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MODIFIED LESSON INSTRUCTIONS AND INSTRUCTIONAL GUIDES – TP 1 OF EO M232.01

A-CR-CCP-802/PG-001

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"> a. rocket engines; b. gas turbine jet engines; and c. piston-powered engines. 	Interactive Lecture	10 min	C3-116 (p. 51) C3-084 C3-086 C3-087 C3-088

5. **Time**
 - a. Introduction/Conclusion: 5 min
 - b. Interactive Lecture: 10 min
 - c. Total: 15 min
6. **Substantiation.** An interactive lecture was chosen for TP1 to introduce types of aircraft engines and give an overview of them.
7. **References**
 - a. C3-084 NASA Glenn Research Center. *Engines 101*. Retrieved 21 February 2007, from <http://www.ueet.nasa.gov/Engines101.html#Aeronautics>.
 - b. C3-086 NASA Glenn Research Center. *Engines 101*. Retrieved 21 February 2007, from <http://www.grc.nasa.gov/WWW/K-12/airplane/icengine.html>.

- c. C3-087 NASA Glenn Research Center. *Propulsion Index*. Retrieved 21 February 2007, from <http://www.grc.nasa.gov/WWW/K-12/airplane/shortp.html>.
 - d. 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>.
 - e. 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.** N/A.



ROYAL CANADIAN AIR CADETS
PROFICIENCY LEVEL TWO
INSTRUCTIONAL GUIDE



SECTION 1

EO M232.01 – IDENTIFY TYPES OF AIRCRAFT ENGINES

Total Time: 15 min

PREPARATION

PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-802/PG-001, Chapter 4. Specific uses for said resources are identified throughout the Instructional Guide within the TP for which they are required.

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

PRE-LESSON ASSIGNMENT

N/A.

APPROACH

An interactive lecture was chosen for TP1 to introduce types of aircraft engines and give an overview of them.

INTRODUCTION

REVIEW

N/A.

OBJECTIVES

By the end of this lesson the cadet shall be expected to identify types of aircraft engines.

IMPORTANCE

Engines are one of the key systems in a powered aircraft. It is important for cadets to learn about types of aircraft engines so that they can understand subsequent and related aspects of aviation.

Teaching Point 1

Explain That a Powered Aircraft Needs a Means of Propulsion

Time: 10 min

Method: Interactive Lecture

A powered aircraft needs a means of propulsion to overcome drag and allow the wings to generate sufficient lift to overcome weight.

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The propeller and jet engine are very closely related, providing thrust by the same means – the acceleration of a mass of air. The propeller generates thrust by acting on a large mass of air, giving it a relatively small acceleration. The jet engine does exactly the same thing by giving a larger acceleration to a smaller mass of air.

The most common engine types used for aviation propulsion employ internal combustion and they include:

- rocket engines,
- gas turbine jet engines, and
- reciprocating piston-powered engines.



Show the cadets a slide or handout of rocket engine applications in [Figures 12A-1 and 12A-2](#).

The earliest vehicle engines were rocket engines used to power ancient Chinese fire arrows. This method of propulsion proved so effective that, with many improvements, it is still commonly used today for many applications including space exploration. Self-contained with their own oxidizer, rockets have the great advantage of being able to function in a vacuum such as outer space.



All propulsion systems are reactive, meaning that they all employ an equal and opposite reaction predicted by Newton's third law of motion.

Piston-powered internal combustion engines were developed in the late nineteenth century. They were available to Orville and Wilbur Wright, who designed their 1903 flyer with a four-cylinder piston-powered engine.



Show the cadets a slide or handout of a Harvard piston-powered engine application in [Figures 12A-3 and 12A-4](#) located at the end of this document.

Piston-powered engines are the most common vehicle engine of all and the one that Proficiency Level Two cadets will explore in most detail. In many ways, pistons are the most complicated system of converting the chemical energy of fuel into the energy of motion but they are found in many places, including aircraft, automobiles, boats and lawnmowers.



Show the cadets a slide or handout of a gas turbine jet engine application in [Figures 12A-5 and 12A-6](#) located at the end of this document. Point out the airflow path and combustion location in the schematic.

Gas turbine jet engines are improvements upon simple ramjets. The ramjet is a liquid-fuelled rocket-like engine, which uses atmospheric oxygen to burn fuel. One of the most limiting aspects of a ramjet is that it requires high velocity to work. Therefore it cannot start combustion until it is up to speed – it must be launched from a speeding vehicle. Air-launched missiles are one of the few applications of ramjet engines.

Any turbine converts the energy of moving liquid or gases, such as jet exhaust or wind, into rotary motion to turn a shaft. A windmill is a turbine which uses wind energy to turn a shaft. Among other advantages, adding

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a turbine to the simple ramjet allows a compressor to generate high-pressure air so that the gas turbine jet engine can be started from a resting, or static, position. This is the secret of the modern gas turbine jet engine, which still relies on the ejection of hot gases to produce thrust. Until the turbine and compressor are functioning and delivering high-pressure air to the engine, however, the engine cannot start. Even gas turbine jet engines, therefore, must be started with a starting motor.



Show the cadets a slide or handout of the CT-114 Tutor turbojet engine application [Figures 12A-7](#) and [12A-8](#) located at the end of this document.

A gas turbine jet engine that provides thrust, with no rotating shaft output, is a TURBOJET engine.



Show the cadets a slide or handouts of the C-130 Hercules turboprop engine application [Figures 12A-9](#) and [12A-10](#) located at the end of this document.

A gas turbine jet engine that provides thrust and also drives a propeller is a TURBOPROP engine.



Show the cadets a slide or handout of the CH-146 Griffon turboshaft engine application [Figures 12A-11](#) and [12A-12](#) located at the end of this document.

A gas turbine engine that drives a helicopter rotor is usually a TURBOSHAFT engine. In a turboshaft helicopter engine, the output driveshaft is separate from the compressor turbine shaft so that engine speed is not tied to the helicopter's main rotor speed.



Show the cadets a slide or handout of the CC-150 Polaris (A310-300 Airbus) turbofan engine application [Figures 12A-5](#) and [12A-6](#) located at the end of this document. Point out the fan location.

The most common variation of the gas turbine jet engine is the TURBOFAN, which is a hybrid of a turbojet and a turboprop. The turbofan has a fan that provides thrust with bypass air, in place of a propeller, adding to the reactive thrust of the ejected exhaust gases. This application allows the aircraft to go faster than normal propellers could go, while also reducing engine noise and allowing the aircraft to make efficient use of fuel. The noise reduction and fuel efficiency of turbofans make them very effective for commercial aviation.



All three of these engine types, rocket, gas turbine jet and piston-powered engines, use internal combustion to capture the energy of expanding hot gases in a closed container.

END OF LESSON CONFIRMATION

QUESTIONS

Q1. Which engine type was the first to be used for propulsion?

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Q2. Why are the rocket, gas-turbine and piston-powered engines all internal combustion engines?

Q3. Why does a gas turbine jet engine need to have a starting motor?

ANTICIPATED ANSWERS

A1. The rocket was the first to be used for propulsion.

A2. The rocket, gas-turbine and piston-powered engines all use internal combustion to capture the energy of hot expanding gases in a closed container.

A3. A gas turbine jet engine needs to have a starting motor because, until the turbine and compressor are running, there is no high-pressure air to operate the engine.

CONCLUSION

HOMEWORK/READING/PRACTICE

N/A.

METHOD OF EVALUATION

N/A.

CLOSING STATEMENT

The topic of aircraft engines is very broad and ever-changing as new solutions are found and new products developed to push the performance envelope.

INSTRUCTOR NOTES/REMARKS

N/A.

REFERENCES

- C3-084 NASA Glenn Research Center. *Engines 101*. Retrieved 21 February 2007, from <http://www.ueet.nasa.gov/Engines101.html#Aeronautics>.
- 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>.
- C3-088 NASA. *Welcome to the Beginner's Guide to Rockets*. Retrieved 21 February 2007, from <http://exploration.grc.nasa.gov/education/rocket/bgmr.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.

IDENTIFYING TYPES OF AIRCRAFT ENGINES

Rocket Engines



National Aeronautics and Space Administration (NASA), "Missions" Space Shuttle System (2006). Retrieved 17 March 2007, from http://www.nasa.gov/returntoflight/system/system_SSME.html

Figure 12A-1 Rocket Engine Application

	<h2>ROCKET PROPULSION</h2>	<p>GLENN RESEARCH CENTER</p>
		

NASA Glenn Research Center. "Propulsion Index". *Rocket Propulsion* (2006). Retrieved 21 February 2007, from <http://www.grc.nasa.gov/WWW/K-12/airplane/shortp.html>

Figure 12A-2 X-15 in Flight

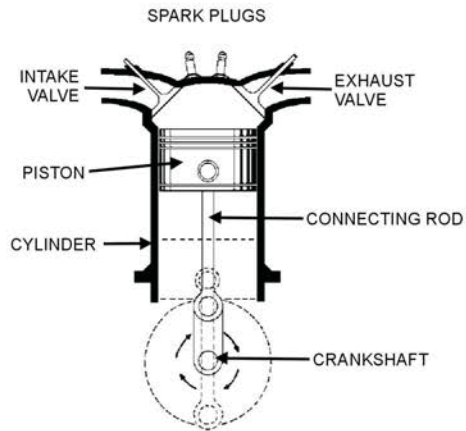
A-CR-CCP-802/PF-001
Chapter 12, Annex A

Piston-powered Engines



Canadian Forces. Aircraft. (2005). Retrieved 17 March 2007, from http://www.airforce.gc.ca/equip/equip1_e.asp

Figure 12A-3 Piston-powered Engine Application



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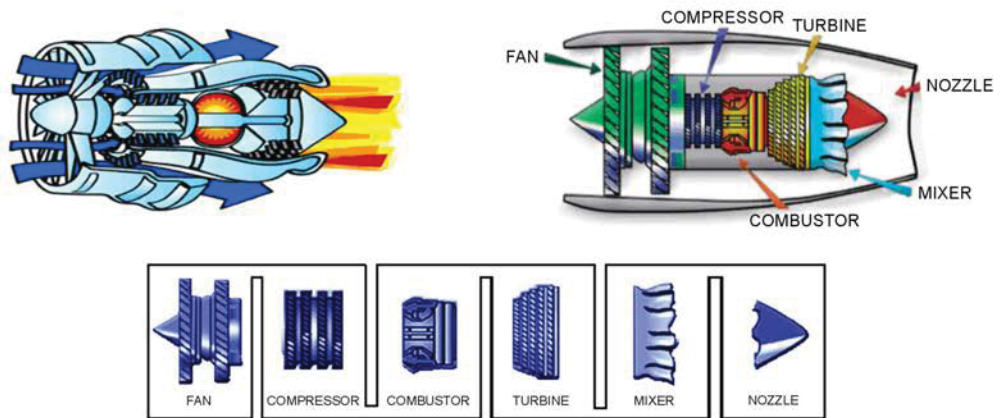
Figure 12A-4 Piston-powered Engine Schematic

Jet Engine



Canadian Forces. Aircraft. (2005). Retrieved 17 March 2007, from http://www.airforce.gc.ca/equip/equip1_e.asp

Figure 12A-5 Gas Turbine Engine Application



NASA "Engines 101". Ultra Efficient Engine Technology (UEET). (2001). Retrieved 17 March 2007, from <http://www.ueet.nasa.gov/Engines101.html>

Figure 12A-6 Turbofan Parts

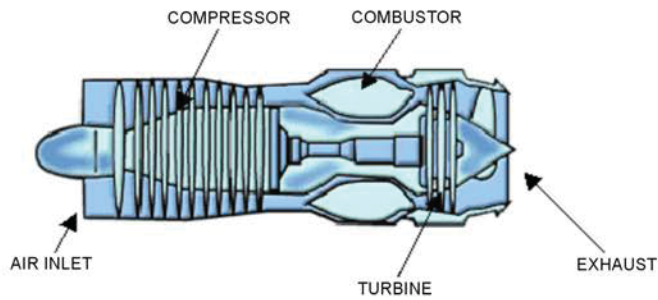
A-CR-CCP-802/PF-001
Chapter 12, Annex A

Turbojet Engines



Canadian Forces. *Aircraft*. (2005). Retrieved 17 March 2007, from http://www.airforce.gc.ca/equip/equip1_e.asp

Figure 12A-7 Turbojet Application



NASA Engines 101. *Ultra Efficient Engine Technology (UEET)*. (2001). Retrieved 17 March 2007, from <http://www.ueet.nasa.gov/Engines101.html>

