:
  - a. identifying daily water requirements;
  - b. identifying proper footwear; and
  - c. identifying proper hiking rhythm.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain potable water requirements for consumption during a day hike, to include: <ol style="list-style-type: none"> <li>a. daily water requirements, to include:               <ol style="list-style-type: none"> <li>(1) performance-related water loss; and</li> <li>(2) daily water intake by weight; and</li> </ol> </li> <li>b. maintaining safe hydration levels, to include:               <ol style="list-style-type: none"> <li>(1) pre-hydrating;</li> <li>(2) drinking small amounts often;</li> <li>(3) avoiding sugar and caffeine drinks; and</li> <li>(4) routinely drinking water.</li> </ol> </li> </ol>	Interactive Lecture	15 min	C2-009 (pp. 139–141)
TP2	Explain the optimum characteristics of hiking footwear, to include: <ol style="list-style-type: none"> <li>a. sturdy and lightweight;</li> <li>b. comfortable (snug fit);</li> <li>c. sized correctly (can wiggle toes);</li> <li>d. snug against the heel;</li> <li>e. equipped with a tongue which rests comfortably along the top of the toe; and</li> </ol>	Interactive Lecture	15 min	C2-017 (pp. 22–25) C2-012 (p. 26)

TP	Description	Method	Time	Ref
	f. wide enough so that the boot matches the width of the foot (should have a little extra room).			
TP3	<p>Explain personal hiking rhythm, to include:</p> <p>a. determining stride rhythm and speed through a fixed pace that can be maintained throughout the hike, for a period of an hour at a time;</p> <p>b. controlling fatigue by stopping for scheduled rest periods of 10 minutes each, approximately an hour apart;</p> <p>c. adjusting rhythm to account for terrain, weather and weight; and</p> <p>d. employing full body synchronization, thus enhancing hiking rhythm.</p>	Interactive Lecture	20 min	C2-010

5. **Time**

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 10 min |
| b. | Interactive Lecture:     | 50 min |
| c. | Total:                   | 60 min |

6. **Substantiation.** An interactive lecture was chosen for TP1 to TP3 to present background material to the cadets.

7. **References**

- a. C2-009 (ISBN 0-684-85909-2) Harvey, M. (1999). *The National Outdoor Leadership School's Wilderness Guide*. New York, NY: Fireside.
- b. C2-010 (ISBN 0-375-70323-3) Rawlins, C., and Fletcher, C. (2004). *The Complete Walker IV*. New York, NY: Alfred A. Knopf.
- c. C2-012 (ISBN 0-89886-643-X) Weiss, H. (1988). *Secrets of Warmth for Comfort or Survival*. Seattle, WA: The Mountaineers.
- d. C2-017 (ISBN 0-7627-0476-4) Roberts, H. (1999). *Basic Essentials, Backpacking*. Guilford, CT: The Globe Pequot Press.

8. **Training Aids.** N/A.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** Examples of hiking footwear should be brought into the class for demonstration purposes.

**EO M290.06 – OPERATE A HAND-HELD RADIO**

1. **Performance.** Operate a Hand-Held Radio.
2. **Conditions**
  - a. Given:
    - (1) Hand-held radio per four cadets;
    - (2) Batteries;
    - (3) Assigned network frequencies;
    - (4) Supervision; and
    - (5) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Field setting, day or night, during a field exercise.
3. **Standard.** In accordance with *Talkabout FRS/GMRS Recreational Two-way Radios Models T5000, T5500, T5550 User's Guide*, the cadet shall operate a hand-held radio, to include:
  - a. turning the radio on and off;
  - b. adjusting frequencies;
  - c. using the push-to-talk button; and
  - d. changing the batteries.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Identify and briefly describe the parts of the radio, to include: <ol style="list-style-type: none"> <li>a. on-off/volume knob;</li> <li>b. light emitting diode (LED);</li> <li>c. push-to-talk button (PTT);</li> <li>d. speaker;</li> <li>e. antenna;</li> <li>f. accessory jack;</li> <li>g. menu scroll/channel/frequency selector;</li> <li>h. microphone;</li> <li>i. battery cover; and</li> <li>j. battery cover latches.</li> </ol>	Interactive Lecture	5 min	C0-069 (pp. 11–12)
TP2	Demonstrate and have cadets turn the radio on and off.	Demonstration and Performance	5 min	C0-069 (p. 15)