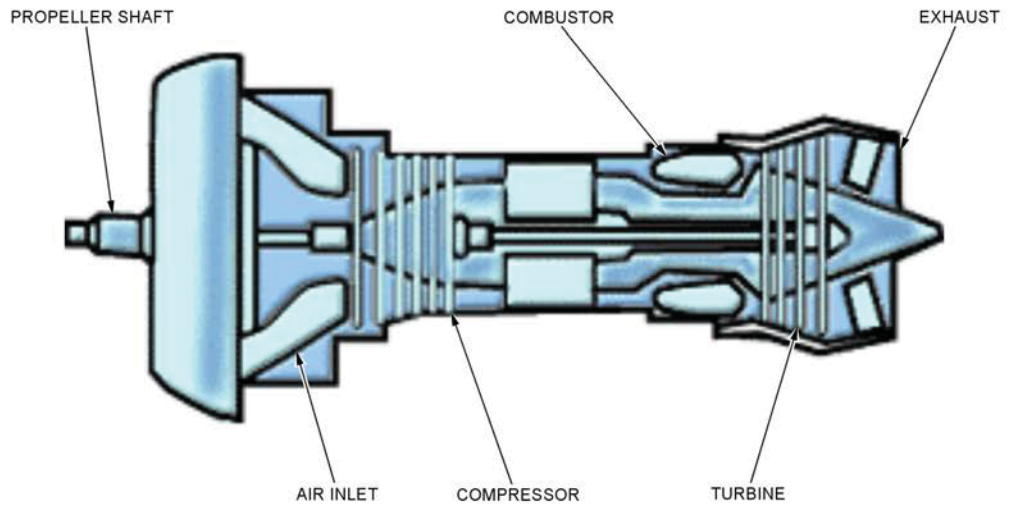
Figure 12A-8 Turbojet Schematic

Turboprop Engines



Canadian Forces. Aircraft. (2005). Retrieved 17 March 2007, from http://www.airforce.gc.ca/equip/equip1_e.asp

Figure 12A-9 Turboprop Application



NASA Engines 101. Ultra Efficient Engine Technology (UEET). (2001). Retrieved 17 March 2007, from <http://www.ueet.nasa.gov/Engines101.html>

Figure 12A-10 Turboprop Engine Schematic

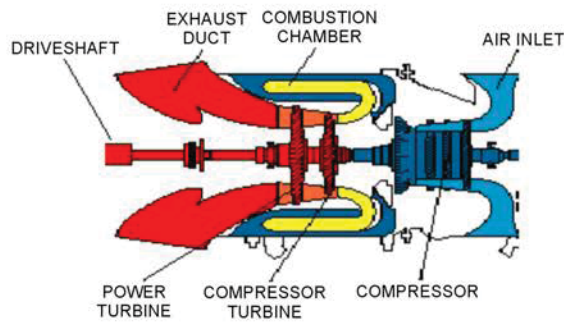
A-CR-CCP-802/PF-001
Chapter 12, Annex A

Turboshaft Engines



Canadian Forces. Aircraft. (2005). Retrieved 17 March 2007, from http://www.airforce.gc.ca/equip/equip1_e.asp

Figure 12A-11 Turboshaft Engine Application



Imagine the Power, Pratt & Whitney Canada. Retrieved 16 March 2007, from http://www.pwc.ca/en/3_0/3_0_3/3_0_3_3_1.asp

Figure 12A-12 Turboshaft Engine Schematic

MODIFIED LESSON INSTRUCTIONS AND INSTRUCTIONAL GUIDES – TP 2 OF EO C232.03

A-CR-CCP-802/PG-001

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.** 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	Have the cadets make and fly a paper helicopter.	In-Class Activity	10 min	C3-056

5. **Time**
 - a. Introduction/Conclusion: 5 min
 - b. In-class Activity: 10 min
 - c. Total: 15 min
6. **Substantiation.** An in-class activity was chosen for TP1 as it is an interactive way to provoke thought and stimulate interest among cadets.
7. **References.** C3-056 US Centennial of Flight Commission. *Helicopters*. (2003). Retrieved 12 October 2006, from <http://www.centennialofflight.gov/essay/Dictionary/helicopter/D127.htm>.
8. **Training Aids**
 - a. Presentation aids (e.g. whiteboard/flipchart/OHP/multimedia projector) appropriate for the classroom/training area;
 - b. Completed paper helicopter for demonstration purposes;
9. **Learning Aids**
 - a. Directions to construct and fold a paper helicopter (A-CR-CCP-802/PF-001, Annex D); and
 - b. Materials required to construct a paper helicopter.
10. **Test Details.** N/A.



ROYAL CANADIAN AIR CADETS
PROFICIENCY LEVEL TWO
INSTRUCTIONAL GUIDE



SECTION 7

EO C232.03 – IDENTIFY THE CHARACTERISTICS OF HELICOPTER ENGINES

Total Time: 15 min

PREPARATION

PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-802/PG-001, Chapter 4. Specific uses for said resources are identified throughout the Instructional Guide within the TP for which they are required.

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

Photocopy handouts of the paper helicopter construction templates and instructions shown in [Figures 12T-2](#) and [12T-3](#) for each cadet.

Gather materials needed for the construction of the paper helicopter.

PRE-LESSON ASSIGNMENT

N/A.

APPROACH

An in-class activity was chosen for TP1 as it is an interactive way to provoke thought and stimulate an interest among cadets.

INTRODUCTION

REVIEW

N/A.

OBJECTIVES

By the end of this lesson the cadet shall identify the characteristics of helicopter engines.

IMPORTANCE

It is important for cadets to know about the characteristics of helicopter engines because helicopters form a significant part of the Canadian Forces' lift, tactical manoeuvring and Search and Rescue capabilities.

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Teaching Point 1

Make and Fly a Paper Helicopter

Time: 10 min

Method: In-Class Activity

When a helicopter engine loses power under flight, the pilot can auto-rotate the aircraft to the ground.

Auto-rotation is the state of flight where the main rotor is being turned by the action of the wind passing up through the rotor disc instead of being turned by engine power.

ACTIVITY

Time: 15 min

OBJECTIVE

The objective of this activity is to have the cadets fold paper helicopters and then auto-rotate them to the ground to demonstrate that loss of engine power does not necessarily lead to a crash.

RESOURCES

Instructions and the template for folding a paper helicopter shown in [Figures 12T-2 and 12T-3](#).

ACTIVITY LAYOUT

N/A.

ACTIVITY INSTRUCTIONS

1. Distribute the instructions and template for paper helicopter construction to each cadet.
2. Have the cadets cut out the paper helicopter and then fold it into shape.
3. Have the cadets stand and drop the helicopters.



Give the paper helicopter a spin before releasing it. This will help establish effective rotor action because, as stated by Newton's first law of motion, every object in a state of uniform motion tends to remain in that state of motion unless an external force is applied to it.

SAFETY

N/A.

CONFIRMATION OF TEACHING POINT 1

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

END OF LESSON CONFIRMATION

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

CONCLUSION

HOMEWORK/READING/PRACTICE

N/A.

METHOD OF EVALUATION

N/A.

CLOSING STATEMENT

Rotary wing aircraft present special challenges for aviation but they offer special capabilities as well, which enable them to make important contributions to the Canadian Forces' lift, tactical manoeuvring and Search and Rescue operations.

INSTRUCTOR NOTES/REMARKS

N/A.

REFERENCES

C3-056 US Centennial of Flight Commission. *Helicopters. (2003)*. Retrieved 12 October 2006, from <http://www.centennialofflight.gov/essay/Dictionary/helicopter/DI27.htm>.

INSTRUCTIONS AND TEMPLATE FOR FOLDING A PAPER HELICOPTER

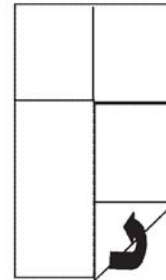
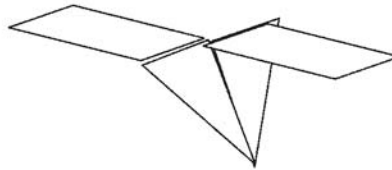
MAKE A HELICOPTER

AIM: TO MAKE A TWIRLING HELICOPTER.

YOU WILL NEED: A HELICOPTER SHEET, SCISSORS, COLOURING PENCILS, PAPER CLIPS FOR WEIGHTS

WHAT TO DO:

1. COLOUR THE HELICOPTER SHEET.
2. CUT ALONG THE DOTTED LINES.
3. FOLD CORNERS A AND B TO MEET THE CENTRE LINE
4. FOLD E AND F IN THE OPPOSITE DIRECTIONS.



5. TEST YOUR HELICOPTER BY DROPPING IT FROM A HIGH PLACE (E.G. STANDING ON A RAISED PLATFORM).
6. DISCUSS WHAT HAPPENS.

THINGS TO TRY

DOES THE WAY THE FLAPS ARE BENT MAKE A DIFFERENCE TO THE HELICOPTER'S FALL?

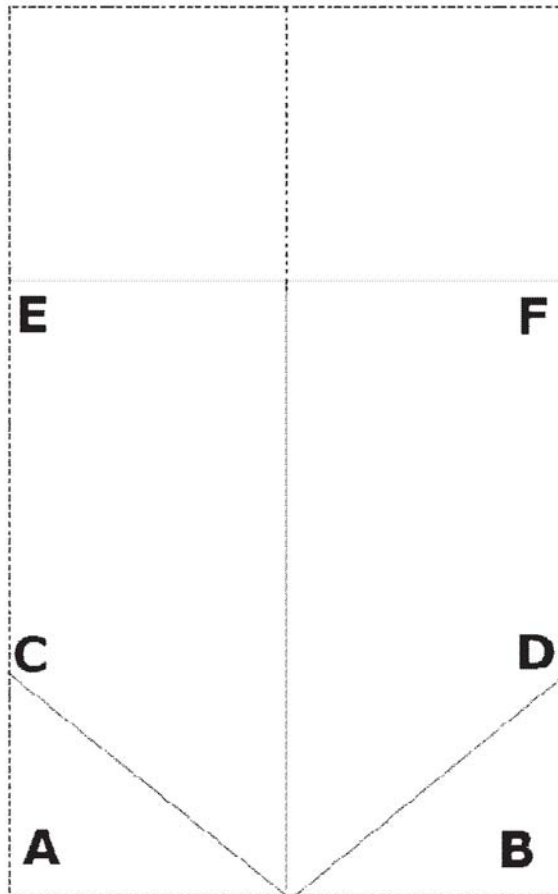
ADD EXTRA WEIGHT TO YOUR HELICOPTER. DOES THIS MAKE A DIFFERENCE.

MAKE A NEW HELICOPTER WITH LONGER BLADES. HOW DOES IT WORK?

*"Force and Movement" Making a Helicopter. Retrieved 11 October 2006,
from http://www.teacherresourcesgalore.com/physics_files/helicopter.doc*

Figure 12T-2 Instructions for Paper Helicopter Construction

PAPER HELICOPTER TEMPLATE



"Force and Movement: Making a Helicopter". Retrieved 11 October 2006, from http://www.teacherresourcesgalore.com/physics_files/helicopter.doc

Figure 12T-3 Template for Paper Helicopter Construction

MODIFIED LESSON INSTRUCTIONS AND INSTRUCTIONAL GUIDES – TP 2 OF EO C240.03

A-CR-CCP-802/PG-001

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	Conduct an activity naming the parts of a rocket.	In-class Activity	10 min	C3-106

5. **Time**
 - a. Introduction/Conclusion: 5 min
 - b. In-class Activity: 10 min
 - c. Total: 15 min
6. **Substantiation.** An in-class activity was chosen for TP1 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/multimedia projector) 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.



ROYAL CANADIAN AIR CADETS
PROFICIENCY LEVEL TWO
INSTRUCTIONAL GUIDE



SECTION 6

EO C240.03 – IDENTIFY PARTS OF A ROCKET

Total Time: 15 min

PREPARATION

PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-802/PG-001, Chapter 4. Specific uses for said resources are identified throughout the Instructional Guide within the TP for which they are required.

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

Photocopy the handout located at [Figure 13F-1](#) for each cadet.

Photocopy and cut out the rocket puzzle pieces from [Figure 13G-1](#) through [Figure 13G-13](#) located at the end of this document.

PRE-LESSON ASSIGNMENT

N/A.

APPROACH

An in-class activity was chosen for TP1 as it is an interactive way to confirm the cadet's comprehension of the material.

INTRODUCTION

REVIEW

N/A.

OBJECTIVES

By the end of this lesson the cadet shall be expected to identify parts of a rocket to become familiar with its components.

IMPORTANCE

It is important for cadets to know the parts of a rocket so that they can understand how they are constructed. Identifying the parts of a rocket may develop an interest in the components that make up a rocket, which may lead to future aerospace opportunities in the Air Cadet Program.

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Teaching Point 1**Conduct an Activity Naming the Parts of a Rocket**

Time: 10 min

Method: In-class Activity



The following activity is designed to be done as a class activity. The class will construct and label the puzzle together, one piece at a time.

ACTIVITY

OBJECTIVE

The objective of this activity is to help cadets become familiar with the parts of a rocket.

RESOURCES

- The puzzle located at [Figure 13G-1](#) through [Figure 13G-13](#), and
- Tape.

ACTIVITY LAYOUT

N/A.

ACTIVITY INSTRUCTIONS

1. Provide the cadets with the puzzle parts and shapes of a rocket.
2. Request a cadet to volunteer and select a shape and place it on the board in front of the class.
3. Repeat the steps until all the shapes are up on the board and the rocket is built. Then repeat the steps using the words and pictures to label the rocket.



Allow cadets to make corrections if the parts of the puzzle are in the wrong place.

4. Use the handout located at [Annex F](#) as a guide to confirm if the puzzle is correct.

SAFETY

N/A.

CONFIRMATION OF TEACHING POINT 1

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

END OF LESSON CONFIRMATION



Distribute [Figure 13F-1](#) Parts of a Rocket to each cadet.

The cadets' participation in identifying the parts of a rocket will serve as the confirmation of this lesson.

CONCLUSION

HOMEWORK/READING/PRACTICE

N/A.

METHOD OF EVALUATION

N/A.

CLOSING STATEMENT

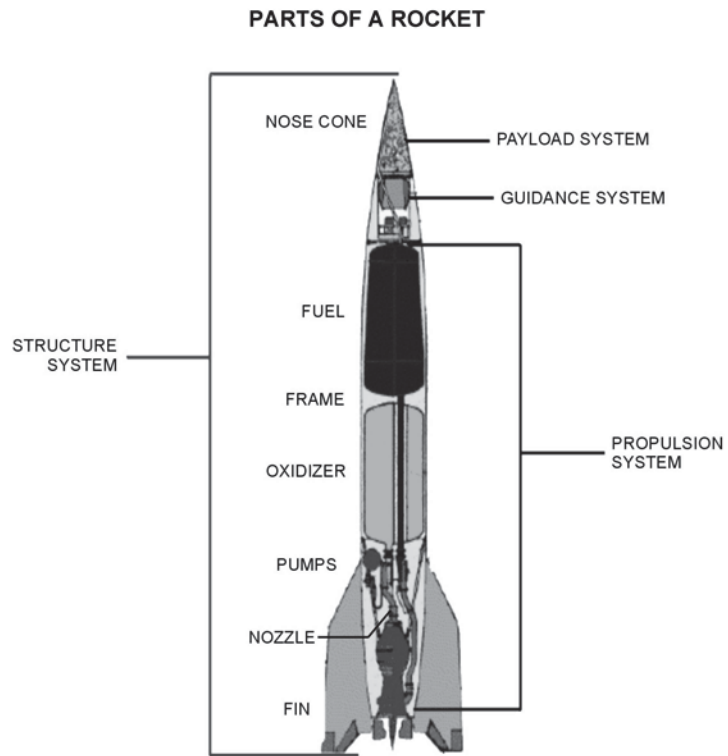
Knowing the parts of a rocket will help cadets understand how rockets are constructed. Identifying the parts of a rocket will help cadets understand the components that make up the rocket, which may develop an interest in rocket technology that may lead to future aerospace opportunities in the Air Cadet Program.

INSTRUCTOR NOTES/REMARKS

N/A.

REFERENCES

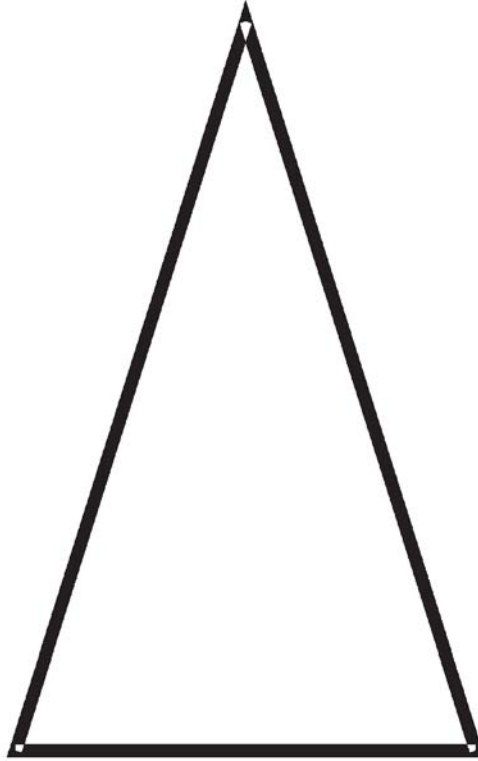
C3-106 NASA. (2006). *Rocket Parts*. Retrieved 22 February 2007, from <http://exploration.grc.nasa.gov/education/rocket/rockpart.html#>.



"NASA", *Parts of a Rocket*. Retrieved 23 April 2007, from <http://exploration.grc.nasa.gov/education/rocketpart.html#>

Figure 13F-1 Parts of a Rocket

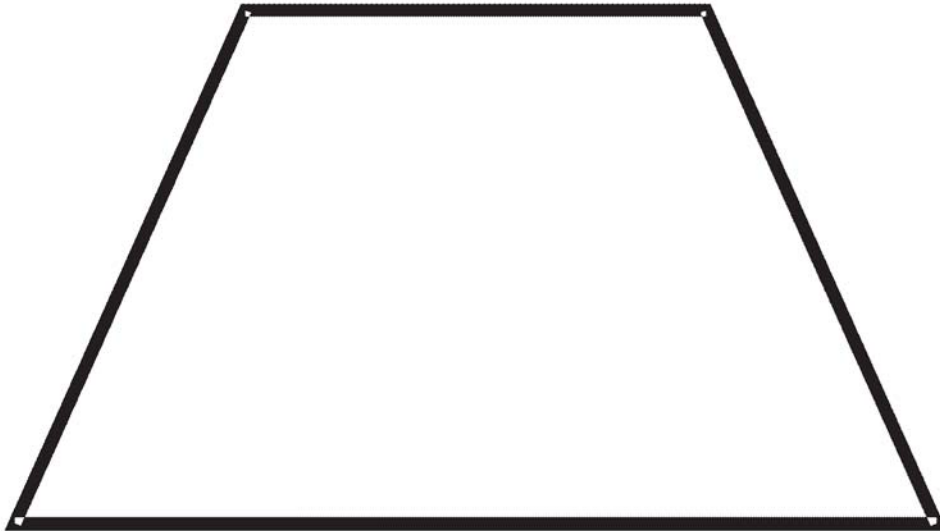
ROCKET PUZZLE PIECES



Director Cadets 3, 2006, Ottawa, ON: Department of National Defence

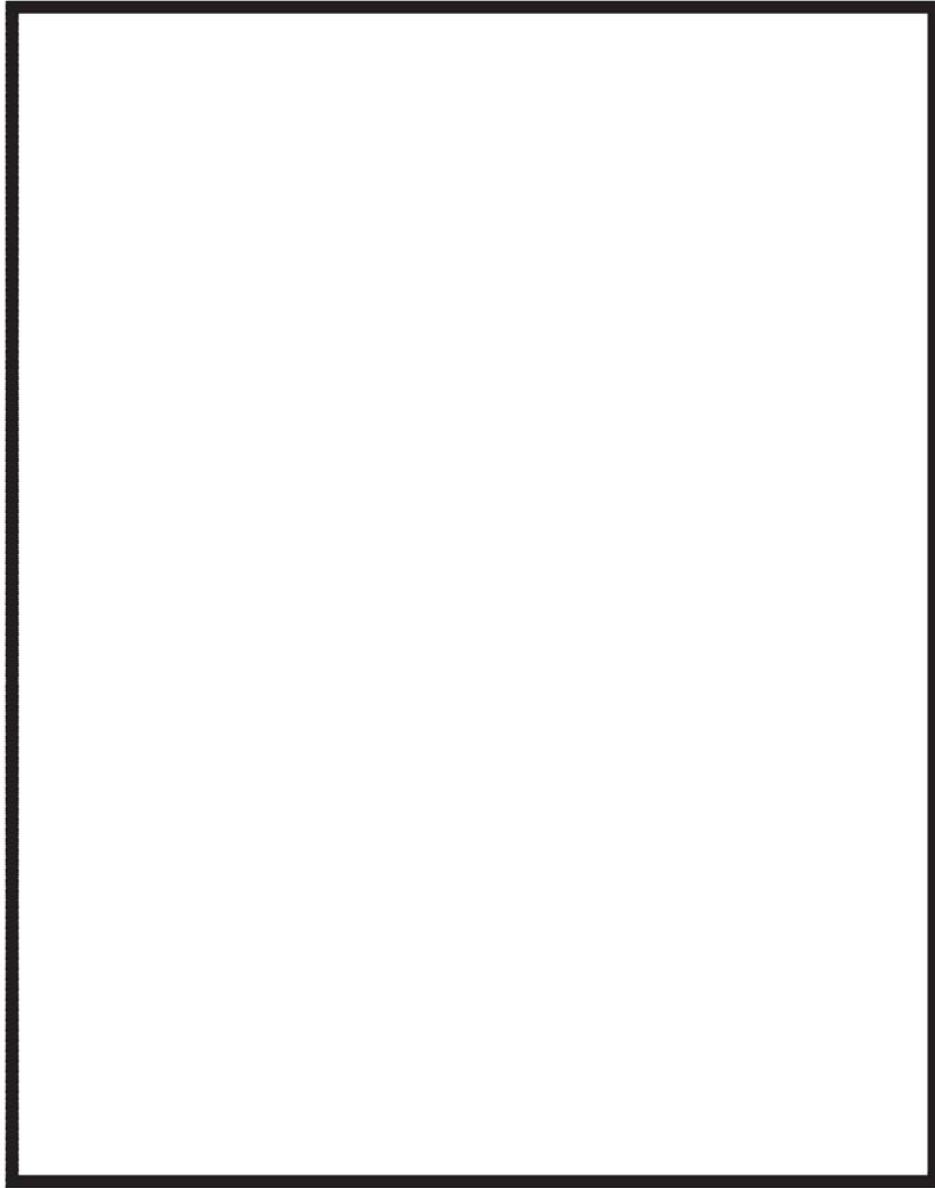
Figure 13G-1 Nose Cone (Part A)

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Chapter 13, Annex G



Director Cadets 3, 2006, Ottawa, ON: Department of National Defence

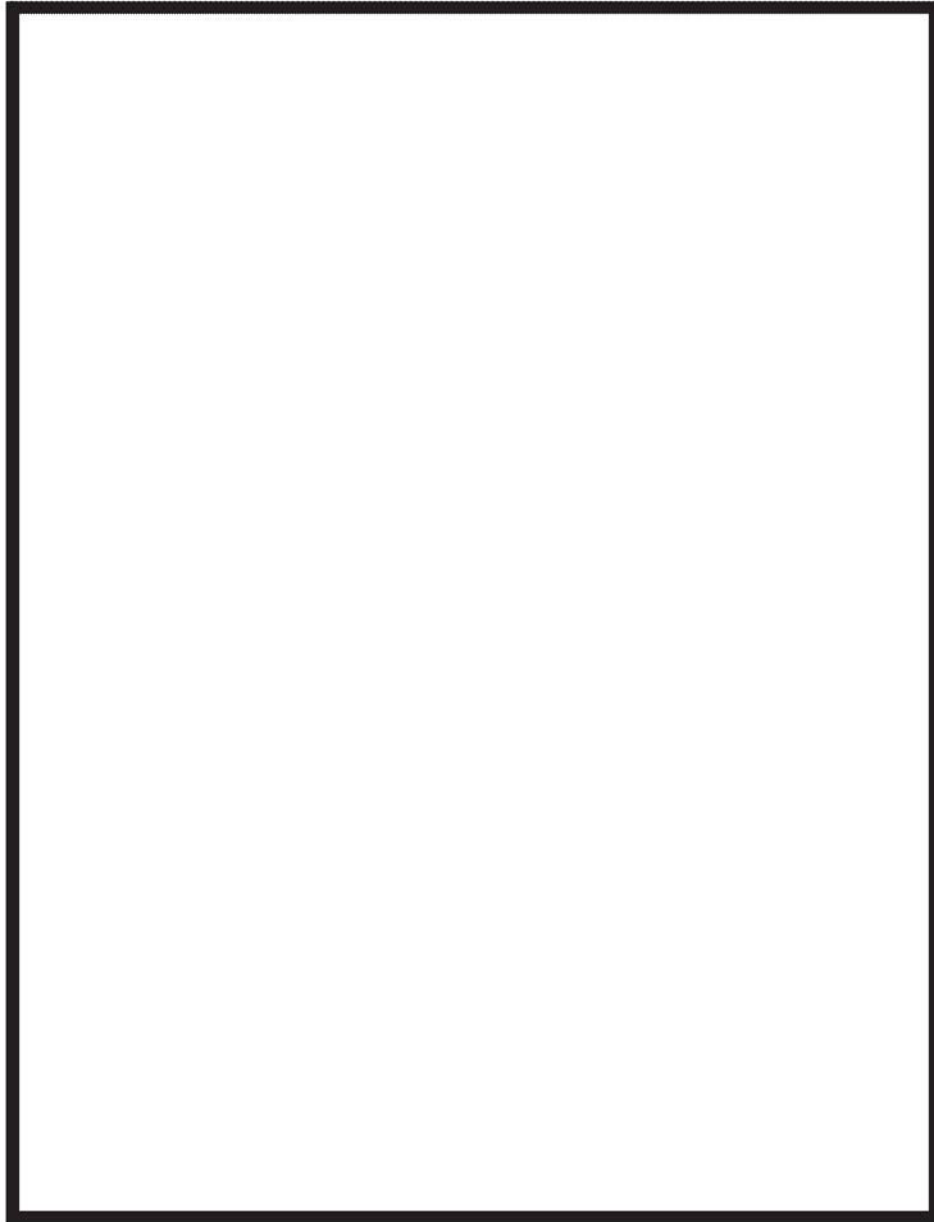
Figure 13G-2 Nose Cone (Part B)