TP	Description	Method	Time	Ref
TP3	Demonstrate adjusting frequencies.	Demonstration	5 min	C0-069 (p. 16)
TP4	Demonstrate and allow cadets to practice operating the push-to-talk button, to include: <ul style="list-style-type: none"> <li>a. depressing the button;</li> <li>b. observing a standard pause;</li> <li>c. speaking loudly, clearly, and briefly; and</li> <li>d. releasing the button.</li> </ul>	Demonstration and Performance	5 min	C0-069 (pp. 17–18)
TP5	Demonstrate and allow cadets to practice changing batteries, to include: <ul style="list-style-type: none"> <li>a. removing the battery compartment cover;</li> <li>b. replacing/installing batteries;</li> <li>c. replacing the battery compartment cover; and</li> <li>d. safely discarding spent batteries.</li> </ul>	Demonstration and Performance	5 min	C0-069 (pp. 13–14) See Remarks Para 11b.

#### 5. Time

a. Introduction/Conclusion:	5 min
b. Interactive Lecture:	5 min
c. Demonstration:	5 min
d. Demonstration and Performance:	15 min
e. Total:	30 min

#### 6. Substantiation

- a. An interactive lecture was chosen for TP1 to introduce a new subject and give direction on new procedures.
- b. Demonstration and performance was chosen for TP2, TP4, and TP5 as it allows the instructor to explain and demonstrate the skill the cadet is expected to acquire while providing an opportunity for the cadets to practice the skill under supervision.
- c. Demonstration was chosen for TP3 as it allows the instructor to explain and demonstrate the skill the cadet is expected to acquire.

#### 7. References. C0-069 Motorola Inc. (2004). *Talkabout FRS/GMRS Recreational Two-way Radios Models T5000, T5500, T5550 User's Guide*. Motorola Inc.

#### 8. Training Aids

- a. Hand-held radio; and
- b. Batteries.

#### 9. Learning Aids

- a. One hand-held radio per four cadets; and

b. Batteries.

10. **Test Details.** N/A.

11. **Remarks**

a. Hand-held radio models may vary from region to region. The instructor will be responsible for consulting the owner's manual for detailed instructions on radio operation.

b. Dispose/recycle the batteries in accordance with local regulations.



## EO C290.01 – PARTICIPATE IN A PRESENTATION GIVEN BY A MEMBER OF A SURVIVAL ORGANIZATION

1. **Performance.** Participate in a Presentation Given by a Member of a Survival Organization.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable classroom facilities or training area large enough to accommodate the entire group.
3. **Standard.** The cadet shall participate in a presentation given by a member of a survival organization to further develop the cadet's knowledge of survival training.
4. **Teaching Points.** The guest speaker is asked to:
  - a. describe the service agency of which they are a member;
  - b. describe their duties;
  - c. describe a day in the life of a member of a survival organization;
  - d. explain their role in the community; and
  - e. facilitate a question and answer period.
5. **Time**

a. Introduction/Conclusion:	5 min
b. Interactive Lecture:	55 min
c. Total:	60 min
6. **Substantiation.** The interactive lecture was chosen for this lesson to orient the cadets to the topic and generate an interest in survival.
7. **References.** N/A.
8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/ presentation area.
9. **Learning Aids.** N/A.
10. **Test Details.** N/A.
11. **Remarks**
  - a. Training aids should be determined by contacting the speaker prior to the presentation.
  - b. There is no instructional guide for this EO.

**EO C290.02 – DISCUSS SKINNING AND COOKING A SMALL ANIMAL**

1. **Performance.** Discuss Skinning and Cooking a Small Animal.
2. **Conditions**
  - a. Given:
    - (1) Supervision; and
    - (2) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Suitable indoor or outdoor training area large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references, the cadet shall discuss skinning and cooking a small animal.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Discuss skinning a small animal, to include: <ol style="list-style-type: none"> <li>a. removing urine;</li> <li>b. cutting a hole in the belly area;</li> <li>c. pulling the skin apart and removing the guts;</li> <li>d. cutting the skin around the front and hind paws;</li> <li>e. hanging the animal; and</li> <li>f. removing the skin and dismembering the animal.</li> </ol>	Interactive Lecture	15 min	C3-003 (p. 146)
TP2	Discuss cooking a small animal, to include: <ol style="list-style-type: none"> <li>a. boiling;</li> <li>b. baking;</li> <li>c. grilling;</li> <li>d. roasting;</li> <li>e. steaming; and</li> <li>f. frying.</li> </ol>	Interactive Lecture	10 min	C2-002 (pp. 283–286) C3-003 (p. 146)

5. **Time**
  - a. Introduction/Conclusion: 5 min
  - b. Interactive Lecture: 25 min
  - c. Total: 30 min
6. **Substantiation.** An interactive lecture was chosen for this lesson to present basic material.

7. **References**

- a. C3-002 (ISBN 0-00-653140-7) Wiseman, J. (1999). *The SAS Survival Handbook*. Hammersmith, London: HarperCollinsPublishers.
- b. C3-003 1-896713-00-9 Tawrell, P. (1996). *Camping and Wilderness Survival: The Ultimate Outdoors Book*. Green Valley, ON: Falcon Distribution.

8. **Training Aids.** Presentation aids (e.g. whiteboard/flipchart/OHP) appropriate for the classroom/ presentation area.

9. **Learning Aids.** N/A.

10. **Test Details.** N/A.

11. **Remarks.** N/A.

**EO C290.03 – CONSTRUCT A SNOW CAVE**

1. **Performance.** Construct a Snow Cave.
2. **Conditions**
  - a. Given:
    - (1) Shovel;
    - (2) Groundsheet;
    - (3) Supervision; and
    - (4) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Winter field setting during the day large enough to accommodate the entire group and the shelter construction.
3. **Standard.** In accordance with specified references and as a member of a group of no more than four, the cadet shall construct a snow cave by:
  - a. selecting a site;
  - b. constructing the snow cave; and
  - c. disassembling the snow cave when the exercise is completed.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Identify factors to consider in selecting a site for a snow cave, to include: <ol style="list-style-type: none"> <li>a. a hard snow drift; or</li> <li>b. a slope with a firm crust of snow on the opposite side of the wind; and</li> <li>c. avoiding a drift that is below a cornice or in an avalanche area.</li> </ol>	Interactive Lecture	5 min	C3-002 (p. 256) C3-003 (p. 117)
TP2	Demonstrate appropriate site selection and construct a snow cave, to include: <ol style="list-style-type: none"> <li>a. burrowing a small tunnel that is one metre into the lowest level of the chamber;</li> <li>b. clearing the chamber of snow at right angles to the tunnel;</li> <li>c. clearing the chamber of snow to a height comfortable for sitting;</li> <li>d. constructing the outside of the roof to be well arched without sharp angles, to provide maximum support;</li> </ol>	Demonstration	35 min	C3-002 (p. 256) C3-003 (p. 117)

TP	Description	Method	Time	Ref
	e. constructing a sleeping and sitting platform above the level of the entrance; f. constructing a breathing hole in the roof of the snow cave; and g. constructing a door using a block of snow or a groundsheet.  <b>Note:</b> Ensure cadets enter and observe the finished snow cave.			
TP3	Ensure cadets choose an appropriate site for construction of a snow cave and have cadets construct a snow cave following the directions in TP1 and TP2.	Performance	35 min	
TP4	Disassemble the snow caves when the exercise is completed.	Performance	5 min	

#### 5. Time

a.	Introduction/Conclusion:	10 min
b.	Interactive Lecture:	5 min
c.	Demonstration:	35 min
d.	Performance:	40 min
e.	Total:	90 min

#### 6. Substantiation

- An interactive lecture was chosen for TP1 to present basic material and give direction on procedures.
- Demonstration was chosen TP2 as it allows the instructor to explain and demonstrate the skill the cadet is expected to acquire.
- Performance was chosen TP3 and TP4 as it provides an opportunity for the cadets to practice building a snow cave under supervision.

#### 7. References

- C3-002 (ISBN 0-00-653140-7) Wiseman, J. (1999). *The SAS Survival Handbook*. Hammersmith, London: HarperCollinsPublishers.
- C3-003 1-896713-00-9 Tawrell, P. (1996). *Camping and Wilderness Survival: The Ultimate Outdoors Book*. Green Valley, ON: Falcon Distribution.

#### 8. Training Aids. N/A.

#### 9. Learning Aids

- Shovel; and
- Groundsheet.

10. **Test Details.** N/A.

11. **Remarks**

- a. Cadets will not sleep in the snow cave.
- b. Additional supervision is required during the construction of the snow cave.