Director Cadets 3, 2006, Ottawa, ON: Department of National Defence

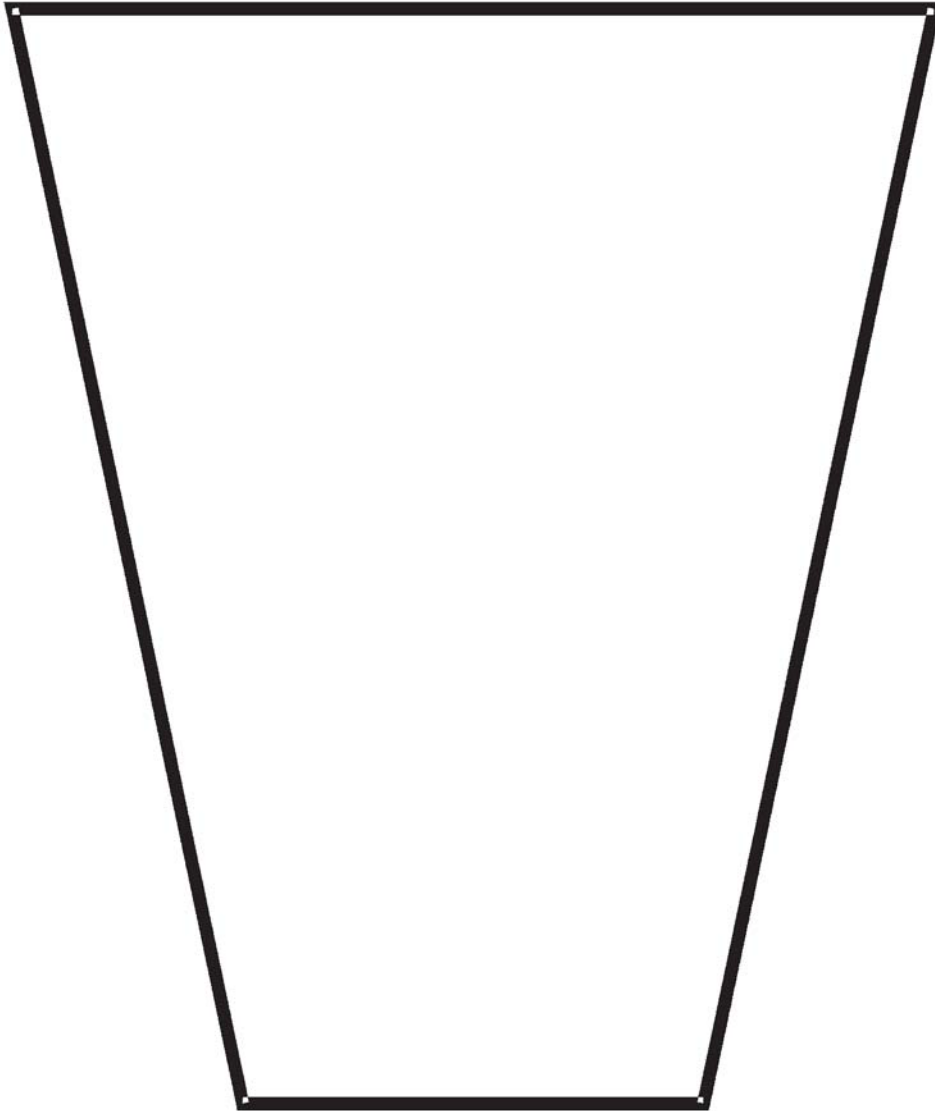
Figure 13G-3 Frame (Fuel Section)

A-CR-CCP-802/PF-001
Chapter 13, Annex G



Director Cadets 3, 2006, Ottawa, ON: Department of National Defence

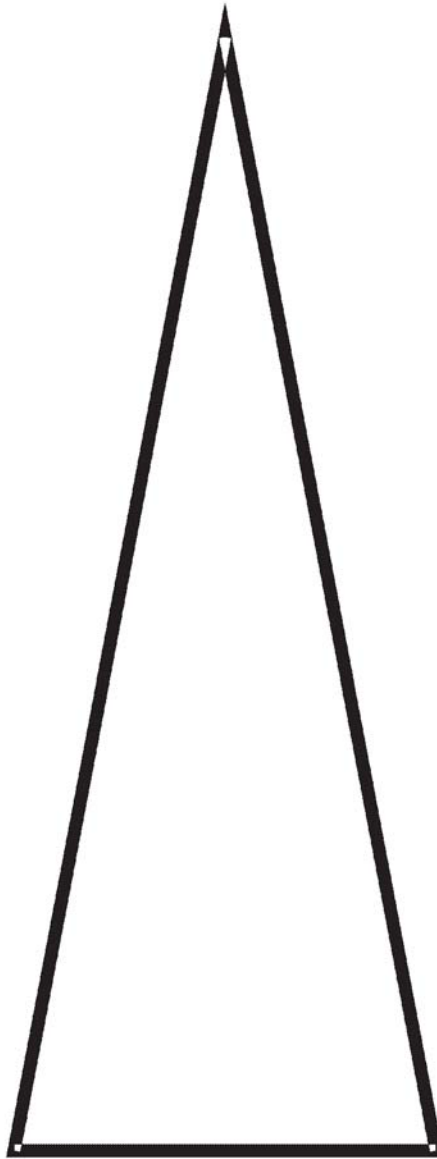
Figure 13G-4 Frame (Oxidizer Section)



Director Cadets 3, 2006, Ottawa, ON: Department of National Defence

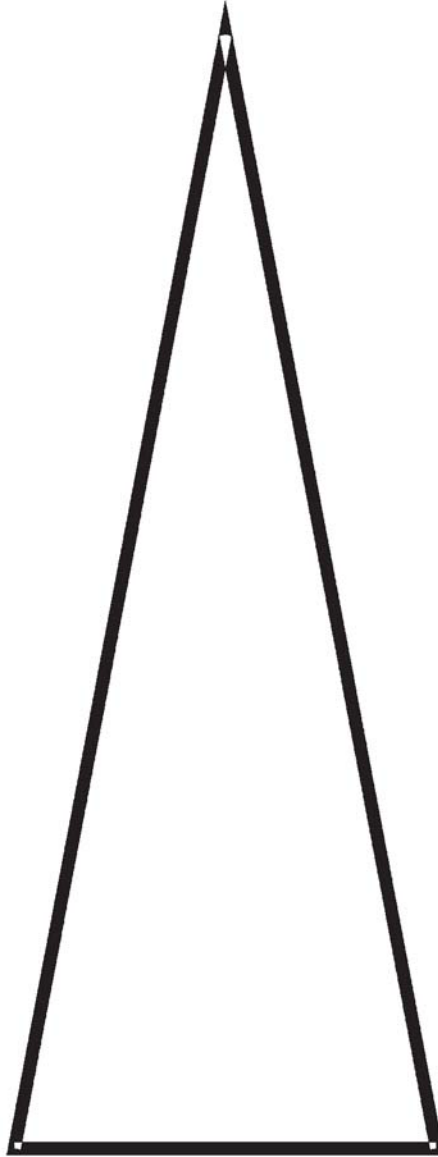
Figure 13G-5 Frame (Pumps and Nozzle Section 0)

A-CR-CCP-802/PF-001
Chapter 13, Annex G



Director Cadets 3, 2006, Ottawa, ON: Department of National Defence

Figure 13G-6 Fin (Section 1)



Director Cadets 3, 2006, Ottawa, ON: Department of National Defence

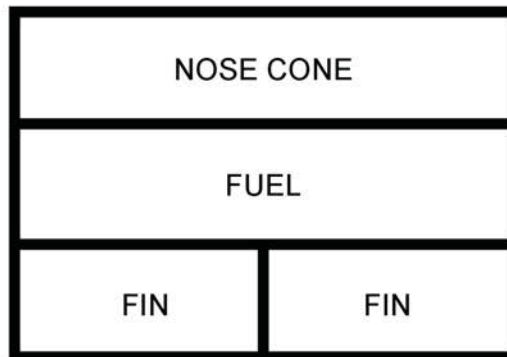
Figure 13G-7 Fin (Section 2)

A-CR-CCP-802/PF-001
Chapter 13, Annex G

PARTS OF A ROCKET: LABELS



Cut out the following boxes and figures to be used to label the rocket puzzle.



Director Cadets 3, 2006, Ottawa, ON: Department of National Defence

Figure 13G-8 Rocket Labels



GUIDANCE SYSTEM

"Clip Art", Microsoft Corporation, 2003, Santa Rosa: CA: Impresa Systems, Copyright 2000, Impresa Systems

Figure 13G-9 Guidance System

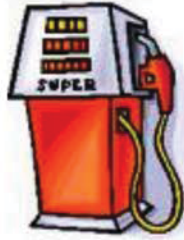


PAYLOAD SYSTEM

"Clip Art", Microsoft Corporation, 2003, Santa Rosa: CA: Impresa Systems, Copyright 2000, Impresa Systems

Figure 13G-10 Payload

A-CR-CCP-802/PF-001
Chapter 13, Annex G



FUEL PUMP

"Google Images", New Philadelphia, Ohio, Fuel Pump. Retrieved 18 April 2007, from <http://www.neohiotravel.com/images/gaspump.gif>

Figure 13G-11 Fuel Pump



OXIDIZER

"Google Images", California State University, Oxidizer Label. Retrieved 18 April 2007, from <http://www.csudh.edu/oliver/chemdata/wamlabs/oxidizer.jpg>

Figure 13G-12 Oxidizer



NOZZLE

*"Google Images", Airwork Aviation Images, Engines. Retrieved 18 April 2007,
from <http://www.airwork-images.com/details.php?gid=278&sgid=&pid=456>*

Figure 13G-13 Nozzle

INSTRUCTIONAL TECHNIQUES – ASSESSMENT FORM

Cadet's Name: _____

Flight: _____

Lesson Topic: _____

CRITERIA	COMMENTS	Incomplete	Completed With Difficulty	Completed Without Difficulty
PREPARATION				
Selected a lesson location.				
Set up the lesson location.				
Used a lesson plan.				
Selected an appropriate method(s) of instruction.				
Reviewed previous lesson material.				
INTRODUCTION				
Stated what the cadets will learn.				
Stated why it is important.				
Described where the knowledge/skill will be applied.				
BODY				
Applied the principles of instruction. (interest, comprehension, emphasis, participation, accomplishment and confirmation)				
Selected an appropriate instructional aid(s).				