**EO C290.04 – COLLECT DRINKING WATER USING A SOLAR STILL**

1. **Performance.** Collect Drinking Water Using a Solar Still.
2. **Conditions**
  - a. Given:
    - (1) Clear plastic bags;
    - (2) Cup or pail;
    - (3) Shovel;
    - (4) Supervision; and
    - (5) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Field setting during the day large enough to accommodate the entire group.
3. **Standard.** In accordance with specified references and as a member of a group of no more than five, the cadet shall collect drinking water using a solar still by:
  - a. selecting an appropriate site;
  - b. constructing the solar still;
  - c. collecting water (as time allows); and
  - d. disassembling the solar still.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain how to find an appropriate collection site by digging a hole in the ground.	Interactive Lecture	5 min	
TP2	Demonstrate the construction of a solar still, to include: <ol style="list-style-type: none"> <li>a. digging a hole;</li> <li>b. placing a collecting can in the centre of the hole;</li> <li>c. covering the hole with a sheet of plastic formed into a cone;</li> <li>d. weighing down the edges of the plastic sheet; and</li> <li>e. placing a stone in the centre of the bottom of the plastic sheet above the collecting can.</li> </ol>	Demonstration	15 min	C3-002 (p. 42) C3-003 (p. 151)
TP3	Explain how water condensation from the ground, to the underside of the plastic sheet, to the collecting can works.	Interactive Lecture	5 min	C3-002 (p. 42) C3-003 (p. 151)

TP	Description	Method	Time	Ref
TP4	Have the cadets in groups of no more than five construct a solar still.  <b>Note:</b> The stills can remain overnight to collect water.	Performance	25 min	
TP5	Disassemble the solar still and fill in the hole.	Performance	5 min	

## 5. Time

- |    |                          |        |
|----|--------------------------|--------|
| a. | Introduction/Conclusion: | 5 min  |
| b. | Interactive Lecture:     | 10 min |
| c. | Demonstration:           | 15 min |
| d. | Performance:             | 30 min |
| e. | Total:                   | 60 min |

## 6. Substantiation

- An interactive lecture was chosen for TP1 and TP3 to present basic material and give direction on procedures.
- Demonstration was chosen for TP2 as it allows the instructor to explain and demonstrate building a solar still.
- Performance was chosen for TP4 and TP5 as it provides an opportunity for the cadets to practice the skill under supervision.

## 7. References

- C3-002 (ISBN 0-00-653140-7) Wiseman, J. (1999). *The SAS Survival Handbook*. Hammersmith, London: HarperCollinsPublishers.
- C3-003 (ISBN 1-896713-00-9) Tawrell, P. (1996). *Camping and Wilderness Survival: The Ultimate Outdoors Book*. Green Valley, ON: Falcon Distribution.

## 8. Training Aids

- Clear plastic bags;
- Cup or pail; and
- Shovel.

## 9. Learning Aids

- Clear plastic bags;
- Cup or pail; and
- Shovel.

## 10. Test Details. N/A.



11. **Remarks.** The solar still must remain in place overnight as both the heat from the sun and the cool air at night are required for the water condensation process to occur. For scheduling purposes, TP1 to TP4 will be done on day one of the schedule and TP5 will occur on day two.

**EO C290.05 – PARTICIPATE IN A HIKE**

1. **Performance.** Participate in a Hike.
2. **Conditions**
  - a. Given:
    - (1) A planned hike of no greater than 3 km in length;
    - (2) Water supply;
    - (3) Whistle;
    - (4) Supervision; and
    - (5) Assistance as required.
  - b. Denied: N/A.
  - c. Environmental: Field setting with Class 1 hiking terrain, during daylight hours.
3. **Standard.** In accordance with A-CR-CCP-951/PT-002, *Royal Canadian Army Cadets Adventure Training Standards*, the cadet shall participate in a 3 km hike by:
  - a. utilizing proper trail etiquette methods;
  - b. demonstrating proper trailblazing techniques; and
  - c. following a leader.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Describe trail etiquette methods that accomplish the leave no trace ideologies while hiking, to include: <ol style="list-style-type: none"> <li>a. identifying trail etiquette; and</li> <li>b. wearing proper safety equipment, to include:               <ol style="list-style-type: none"> <li>(1) a whistle;</li> <li>(2) a hat;</li> <li>(3) sunscreen; and</li> <li>(4) appropriate footwear.</li> </ol> </li> </ol>	Interactive Lecture	10 min	
TP2	Demonstrate and have the cadets practice trailblazing techniques.	Demonstration and Performance	60 min	A2-001 (p. 7–1/14)
TP3	Conduct a group discussion and debrief the cadets on their experiences while on the hike.	Group Discussion	15 min	

**5. Time**

a.	Introduction/Conclusion:	5 min
b.	Interactive Lecture:	10 min
c.	Demonstration and Performance:	60 min
d.	Group Discussion:	15 min
e.	Total:	90 min

**6. Substantiation**

- a. An interactive lecture was chosen for TP1 to give directions on procedures for the hike.
- b. Demonstration and performance was chosen for TP2 as it is an interactive way to allow cadets to experience hiking in a safe, controlled environment. This activity contributes to the development of the cadets' hiking skills and knowledge in a fun and challenging setting.
- c. A group discussion was chosen for TP3 as it allows the cadets to interact with their peers and share their knowledge, experiences, opinions and feelings about the hike.

7. **References.** A2-001 A-CR-CCP-951/PT-002 D Cdts 3. (2006). *Royal Canadian Army Cadets Adventure Training Standards*. Ottawa, ON: Department of National Defence.

8. **Training Aids.** N/A.

9. **Learning Aids.** Flagging tape.

10. **Test Details.** N/A.

11. **Remarks.** A whistle will be carried by every cadet as a safety precaution.

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### INSTRUCTIONAL METHODOLOGIES AND THEIR APPLICATIONS

The various methods of instruction commonly accepted as appropriate for cadet training is outlined below.

Method	Developmental Period One Ages 12–14 Experience-Based	Developmental Period Two Ages 15–16 Developmental	Developmental Period Three Ages 17–18 Competency
Case Study	N/A	Applicable	Applicable
Demonstration and Performance	Applicable	Applicable	Applicable
Experiential Learning	Applicable	Applicable	Applicable
Field Trip	Applicable	Applicable	Applicable
Game-playing	Applicable	Applicable	Applicable
Group Discussion	Applicable	Applicable	Applicable
Guided Discussion	N/A	N/A	Applicable
In-class Activity	Applicable	Applicable	Applicable
Interactive Lecture	Applicable	Applicable	Applicable
Lecture	Applicable	Applicable	Applicable
On-the-Job Training (OJT)	N/A	N/A	Applicable
Peer Learning	N/A	N/A	Applicable
Practical Activity	Applicable	Applicable	Applicable
Role-play	N/A	Applicable	Applicable
Self-study	N/A	N/A	Applicable
Simulation	N/A	N/A	Applicable
Tutorial	N/A	N/A	Applicable

General information follows on each method for its age-appropriateness, definition, application, advantages and disadvantages.

Method(s)	Applications	Advantages	Disadvantages
<p><b>DEMONSTRATION AND PERFORMANCE</b></p> <p>Cadets observe the instructor performing the task in a demonstration, and rehearse it under the supervision of the instructor.</p> <p><b>Demonstration Method</b></p> <p>A method of instruction where the instructor, by actually performing an operation or doing a job, shows the cadet what to do, how to do it and through explanations brings out why, where and when it is done.</p>	<p><b>Demonstration Method</b></p> <ol style="list-style-type: none"> <li>To teach hands-on operations or procedures.</li> <li>To teach troubleshooting.</li> <li>To illustrate principles.</li> <li>To teach operation or functioning of equipment.</li> <li>To set standards of workmanship.</li> <li>To teach safety procedures.</li> </ol>	<p><b>Demonstration Method</b></p> <ol style="list-style-type: none"> <li>Minimizes damage and waste.</li> <li>Saves time.</li> <li>Can be presented to large groups.</li> </ol>	<p><b>Demonstration Method</b></p> <ol style="list-style-type: none"> <li>Requires careful preparation and rehearsal.</li> <li>Requires special classroom arrangements.</li> <li>Requires equipment and aids.</li> </ol>
<p><b>Performance Method</b></p> <p>A method in which the cadet is required to perform, under controlled conditions, the operations, skill or movement being taught.</p>	<p><b>Performance Method</b></p> <ol style="list-style-type: none"> <li>To teach hands-on operations or procedures.</li> <li>To teach operations or functioning of equipment.</li> <li>To teach team skills.</li> <li>To teach safety procedures.</li> </ol>	<p><b>Performance Method</b></p> <ol style="list-style-type: none"> <li>Builds confidence.</li> <li>Enables learning evaluation.</li> <li>Reduces damage and waste.</li> <li>Promotes safety.</li> </ol>	<p><b>Performance Method</b></p> <ol style="list-style-type: none"> <li>Requires tools and equipment.</li> <li>Requires large blocks of time.</li> <li>Requires more instructors.</li> </ol>