CRITERIA	COMMENTS	Incomplete	Completed With Difficulty	Completed Without Difficulty
END OF LESSON CONFIRMATION				
Used questions/activity to confirm knowledge or skills.				
CONCLUSION				
Summarized the lesson.				
Re-motivated the cadets.				
Described the next lesson.				
EFFECTIVE-SPEAKING TECHNIQUES				
Applied the elements of voice control. (pitch, tone, volume, speed, pause and articulation)				
Used appropriate body language.				
Maintaining appropriate dress and deportment.				
QUESTIONING TECHNIQUES				
Choose appropriate types of questions.				
Applied the questioning sequence. (pose, pause, pounce, ponder and praise)				
FEEDBACK				

 Assessor's Signature

 Date

 Cadet's Signature

LIST OF TOPICS

1. Your personal involvement within the cadet squadron.
2. One fun event in which you took part at a Cadet Summer Training Centre.
3. One subject or topic area you would like to see added to/expanded on in the current training program.
4. One goal you have set or attained while in cadets.
5. Where you see yourself within the squadron in the future.
6. One fun event in which you took part with the squadron.
7. Your first night as a cadet.
8. Your first trip with the squadron.
9. Your first visit to the gliding centre.
10. Why you joined cadets.

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VERBAL PRESENTATION – FEEDBACK FORM

Name: _____ Date: _____

Length: 1 min Start: _____ End: _____ Total: _____

Criteria	Comments	Yes	No
Introduction			
Body			
Conclusion			
Voice			
Body Language			
Dress & Deportment			
Presentation Aid(s)			
Comments:			
STRENGTHS		AREAS FOR IMPROVEMENT	

 Instructor's Signature

 Cadet's Signature

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THE LESSON PLAN

The lesson plan is a way for the instructor to organize the lesson and summarize information included in the lesson specification, the IG and their personal ideas. Lesson plans provide a set of detailed directions for delivering one or more periods of instruction.

Part	Purpose
1. Introduction	Builds the cadets' interest and motivation.
2. Body	Presents and explains each TP.
3. End of Lesson Confirmation	Confirms cadets' comprehension of the lesson.
4. Conclusion	Summarizes key points and identifies future lessons.

INTRODUCTION

The introduction is the instructor's first verbal interaction with the cadets. It should capture the cadets' interest. The following should be included in the introduction of a lesson plan:

- **What.** A description of what the cadets will be expected to accomplish at the end of the lesson.
- **Why.** A description of how and where the lesson fits into the Cadet Program.
- **Where.** A description of why it is important for the cadets to achieve the objectives.



Read the "Objective" and "Importance" paragraphs in the IG for help in writing the introduction of the lesson plan.

BODY

The body of the lesson plan is where the content is presented, explained and supported. Each TP directs the instructor and the cadets.

Each TP in the lesson includes:

- **Introduction.** Briefly introduce the content to be taught during the TP.
- **Teaching Method.** Identifies which teaching method has been chosen for the given TP.
- **Lesson Content.** Presents the lesson content in a clear and logical order, from easy to difficult or known to unknown.
- **Confirmation.** Confirmation of the TP may be oral questions, games, role-play or an in-class or practical activity. Instructional guides offer suggestions on how to confirm TPs. Instructors may choose to use those confirmation suggestions or develop their own.

END OF LESSON CONFIRMATION

The lesson plan should outline procedures to be used to confirm the learning of the TP. End of lesson confirmations are carried out to ensure that the cadets have understood the whole lesson and that any weaknesses in performance are identified so they may be corrected.

Confirmation activities are based on the lesson objectives. The end of lesson confirmation may be oral questions, games, role-play or an in-class or practical activity. IGs offer suggestions for how to conduct end of lesson confirmations. Instructors may choose to use those confirmation suggestions or develop their own.

CONCLUSION

The conclusion of a lesson allows the instructor to give a summary of key points and link them to the coming lessons and their practical use.

- **A Summary of Important Points and Any Weak Areas.** The summary reviews the main TPs. The depth of the summary will be determined by the lesson objectives and the results of the cadets' end of lesson confirmation/test. If the cadets achieved the objectives successfully, the summary may be brief. If they experienced some difficulties, the instructor should summarize them here and indicate how the issue will be addressed.
- **Re-Motivation Statement.** The re-motivation statement restates the importance of the lesson (the "why") and re-motivates the cadets. The instructor should also take this time to give an overview of the next lesson and any precautions the cadets should be aware of when using the knowledge they have gained in a practical setting.



Read the "Closing Statement" paragraph in the IG for help in writing the conclusion of the lesson plan.

DRILL LESSON PLAN

EO #:		Title of the EO:	
Instructor:		Location:	Total Time: min
TIME	REVIEW		NOTES
	PO/EO: ENABLING OBJECTIVE:		
TIME	INTRODUCTION		NOTES
	What: Why: Where:		
TIME	BODY		NOTES
	TP 1: (First Movement) Formation:		
	Confirm TP 1:		

PLAN A DRILL LESSON CHECKLIST

PREPARATION	NOTES
<p>Have you:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Selected an appropriate squad formation? <input type="checkbox"/> Written a lesson plan? 	
INTRODUCTION	
<p>Does your introduction:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Review previous lesson material? <input type="checkbox"/> State what the cadets will learn? <input type="checkbox"/> Describe why the movement is important to learn? <input type="checkbox"/> Describe where and when the movement can be used? <input type="checkbox"/> Describe how the cadets will be assessed? 	
BODY	
<p>Does the body of your lesson:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Demonstrate the complete movement with the instructor calling the time? <input type="checkbox"/> Explain the movement? <input type="checkbox"/> Demonstrate and explain the first part of the movement (Squad 1)? <input type="checkbox"/> Permit practice of the first part of the movement (collectively, individually, collectively)? <input type="checkbox"/> Teach the second and each subsequent movement following the sequence described above? <input type="checkbox"/> Permit practice of the complete movement with: <ul style="list-style-type: none"> <input type="checkbox"/> the instructor calling the time; <input type="checkbox"/> the cadets calling the time; and <input type="checkbox"/> the cadets judging the time? <input type="checkbox"/> Confirm each TP? <input type="checkbox"/> Include two complete demonstrations? 	
END OF LESSON CONFIRMATION	
<ul style="list-style-type: none"> <input type="checkbox"/> Did you conduct an end of lesson confirmation? 	
CONCLUSION	
<p>Does your conclusion:</p>	

<ul style="list-style-type: none"><input type="checkbox"/> Restate the movement taught and where or when it will be used?<input type="checkbox"/> Re-motivate the cadets by:<ul style="list-style-type: none"><input type="checkbox"/> comment on the cadets' progress; and<input type="checkbox"/> re-state why the drill movement just learned is important?<input type="checkbox"/> Describe the next lesson?	
---	--

LIST OF APPROVED 15-MINUTE DRILL TOPICS

Teach the movement of attention from stand at ease, and stand at ease from attention (M108.01 [Adopt the Positions of Attention, Stand at Ease and Stand Easy, A-CR-CCP-801/PG-001, Chapter 4, Section 8 and A-CR-CCP-801/PF-001, Chapter 8, Section 1]).

Teach the movement of stand easy from stand at ease, and stand at ease from stand easy (M108.01 [Adopt the Positions of Attention, Stand at Ease and Stand Easy, A-CR-CCP-801/PG-001, Chapter 4, Section 8 and A-CR-CCP-801/PF-001, Chapter 8, Section 1]).

Teach a salute to the front (M108.02 [Execute a Salute at the Halt Without Arms, A-CR-CCP-801/PG-001, Chapter 4, Section 8 and A-CR-CCP-801/PF-001, Chapter 8, Section 2]).

Teach a salute to the right (left) (M108.02 [Execute a Salute at the Halt Without Arms, A-CR-CCP-801/PG-001, Chapter 4, Section 8 and A-CR-CCP-801/PF-001, Chapter 8, Section 2]).

Teach the right turn at the halt (M108.03 [Execute Turns at the Halt, A-CR-CCP-801/PG-001, Chapter 4, Section 8 and A-CR-CCP-801/PF-001, Chapter 8, Section 3]).

Teach the left turn at the halt (M108.03 [Execute Turns at the Halt, A-CR-CCP-801/PG-001, Chapter 4, Section 8 and A-CR-CCP-801/PF-001, Chapter 8, Section 3]).

Teach the about turn at the halt (M108.03 [Execute Turns at the Halt, A-CR-CCP-801/PG-001, Chapter 4, Section 8 and A-CR-CCP-801/PF-001, Chapter 8, Section 3]).

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MODIFIED LESSON INSTRUCTIONS AND INSTRUCTIONAL GUIDES – MOVEMENT OF ATTENTION FROM STAND AT EASE, AND STAND AT EASE FROM ATTENTION

A-CR-CCP-801/PG-001

EO M108.01 – ADOPT THE POSITIONS OF ATTENTION, STAND AT EASE, AND STAND EASY

1. **Performance.** Adopt the Positions of Attention, Stand at Ease, and Stand Easy.
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, in favourable weather, an outdoor parade square.
3. **Standard.** In accordance with A-PD-201-000/PT-000, the cadet shall perform the following individual drill movements:
 - a. attention from stand at ease; and
 - b. stand at ease from attention.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain and demonstrate the movement of attention from stand at ease and allow cadets to practice.	Demonstration and Performance	5 min	A0-002 (pp. 2-2 to 2-8)
TP2	Explain and demonstrate the movement of stand at ease from attention and allow cadets to practice.	Demonstration and Performance	5 min	A0-002 (pp. 2-2 to 2-8)

5. **Time**
 - a. Introduction/Conclusion: 5 min
 - b. Demonstration and Performance: 10 min
 - c. Total: 15 min
6. **Substantiation.** The demonstration-performance method was chosen to allow cadets to participate in supervised exploration of practical instructional material. This method provides the instructor the opportunity to introduce the subject matter, demonstrate and explain procedures, and supervise the cadets while they imitate the skill. This method appeals to all learning styles.
7. **References.** A0-002 A-PD-201-000/PT-000 DHH 3-2. (2001). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.
8. **Training Aids.** Assistant instructors as required.
9. **Learning Aids.** N/A.

A-CR-CCP-801/PG-001

10. **Test Details.** There is no formal assessment of this EO. Instructors will confirm the cadets' ability to perform the movements during the end of lesson check, and ongoing feedback will be provided during future drill practices, weekly parade nights, and ceremonial parades.
11. **Remarks.** N/A.

A-CR-CCP-801/PF-001



**COMMON TRAINING
PROFICIENCY LEVEL ONE
INSTRUCTIONAL GUIDE**



SECTION 1

EO M108.01 – ADOPT THE POSITIONS OF ATTENTION, STAND AT EASE AND STAND EASY

Total Time: 15 min

PREPARATION

PRE-LESSON INSTRUCTIONS

A complete list of resources needed for the instruction of this EO is located at Chapter 4 of the QSP. Specific uses for said stores are identified throughout the Instructional Guide, within the teaching point for which they are required.

Prior to instructing this lesson the instructor shall:

- review the lesson content, and become familiar with the material; and
- select the most effective squad formation for the lesson being taught. A squad may be in a single rank, hollow square or semi-circle for elementary drill instruction. (Note: All cadets **must** be able to fully observe all demonstrations and explanations.)

PRE-LESSON ASSIGNMENT

N/A.

APPROACH

This lesson will be presented using the demonstration and performance method. The demonstration and performance method was chosen to allow cadets to participate in supervised exploration of practical instructional material. This method provides the instructor the opportunity to introduce the subject matter, demonstrate and explain procedures, and supervise the cadets while they imitate the skill. This method appeals to all learning styles.



The instructor shall develop and use a vocabulary of short, concise words to impress on the squad that the movements must be performed smartly. For example, the words “crack”, “drive”, “seize” and “grasp” suggest the degree of smartness required. Profanity or personal sarcasm shall never be used.

INTRODUCTION

REVIEW

N/A.

A-CR-CCP-801/PF-001

OBJECTIVES

By the end of this lesson the cadet shall be expected to adopt the positions of attention and stand at ease.

IMPORTANCE

As members of the Canadian Cadet Movement (CCM) cadets will be required to perform drill movements at a competent level, developing sharpness, esprit de corps, physical coordination, and alertness. These movements will be executed with ease and without hesitation. Ensuring that the cadets efficiently move together as one will promote discipline, alertness, precision, pride, steadiness, and cohesion. This develops the basis of teamwork that the CCM depends on.

Teaching Point 1

Adopting the Position of Attention From Stand at Ease

Time: 5 min

Method: Demonstration and Performance



Instructors are reminded that they are to present the example with regards to drill, from the moment they step onto the parade square. Proper drill movements, combined with a professional demeanour, are of paramount importance, and must be exemplified throughout the period of instruction.

DEMONSTRATE THE COMPLETE MOVEMENT WITH TIMING

The instructor shall provide a complete demonstration of the drill movement, with timing. A practiced assistant instructor may carry out this demonstration.

The demonstration shall be provided from various vantage points, as required.

DEMONSTRATE FIRST PART OF MOVEMENT (FIRST NUMBER)



For ease of instruction, drill commands have been broken down into individual movements, or numbers. The instructor(s) shall demonstrate and explain each number.

In order to adopt the position of attention from stand at ease, the cadet shall:

On the command ATTENTION BY NUMBERS, SQUAD – ONE, bend the left knee and shift the balance to the right foot.

PRACTICE THE SQUAD ON THE FIRST MOVEMENT

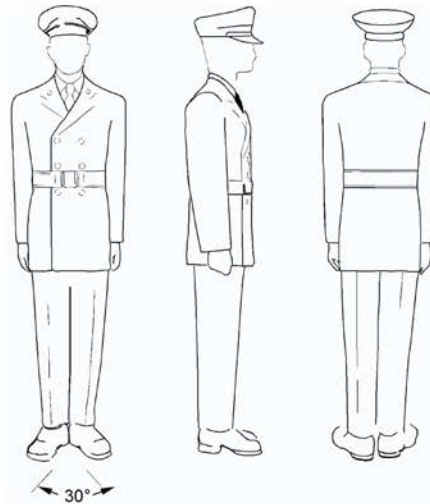
Practice the squad on the first movement collectively, individually and collectively.

DEMONSTRATE AND EXPLAIN THE SECOND PART OF THE MOVEMENT

On the command SQUAD – TWO:

1. straighten the left leg in double time, place the foot smartly on the ground, toe touching first, followed by the heel, and with heels aligned; and
2. simultaneously, with a quick motion, bring the arms and hands to the position of attention.

A-CR-CCP-801/PF-001



A-PD-201-000/PT-000, *The Canadian Forces Manual of Drill and Ceremonial, 2001*

Figure 8-1-1 The Position of Attention



A-PD-201-000/PT-000, *The Canadian Forces Manual of Drill and Ceremonial, 2001*

Figure 8-1-2 Fists at Position of Attention



Constant checking and correcting of all faults is essential. Faults shall be corrected immediately after they occur.

GIVE TWO COMPLETE AND FINAL DEMONSTRATIONS

On the command ATTEN – TION, combine the two movements. The timing is called as “one.”

The instructor(s) shall provide a full demonstration and allow time for practice.

CONFIRMATION OF TEACHING POINT 1

Cadets will adopt the position of attention as a squad.

A-CR-CCP-801/PF-001

Teaching Point 2

Adopting the Position of Stand at Ease From Attention

Time: 5 min

Method: Demonstration and Performance

DEMONSTRATE THE COMPLETE MOVEMENT WITH TIMING

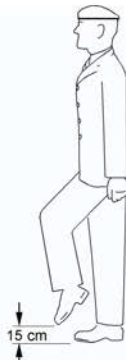
The position of standing at ease is an intermediate position between attention and standing easy. It allows no relaxation, but can be maintained without strain for a longer time than the position of attention.

DEMONSTRATE FIRST PART OF MOVEMENT (FIRST NUMBER)



For ease of instruction, drill commands have been broken down into individual movements, or numbers. The instructor(s) shall demonstrate and explain each number.

On the command STAND AT EASE BY NUMBERS, SQUAD – ONE, the cadet shall bend the left knee.



A-PD-201-000/PT-000, The Canadian Forces Manual of Drill and Ceremonial, 2001

Figure 8-1-3 Squad One – Stand at Ease

PRACTICE THE SQUAD ON THE FIRST MOVEMENT

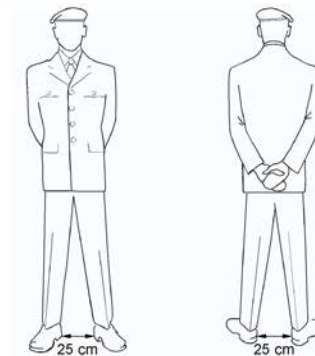
Practice the squad on the first movement collectively, individually and collectively.

DEMONSTRATE AND EXPLAIN THE SECOND PART OF THE MOVEMENT (SECOND NUMBER)

On the command SQUAD – TWO, the cadet shall:

1. carry the left foot to the left, straightening it in double time, and place it smartly flat on the ground with the inside of the heels 25 cm apart;
2. simultaneously, with a quick motion, bring the arms behind the back, stretched to their full extent, and place the back of the right hand in the palm of the left, with thumbs crossed right over left, the fingers together and extended; and
3. balance the body with the weight evenly distributed on both feet.

A-CR-CCP-801/PF-001



A-PD-201-000/PT-000, *The Canadian Forces Manual of Drill and Ceremonial, 2001*

Figure 8-1-4 The Position of Stand at Ease

PRACTICE THE SQUAD ON THE SECOND MOVEMENT

Practice the squad on the second movement collectively, individually and collectively.

GIVE TWO COMPLETE AND FINAL DEMONSTRATIONS

On the command STAND AT – EASE, combine the two movements. The timing is “one.”

The instructor(s) shall provide a full demonstration and allow time for practice.



Constant checking and correcting of all faults is essential. Faults shall be corrected immediately after they occur.

CONFIRMATION OF TEACHING POINT 2

Cadets will adopt the position of stand at ease as a squad.

END OF LESSON CONFIRMATION

The confirmation for this lesson should consist of the cadets, as a squad, practicing the positions of attention, stand at ease and stand easy, and should emphasize movements that cadets showed difficulty with during the class.

Practice the complete movement, with the:

- **instructor** calling the time;
- **squad** calling the time; and
- squad **judging** the time.

A-CR-CCP-801/PF-001

CONCLUSION

HOMEWORK/READING/PRACTICE

Drill movements are skills that must be practiced individually, in order to make the cadet more proficient as a member of a unit. Cadets are encouraged to practice the movements, as opportunities are made available. Ongoing feedback will be provided, and should be heeded during any drill practice.

METHOD OF EVALUATION

In accordance with A-PD-201-000/PT-000, *The Canadian Forces Manual of Drill and Ceremonial*, the cadet shall participate in an Annual Ceremonial Review (ACR) parade. This movement will be used in preparation for, and in the execution of, the ACR parade.

CLOSING STATEMENT

The hallmarks of cadet drill are efficiency, precision, and dignity. These qualities are developed through self-discipline and practice. They lead to unit pride and cohesion. Good drill that is well rehearsed, closely supervised and precise, is an exercise in obedience and alertness. It sets the standard for the execution of any duty, both for the individual and the unit, and builds a sense of confidence between commander and subordinate that is essential to high morale. The personal qualities developed on the parade ground must be maintained in all aspects of life.

INSTRUCTOR NOTES/REMARKS

N/A.

REFERENCES

A0-002 A-PD-201-000/PT-000, DHH 3-2. (2001). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.

**MODIFIED LESSON INSTRUCTIONS AND INSTRUCTIONAL GUIDES – MOVEMENT
OF STAND EASY FROM STAND AT EASE, AND STAND AT EASE FROM STAND EASY**

A-CR-CCP-801/PG-001

EO M108.01 – ADOPT THE POSITIONS OF ATTENTION, STAND AT EASE, AND STAND EASY

1. **Performance.** Adopt the Positions of Attention, Stand at Ease, and Stand Easy.
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, in favourable weather, an outdoor parade square.
3. **Standard.** In accordance with A-PD-201-000/PT-000, the cadet shall perform the following individual drill movements:
 - a. stand easy from stand at ease; and
 - b. stand at ease from stand easy

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain and demonstrate the movement of stand easy from stand at ease and allow cadets to practice.	Demonstration and Performance	5 min	A0-002 (pp. 2-2 to 2-8)
TP2	Explain and demonstrate the movement of stand at ease from stand easy and allow cadets to practice.	Demonstration and Performance	5 min	A0-002 (pp. 2-2 to 2-8)

5. **Time**
 - a. Introduction/Conclusion: 5 min
 - b. Demonstration and Performance: 10 min
 - c. Total: 15 min
6. **Substantiation.** The demonstration-performance method was chosen to allow cadets to participate in supervised exploration of practical instructional material. This method provides the instructor the opportunity to introduce the subject matter, demonstrate and explain procedures, and supervise the cadets while they imitate the skill. This method appeals to all learning styles.
7. **References.** A0-002 A-PD-201-000/PT-000 DHH 3-2. (2001). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.
8. **Training Aids.** Assistant instructors as required.
9. **Learning Aids.** N/A.

A-CR-CCP-801/PG-001

10. **Test Details.** There is no formal assessment of this EO. Instructors will confirm the cadets' ability to perform the movements during the end of lesson check, and ongoing feedback will be provided during future drill practices, weekly parade nights, and ceremonial parades.
11. **Remarks.** N/A.

A-CR-CCP-801/PF-001



**COMMON TRAINING
PROFICIENCY LEVEL ONE
INSTRUCTIONAL GUIDE**



SECTION 1

EO M108.01 – ADOPT THE POSITIONS OF ATTENTION, STAND AT EASE AND STAND EASY

Total Time: 15 min

PREPARATION

PRE-LESSON INSTRUCTIONS

A complete list of resources needed for the instruction of this EO is located at Chapter 4 of the QSP. Specific uses for said stores are identified throughout the Instructional Guide, within the teaching point for which they are required.

Prior to instructing this lesson the instructor shall:

- review the lesson content, and become familiar with the material; and
- select the most effective squad formation for the lesson being taught. A squad may be in a single rank, hollow square or semi-circle for elementary drill instruction. (Note: All cadets **must** be able to fully observe all demonstrations and explanations.)

PRE-LESSON ASSIGNMENT

N/A.

APPROACH

This lesson will be presented using the demonstration and performance method. The demonstration and performance method was chosen to allow cadets to participate in supervised exploration of practical instructional material. This method provides the instructor the opportunity to introduce the subject matter, demonstrate and explain procedures, and supervise the cadets while they imitate the skill. This method appeals to all learning styles.



The instructor shall develop and use a vocabulary of short, concise words to impress on the squad that the movements must be performed smartly. For example, the words “crack”, “drive”, “seize” and “grasp” suggest the degree of smartness required. Profanity or personal sarcasm shall never be used.

INTRODUCTION

REVIEW

N/A.

A-CR-CCP-801/PF-001

IMPORTANCE

As members of the Canadian Cadet Movement (CCM) cadets will be required to perform drill movements at a competent level, developing sharpness, esprit de corps, physical coordination, and alertness. These movements will be executed with ease and without hesitation. Ensuring that the cadets efficiently move together as one will promote discipline, alertness, precision, pride, steadiness, and cohesion. This develops the basis of teamwork that the CCM depends on.

Teaching Point 1

Adopting the Position of Stand Easy

Time: 5 min

Method: Demonstration and Performance

DEMONSTRATE THE COMPLETE MOVEMENT WITH TIMING



Instructors are reminded that they are to present the example with regards to drill, from the moment they step onto the parade square. Proper drill movements, combined with a professional demeanour, are of paramount importance, and must be exemplified throughout the period of instruction.

DEMONSTRATE THE COMPLETE MOVEMENT WITH TIMING

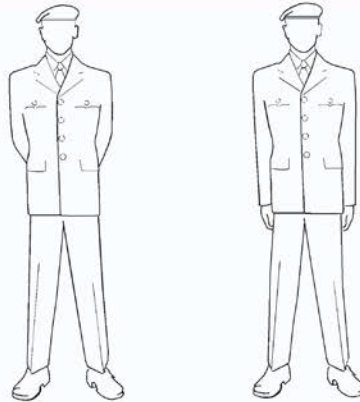
The instructor shall provide a complete demonstration of the drill movement, with timing. A practiced assistant instructor may carry out this demonstration.

The demonstration shall be provided from various vantage points, as required.

The position of stand easy is ordered when it is desirable to permit cadets to relax. This command is only given when the squad is in the position of stand at ease.

On the command STAND – EASY, the cadet shall:

1. close the hands and bring the arms to the position of attention; and
2. relax.



A-PD-201-000/PT-000, The Canadian Forces Manual of Drill and Ceremonial, 2001

Figure 8-1-1 Stand Easy From Stand at Ease

A-CR-CCP-801/PF-001



When standing easy, the cadet may, with permission, move all but the feet and adjust clothing and equipment, but shall not talk.

PRACTICE THE COMPLETE MOVEMENT WITH TIMING

Practice the squad on the first movement collectively, individually and collectively.

GIVE TWO COMPLETE AND FINAL DEMONSTRATIONS

Combine the preceding movements with timing. The instructor(s) shall provide a full demonstration and allow time for practice.



Constant checking and correcting of all faults is essential. Faults shall be corrected immediately after they occur.