Method(s)	Applications	Advantages	Disadvantages
<p><b>EXPERIENTIAL LEARNING</b></p> <p>Learning in the Cadet Program is centred on experiential learning. This involves learning knowledge and skills from direct experience. People learn best from their own experiences and can then apply the knowledge and skills in new situations. The four stages of the cycle may be considered and applied to all activities within the Cadet Program, regardless of methodology chosen.</p> <p><b>Stage 1: Concrete Experience:</b> Cadets have an experience and take time to identify and define what the experience is. Sample activities: direct observations, simulations, field trips, and reading.</p> <p><b>Stage 2: Reflective Observation:</b> Cadets need to reflect on and examine what they saw, felt and thought while they were having the experience. Sample activities: discussion, journals/logs, and graphs.</p> <p><b>Stage 3: Abstract Conceptualization:</b> Cadets work to understand and make connections from the experience to new or different situations. Sample activities: interview, discussion, model building, analogies and planning.</p> <p><b>Stage 4: Active Experimentation:</b> Cadets look ahead to and plan the application of skills and knowledge acquired to future experience. Sample activities include: simulation, fieldwork.</p> <p><b>Note:</b> The cycle is ongoing as each learning experience builds on another.</p>	<ol style="list-style-type: none"> <li>To teach practical skills.</li> <li>To learn how to learn.</li> <li>To teach transferable skills.</li> <li>To teach a process or principle.</li> <li>To teach problem solving.</li> </ol>	<ol style="list-style-type: none"> <li>Knowledge is shared and created by collectively by all participants.</li> <li>Everyone is actively involved in the teaching – learning process.</li> <li>Appeals to many learning styles.</li> <li>Student centred.</li> </ol>	<ol style="list-style-type: none"> <li>Resource intensive.</li> <li>Requires significant planning, preparation and organization prior to activity.</li> <li>The instructor must master the subject developed.</li> <li>Instructor needs very good pedagogical skills.</li> <li>May not be a good process for learning details.</li> <li>The instructor must be a good facilitator to carry out an effective reflective session in stage 2 and 3 of this method.</li> </ol>
<p><b>FIELD TRIP</b></p> <p>Theoretical knowledge is reinforced through participation in an activity in a real-life setting. Prior planning helps to ensure all pre-training and safety standards are met. Field trip activities are planned and carried out to achieve clear instructional objectives that are understood by the cadets. Examples can include trips to areas of local interest, flying/gliding, hiking or sailing.</p>	<ol style="list-style-type: none"> <li>To introduce/illustrate and confirm topics.</li> <li>To allow for familiarization activities.</li> </ol>	<ol style="list-style-type: none"> <li>Immerses cadets in a specific environment.</li> </ol>	<ol style="list-style-type: none"> <li>May require additional staff to ensure adequate supervision.</li> <li>Requires significant planning, preparation and organization prior to activity.</li> <li>May have cost implications.</li> </ol>

Method(s)	Applications	Advantages	Disadvantages
<p><b>GAME-PLAYING</b>                      Games are used with one or more participants to practice skills, apply strategies and enhance teams. It is critical that the game supports learning through the provision of a challenging activity that allows for the skill practice or knowledge confirmation.</p>	<ol style="list-style-type: none"> <li>1. To introduce a topic.</li> <li>2. To discover concepts and principles.</li> <li>3. To review and confirm.</li> </ol>	<ol style="list-style-type: none"> <li>1. Fun and interesting.</li> <li>2. Creates ownership.</li> <li>3. Highly participative.</li> </ol>	<ol style="list-style-type: none"> <li>1. May stratify the group by creating a winner and a loser.</li> <li>2. May be difficult in providing instructor feedback.</li> </ol>
<p><b>GROUP DISCUSSION</b>                      Cadets discuss issues, share knowledge, opinions and feelings about a topic in small groups to meet a specified goal. The instructor's questioning is flexible and minimal, and aims at encouraging cadets to explore their own experiences and opinions through peer interaction.</p>	<ol style="list-style-type: none"> <li>1. To develop imaginative solutions to problems.</li> <li>2. To stimulate thinking and interest and to secure cadet participation.</li> <li>3. To emphasize main teaching points.</li> <li>4. To supplement lectures and seminars.</li> <li>5. To determine how well cadets understand the concepts and principles.</li> <li>6. To prepare cadets for application of theory or procedure.</li> <li>7. To summarize, clarify points or review.</li> <li>8. To prepare cadets for instruction that will follow.</li> <li>9. To determine cadet progress and effectiveness of prior instruction.</li> </ol>	<ol style="list-style-type: none"> <li>1. Increases cadet interest.</li> <li>2. Increases cadet acceptance and commitment.</li> <li>3. Utilizes cadet knowledge and experience.</li> <li>4. Results in more permanent learning because of the high degree of cadet participation/cognitive involvement.</li> </ol>	<ol style="list-style-type: none"> <li>1. Requires highly skilled instructors.</li> <li>2. Time consuming.</li> <li>3. Restricts size of group.</li> <li>4. Requires selective group composition.</li> </ol>