CONFIRMATION OF TEACHING POINT 1

Cadets will adopt the position of stand easy as a squad.

Teaching Point 2

Adopting the Position of Stand at Ease From Standing Easy

Time: 5 min

Method: Demonstration and Performance

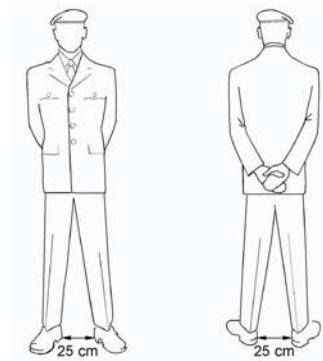
DEMONSTRATE THE COMPLETE MOVEMENT WITH TIMING

The instructor shall provide a complete demonstration of the drill movement, with timing. A practiced assistant instructor may carry out this demonstration.

The demonstration shall be provided from various vantage points, as required.

In order to adopt the position of stand at ease from easy the cadet shall, on the cautionary command SQUAD (or formation title), assume the position of stand at ease.

A-CR-CCP-801/PF-001



A-PD-201-000/PT-000, *The Canadian Forces Manual of Drill and Ceremonial, 2001*

Figure 8-1-2 The Position of Stand at Ease



This teaching point is best taught as a group practice to ensure adherence to timings and togetherness of the squad.



Constant checking and correcting of all faults is essential. Faults shall be corrected immediately after they occur.

CONFIRMATION OF TEACHING POINT 2

Cadets will adopt the position of stand at ease as a squad.

END OF LESSON CONFIRMATION

The confirmation for this lesson should consist of the cadets, as a squad, practicing the positions of attention, stand at ease and stand easy, and should emphasize movements that cadets showed difficulty with during the class.

Practice the complete movement, with the:

- **instructor** calling the time;
- **squad** calling the time; and
- squad **judging** the time.

A-CR-CCP-801/PF-001

CONCLUSION

HOMEWORK/READING/PRACTICE

Drill movements are skills that must be practiced individually, in order to make the cadet more proficient as a member of a unit. Cadets are encouraged to practice the movements, as opportunities are made available. Ongoing feedback will be provided, and should be heeded during any drill practice.

METHOD OF EVALUATION

In accordance with A-PD-201-000/PT-000, *The Canadian Forces Manual of Drill and Ceremonial*, the cadet shall participate in an Annual Ceremonial Review (ACR) parade. This movement will be used in preparation for, and in the execution of, the ACR parade.

CLOSING STATEMENT

The hallmarks of cadet drill are efficiency, precision, and dignity. These qualities are developed through self-discipline and practice. They lead to unit pride and cohesion. Good drill that is well rehearsed, closely supervised and precise, is an exercise in obedience and alertness. It sets the standard for the execution of any duty, both for the individual and the unit, and builds a sense of confidence between commander and subordinate that is essential to high morale. The personal qualities developed on the parade ground must be maintained in all aspects of life.

INSTRUCTOR NOTES/REMARKS

N/A.

REFERENCES

A0-002 A-PD-201-000/PT-000, DHH 3-2. (2001). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.

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MODIFIED LESSON INSTRUCTIONS AND INSTRUCTIONAL GUIDES – SALUTE TO THE FRONT

A-CR-CCP-801/PG-001

EO M108.02 – EXECUTE A SALUTE AT THE HALT WITHOUT ARMS

1. **Performance.** Execute a Salute at the Halt Without Arms.
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, in favourable weather, an outdoor parade square.
3. **Standard.** In accordance with A-PD-201-000/PT-000, the cadet shall execute salutes at the halt without arms, to the front.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain and demonstrate saluting to the front at the halt and allow cadets to practice.	Demonstration and Performance	10 min	A0-002 (pp. 2-10 to 2-12)

5. **Time**
 - a. Introduction/Conclusion: 5 min
 - b. Demonstration and Performance: 10 min
 - c. Total: 15 min
6. **Substantiation.** The demonstration-performance method was chosen to allow cadets to participate in supervised exploration of practical instructional material. This method provides the instructor the opportunity to introduce the subject matter, demonstrate and explain procedures, and supervise the cadets while they imitate the skill. This method appeals to all learning styles.
7. **References.** A0-002 A-PD-201-000/PT-000 DHH 3-2. (2001). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.
8. **Training Aids.** Assistant instructors as required.
9. **Learning Aids.** N/A.
10. **Test Details.** There is no formal assessment of this EO. Instructors will confirm the cadets' ability to perform the movements during the end of lesson check, and ongoing feedback will be provided during future drill practices, weekly parade nights, and ceremonial parades.
11. **Remarks.** N/A.



COMMON TRAINING
PROFICIENCY LEVEL TWO
INSTRUCTIONAL GUIDE



SECTION 2

EO M108.02 – EXECUTE A SALUTE AT THE HALT WITHOUT ARMS

Total Time: 15 min

PREPARATION

PRE-LESSON INSTRUCTIONS

A complete list of resources needed for the instruction of this EO is located at Chapter 4 of the QSP. Specific uses for said stores are identified throughout the Instructional Guide, within the teaching point for which they are required.

Prior to instructing this lesson the instructor shall:

- review the lesson content, and become familiar with the material; and
- select the most effective squad formation for the lesson being taught. A squad may be in a single rank, hollow square or semi-circle for elementary drill instruction. (Note: All cadets **must** be able to fully observe all demonstrations and explanations.)

PRE-LESSON ASSIGNMENT

N/A.

APPROACH

This lesson will be presented using the demonstration and performance method. The demonstration and performance method was chosen to allow cadets to participate in supervised exploration of practical instructional material. This method provides the instructor the opportunity to introduce the subject matter, demonstrate and explain procedures, and supervise the cadets while they imitate the skill. This method appeals to all learning styles.



The instructor shall develop and use a vocabulary of short, concise words to impress on the squad that the movements must be performed smartly. For example, the words “crack”, “drive”, “seize” and “grasp” suggest the degree of smartness required. Profanity or personal sarcasm shall never be used.

INTRODUCTION

REVIEW

N/A.

A-CR-CCP-801/PF-001

OBJECTIVES

By the end of this lesson the cadet shall be expected to execute a salute at the halt without arms.

IMPORTANCE

As members of the Canadian Cadet Organization (CCO) cadets will be required to perform drill movements at a competent level, developing sharpness, esprit de corps, physical coordination, and alertness. These movements will be executed with ease and without hesitation. Ensuring that the cadets efficiently move together as one will promote discipline, alertness, precision, pride, steadiness, and cohesion. This develops the basis of teamwork that the CCO depends on.

Teaching Point 1

Execute a Salute to the Front

Time: 10 min

Method: Demonstration and Performance

DEMONSTRATE THE COMPLETE MOVEMENT WITH TIMING



Instructors are reminded that they are to present the example with regards to drill, from the moment they step onto the parade square. Proper drill movements, combined with a professional demeanour, are of paramount importance, and must be exemplified throughout the period of instruction.

The instructor shall provide a complete demonstration of the drill movement, with timing. A practiced assistant instructor may carry out this demonstration.

The demonstration shall be provided from various vantage points, as required.

The salute is given with the right hand. When physical incapacity or carrying of articles makes a salute with the right hand impracticable, compliments will be paid by turning the head and eyes to the left or right or standing to attention, as appropriate (see also A-PD-201-000/PT-000, Chapter 1, Section 2).

DEMONSTRATE FIRST PART OF MOVEMENT (FIRST NUMBER)

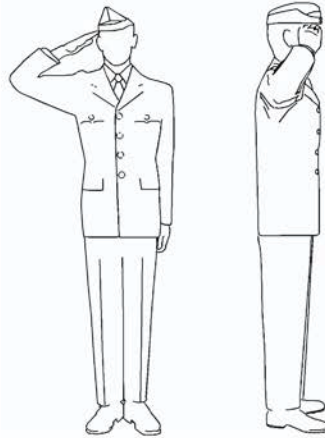


For ease of instruction, drill commands have been broken down into individual movements, or numbers. The instructor(s) shall demonstrate and explain each number.

On the command TO THE FRONT SALUTE BY NUMBERS, SQUAD – ONE, the cadet shall:

1. bend the right elbow and open the palm of the right hand as it passes the shoulder; and
2. force the right hand by its shortest route to the front of the headdress so that the:
 - a. palm of the hand is facing down;
 - b. thumb and fingers are fully extended and close together;
 - c. tip of the second finger is in line with the outside of the right eyebrow and touching the outside edge of the headdress or arm of glasses, if worn;
 - d. hand, wrist and forearm are in a straight line and at a 45-degree angle to the upper arm;

- e. elbow is in line with the shoulders; and
- f. upper arm is parallel to the ground.



A-PD-201-000/PT-000, The Canadian Forces Manual of Drill and Ceremonial, 2001

Figure 8-2-1 Saluting to the Front Without Arms

PRACTICE THE SQUAD ON THE FIRST MOVEMENT

Practice the squad on the first movement collectively, individually and collectively.



Constant checking and correcting of all faults is essential. Faults shall be corrected immediately after they occur.

DEMONSTRATE AND EXPLAIN THE SECOND PART OF THE MOVEMENT

On the command SQUAD – TWO, the hand is:

1. brought sharply to the position of attention by the shortest route, without slapping the thigh; and
2. closed after the forearm is lowered below shoulder level.

PRACTICE THE SQUAD ON THE SECOND MOVEMENT

Practice the squad on the second movement collectively, individually and collectively.

GIVE TWO COMPLETE AND FINAL DEMONSTRATIONS

On the command TO THE FRONT – SALUTE, the two movements are combined. The standard pause shall be observed between movements.

The instructor(s) shall provide a full demonstration and allow time for practice.

Note: When wearing headdress, other than a cap with a peak, the second finger is 2 cm above and in line with the outer tip of the right eyebrow.

A-CR-CCP-801/PF-001



Standard Pause: The standard pause between each movement is two beats in quick time. For example, on the command MOVE TO THE RIGHT IN FILE, RIGHT – TURN, the squad:

1. executes the first movement of the turn on the executive order and simultaneously calls out "ONE";
2. after completing the first movement, calls "TWO", "THREE" while observing the standard pause; and
3. when executing the final movement, calls out "ONE".

CONFIRMATION OF TEACHING POINT 1

Cadets will execute salutes to the front as a squad.

END OF LESSON CONFIRMATION

The cadets' participation in TP1 will serve as the confirmation of this lesson.

CONCLUSION

HOMEWORK/READING/PRACTICE

N/A.

METHOD OF EVALUATION

In accordance with A-PD-201-000/PT-000, *The Canadian Forces Manual of Drill and Ceremonial*, the cadet shall participate in an Annual Ceremonial Review (ACR) parade. This movement will be used in preparation for, and execution of, the ACR parade.

CLOSING STATEMENT

The hallmarks of cadet drill are efficiency, precision, and dignity. These qualities are developed through self-discipline and practice. They lead to unit pride and cohesion. Good drill, that is well rehearsed, closely supervised and precise, is an exercise in obedience and alertness. It sets the standard for the execution of any duty, both for the individual and the unit, and builds a sense of confidence between commander and subordinate that is essential to high morale. The personal qualities developed on the parade ground must be maintained in all aspects of life.

INSTRUCTOR NOTES/REMARKS

N/A.

REFERENCES

A0-002 A-PD-201-000/PT-000, DHH 3-2. (2001). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.

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MODIFIED LESSON INSTRUCTIONS AND INSTRUCTIONAL GUIDES – SALUTE TO THE RIGHT (LEFT)

A-CR-CCP-801/PG-001

EO M108.02 – EXECUTE A SALUTE AT THE HALT WITHOUT ARMS

1. **Performance.** Execute a Salute at the Halt Without Arms.
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, in favourable weather, an outdoor parade square.
3. **Standard.** In accordance with A-PD-201-000/PT-000, the cadet shall execute salutes at the halt without arms, to the left, and right.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain and demonstrate saluting to the left and right at the halt and allow cadets to practice.	Demonstration and Performance	10 min	A0-002 (pp. 2-10 to 2-12)

5. **Time**
 - a. Introduction/Conclusion: 5 min
 - b. Demonstration and Performance: 10 min
 - c. Total: 15 min
6. **Substantiation.** The demonstration-performance method was chosen to allow cadets to participate in supervised exploration of practical instructional material. This method provides the instructor the opportunity to introduce the subject matter, demonstrate and explain procedures, and supervise the cadets while they imitate the skill. This method appeals to all learning styles.
7. **References.** A0-002 A-PD-201-000/PT-000 DHH 3-2. (2001). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.
8. **Training Aids.** Assistant instructors as required.
9. **Learning Aids.** N/A.
10. **Test Details.** There is no formal assessment of this EO. Instructors will confirm the cadets' ability to perform the movements during the end of lesson check, and ongoing feedback will be provided during future drill practices, weekly parade nights, and ceremonial parades.
11. **Remarks.** N/A.