Method(s)	Applications	Advantages	Disadvantages
<p><b>IN-CLASS ACTIVITY</b> In-class activities encompass a wide variety of activity-based learning opportunities that can be used to reinforce instructional topics or to introduce cadets to new experiences. In-class activities should provoke thought and stimulate interest among cadets, while maintaining relevance to the performance objectives.</p>	<ol style="list-style-type: none"> <li>1. To reinforce instructional topics.</li> <li>2. To orient cadets to the subject.</li> <li>3. To give direction on procedures.</li> <li>4. To illustrate the application of rules, principles or concepts.</li> <li>5. To review, clarify, and/or summarize.</li> </ol>	<ol style="list-style-type: none"> <li>1. Provokes thought and stimulates interest among cadets.</li> <li>2. Appeals to kinaesthetic learners</li> </ol>	<ol style="list-style-type: none"> <li>1. Difficult to gauge cadet reaction.</li> <li>2. Takes time to prepare.</li> </ol>
<p><b>INTERACTIVE LECTURE</b> The instructor-driven methodology combines both lecture and interaction to meet lesson objectives. Lecture portions of the lesson are offset with relevant activities such as videos with discussion, games to confirm and completion of handouts.</p>	<ol style="list-style-type: none"> <li>1. To orient cadets to the subject.</li> <li>2. To give instruction on procedures.</li> <li>3. To illustrate the application of rules, principles or concepts.</li> <li>4. To review, clarify, and/or summarize.</li> </ol>	<ol style="list-style-type: none"> <li>1. Saves time.</li> <li>2. Permits flexibility of class size.</li> <li>3. Requires less rigid space requirements.</li> <li>4. Permits better control over content and sequence.</li> </ol>	<ol style="list-style-type: none"> <li>1. Difficult to gauge cadet reaction.</li> </ol>
<p><b>LECTURE</b> This is a formal or semi-formal discourse in which the instructor presents a series of events, facts, principles, explores a problem or explains relationships.</p>	<ol style="list-style-type: none"> <li>1. To orient cadets to the subject.</li> <li>2. To give instruction on procedures.</li> <li>3. To illustrate the application of rules, principles or concepts.</li> <li>4. To review, clarify, and/or summarize.</li> </ol>	<ol style="list-style-type: none"> <li>1. Proficient oral skills are required.</li> <li>2. Useful for big groups.</li> <li>3. Saves time because of fewer interruptions.</li> </ol>	<ol style="list-style-type: none"> <li>1. Requires preparation and a dynamic lecturer.</li> <li>2. Cadets may be passive and uninvolved.</li> </ol>

Method(s)	Applications	Advantages	Disadvantages
<p><b>PRACTICAL ACTIVITY</b>                      Practical activities encompass a wide variety of activity-based learning opportunities that can be used to reinforce and practice instructional topics or to introduce cadets to new experiences. Practical activities should stimulate interest among cadets and encourage their participation, while maintaining relevance to the performance objectives.</p>	<ol style="list-style-type: none"> <li>1. To introduce a subject.</li> <li>2. To practice skills.</li> <li>3. To review and/or reinforce.</li> </ol>	<ol style="list-style-type: none"> <li>1. Encourages participation.</li> <li>2. Stimulates an interest in the subject.</li> <li>3. Fun and interesting.</li> <li>4. Creates ownership.</li> </ol>	<ol style="list-style-type: none"> <li>1. Requires significant planning, preparation and organization.</li> <li>2. May require additional staff to ensure adequate supervision.</li> </ol>