COMMON TRAINING
PROFICIENCY LEVEL TWO
INSTRUCTIONAL GUIDE



SECTION 2

EO M108.02 – EXECUTE A SALUTE AT THE HALT WITHOUT ARMS

Total Time: 15 min

PREPARATION

PRE-LESSON INSTRUCTIONS

A complete list of resources needed for the instruction of this EO is located at Chapter 4 of the QSP. Specific uses for said stores are identified throughout the Instructional Guide, within the teaching point for which they are required.

Prior to instructing this lesson the instructor shall:

- review the lesson content, and become familiar with the material; and
- select the most effective squad formation for the lesson being taught. A squad may be in a single rank, hollow square or semi-circle for elementary drill instruction. (Note: All cadets **must** be able to fully observe all demonstrations and explanations.)

PRE-LESSON ASSIGNMENT

N/A.

APPROACH

This lesson will be presented using the demonstration and performance method. The demonstration and performance method was chosen to allow cadets to participate in supervised exploration of practical instructional material. This method provides the instructor the opportunity to introduce the subject matter, demonstrate and explain procedures, and supervise the cadets while they imitate the skill. This method appeals to all learning styles.



The instructor shall develop and use a vocabulary of short, concise words to impress on the squad that the movements must be performed smartly. For example, the words “crack”, “drive”, “seize” and “grasp” suggest the degree of smartness required. Profanity or personal sarcasm shall never be used.

INTRODUCTION

REVIEW

N/A.

A-CR-CCP-801/PF-001

OBJECTIVES

By the end of this lesson the cadet shall be expected to execute a salute at the halt without arms.

IMPORTANCE

As members of the Canadian Cadet Organization (CCO) cadets will be required to perform drill movements at a competent level, developing sharpness, esprit de corps, physical coordination, and alertness. These movements will be executed with ease and without hesitation. Ensuring that the cadets efficiently move together as one will promote discipline, alertness, precision, pride, steadiness, and cohesion. This develops the basis of teamwork that the CCO depends on.

Teaching Point 1

Execute a Salute to the Right (Left)

Time: 10 min

Method: Demonstration and Performance

DEMONSTRATE THE COMPLETE MOVEMENT WITH TIMING



Instructors are reminded that they are to present the example with regards to drill, from the moment they step onto the parade square. Proper drill movements, combined with a professional demeanour, are of paramount importance, and must be exemplified throughout the period of instruction.

The instructor shall provide a complete demonstration of the drill movement, with timing. A practiced assistant instructor may carry out this demonstration.

The demonstration shall be provided from various vantage points, as required.

The salute is given with the right hand. When physical incapacity or carrying of articles makes a salute with the right hand impracticable, compliments will be paid by turning the head and eyes to the left or right or standing to attention, as appropriate (see also A-PD-201-000/PT-000, Chapter 1, Section 2).

DEMONSTRATE FIRST PART OF MOVEMENT (FIRST NUMBER)

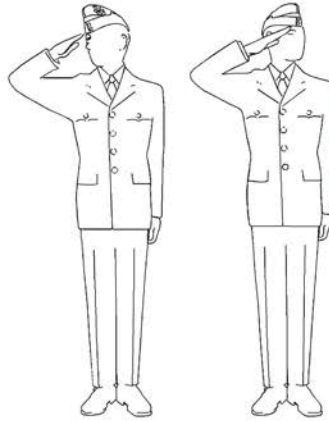


For ease of instruction, drill commands have been broken down into individual movements, or numbers. The instructor(s) shall demonstrate and explain each number.

On the command TO THE RIGHT (LEFT) SALUTE BY NUMBERS, SQUAD – ONE, saluting shall:

1. bend the right elbow and open the palm of the right hand as it passes the shoulder; and
2. force the right hand by its shortest route to the front of the headdress so that the:
 - a. palm of the hand is facing down;
 - b. thumb and fingers are fully extended and close together;
 - c. tip of the second finger is in line with the outside of the right eyebrow and touching the outside edge of the headdress or arm of glasses, if worn;
 - d. hand, wrist and forearm are in a straight line and at a 45 degree angle to the upper arm; and
 - e. upper arm is parallel to the ground.

3. the head and eyes shall be turned smartly to the right (left) as far as possible without straining, remembering the following:
 - a. when saluting to the left, the right hand, wrist and arm are brought further over to the left to the correct position in line with the outside edge of the right eyebrow; and
 - b. when saluting to the right, the arm is moved to the rear, with the tip of the second finger remaining in line with the outside edge of the right eyebrow.



A-PD-201-000/PT-000, The Canadian Forces Manual of Drill and Ceremonial, 2001

Figure 8-2-2 Saluting to the Right and Left

PRACTICE THE SQUAD ON THE FIRST MOVEMENT

Practice the squad on the first movement collectively, individually and collectively.



Constant checking and correcting of all faults is essential. Faults shall be corrected immediately after they occur.

DEMONSTRATE AND EXPLAIN THE SECOND PART OF THE MOVEMENT

On the command SQUAD – TWO, the hand is brought sharply to the position of attention, and simultaneously the head and eyes are turned smartly to the front.

PRACTICE THE SQUAD ON THE SECOND MOVEMENT

Practice the squad on the second movement collectively, individually and collectively.

GIVE TWO COMPLETE AND FINAL DEMONSTRATIONS

On the command TO THE RIGHT (LEFT) – SALUTE, the two movements are combined. The standard pause shall be observed between movements.

The instructor(s) shall provide a full demonstration and allow time for practice.

A-CR-CCP-801/PF-001



Standard Pause: The standard pause between each movement is two beats in quick time. For example, on the command MOVE TO THE RIGHT IN FILE, RIGHT – TURN, the squad:

1. executes the first movement of the turn on the executive order and simultaneously calls out "ONE";
2. after completing the first movement, calls "TWO", "THREE" while observing the standard pause; and
3. when executing the final movement, calls out "ONE".

CONFIRMATION OF TEACHING POINT 1

Cadets will execute salutes to the left and left as a squad.

END OF LESSON CONFIRMATION

The cadets' participation in TP1 will serve as the confirmation of this lesson.

CONCLUSION

HOMEWORK/READING/PRACTICE

N/A.

METHOD OF EVALUATION

In accordance with A-PD-201-000/PT-000, *The Canadian Forces Manual of Drill and Ceremonial*, the cadet shall participate in an Annual Ceremonial Review (ACR) parade. This movement will be used in preparation for, and execution of, the ACR parade.

CLOSING STATEMENT

The hallmarks of cadet drill are efficiency, precision, and dignity. These qualities are developed through self-discipline and practice. They lead to unit pride and cohesion. Good drill, that is well rehearsed, closely supervised and precise, is an exercise in obedience and alertness. It sets the standard for the execution of any duty, both for the individual and the unit, and builds a sense of confidence between commander and subordinate that is essential to high morale. The personal qualities developed on the parade ground must be maintained in all aspects of life.

INSTRUCTOR NOTES/REMARKS

N/A.

REFERENCES

A0-002 A-PD-201-000/PT-000, DHH 3-2. (2001). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.

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MODIFIED LESSON INSTRUCTIONS AND INSTRUCTIONAL GUIDES – RIGHT TURN AT THE HALT

A-CR-CCP-801/PG-001

EO M108.03 – EXECUTE TURNS AT THE HALT

1. **Performance.** Execute Turns at 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, in favourable weather, an outdoor parade square.
3. **Standard.** In accordance with A-PD-201-000/PT-000, the cadet shall perform the movement of right turn at the halt.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain and demonstrate the movement of right turn at the halt and allow cadets to practice.	Demonstration and Performance	10 min	A0-002 (pp. 2-12 to 2-13)

5. **Time**
 - a. Introduction/Conclusion: 5 min
 - b. Demonstration and Performance: 10 min
 - c. Total: 15 min
6. **Substantiation.** The demonstration-performance method was chosen to allow cadets to participate in supervised exploration of practical instructional material. This method provides the instructor the opportunity to introduce the subject matter, demonstrate and explain procedures, and supervise the cadets while they imitate the skill. This method appeals to all learning styles.
7. **References.** A0-002 A-PD-201-000/PT-000 DHH 3-2. (2001). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.
8. **Training Aids.** Assistant instructors as required.
9. **Learning Aids.** N/A.
10. **Test Details.** There is no formal assessment of this EO. Instructors will confirm the cadets' ability to perform the movements during the end of lesson check, and ongoing feedback will be provided during future drill practices, weekly parade nights, and ceremonial parades.
11. **Remarks.** N/A.



COMMON TRAINING
PROFICIENCY LEVEL ONE
INSTRUCTIONAL GUIDE



SECTION 3

EO M108.03 – EXECUTE TURNS AT THE HALT

Total Time: 15 min

PREPARATION

PRE-LESSON INSTRUCTIONS

A complete list of resources needed for the instruction of this EO is located at Chapter 4 of the QSP. Specific uses for said stores are identified throughout the Instructional Guide, within the teaching point for which they are required.

Prior to instructing this lesson the instructor shall:

- review the lesson content, and become familiar with the material; and
- select the most effective squad formation for the lesson being taught. A squad may be in a single rank, hollow square or semi-circle for elementary drill instruction. (Note: All cadets **must** be able to fully observe all demonstrations and explanations.)

PRE-LESSON ASSIGNMENT

N/A.

APPROACH

This lesson will be presented using the demonstration and performance method. The demonstration and performance method was chosen to allow cadets to participate in supervised exploration of practical instructional material. This method provides the instructor the opportunity to introduce the subject matter, demonstrate and explain procedures, and supervise the cadets while they imitate the skill. This method appeals to all learning styles.



The instructor shall develop and use a vocabulary of short, concise words to impress on the squad that the movements must be performed smartly. For example, the words “crack”, “drive”, “seize” and “grasp” suggest the degree of smartness required. Profanity or personal sarcasm shall never be used.

INTRODUCTION

REVIEW

N/A.

A-CR-CCP-801/PF-001

OBJECTIVES

By the end of this lesson the cadet shall be expected to execute right turns at the halt.

IMPORTANCE

As members of the Canadian Cadet Movement (CCM) cadets will be required to perform drill movements at a competent level, developing sharpness, esprit de corps, physical coordination, and alertness. These movements will be executed with ease and without hesitation. Ensuring that the cadets efficiently move together as one will promote discipline, alertness, precision, pride, steadiness, and cohesion. This develops the basis of teamwork that the CCM depends on.

Teaching Point 1

Execute Right Turns

Time: 10 min

Method: Demonstration and Performance

DEMONSTRATE THE COMPLETE MOVEMENT WITH TIMING



Instructors are reminded that they are to present the example with regards to drill, from the moment they step onto the parade square. Proper drill movements, combined with a professional demeanour, are of paramount importance, and must be exemplified throughout the period of instruction.

The instructor shall provide a complete demonstration of the drill movement, with timing. A practiced assistant instructor may carry out this demonstration.

The demonstration shall be provided from various vantage points, as required.

Turns and inclines are made to change direction: right or left turns change direction by 90 degrees, about turns by 180 degrees, and right and left inclines (not instructed in this lesson) by 45 degrees.

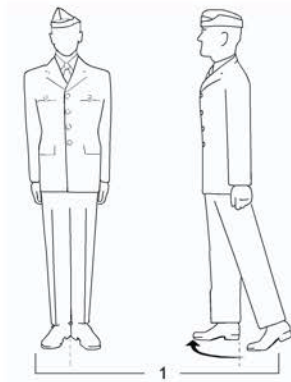
DEMONSTRATE FIRST PART OF MOVEMENT (FIRST NUMBER)



For ease of instruction, drill commands have been broken down into individual movements, or numbers. The instructor(s) shall demonstrate and explain each number.

The cadet shall execute a right turn, by:

On the command RIGHT TURN BY NUMBERS, SQUAD – ONE, turning 90 degrees to the right by pivoting on the right heel and left toe and raising the left heel and right toe simultaneously. Both knees will be kept braced during the turn, arms at the sides and body erect. On the completion of the movement, the weight of the body is placed on the right foot and the left leg is braced with the heel off the ground.



A-PD-201-000/PT-000, The Canadian Forces Manual of Drill and Ceremonial, 2001

Figure 8-3-1 Squad One – Right Turn at the Halt

PRACTICE THE SQUAD ON THE FIRST MOVEMENT

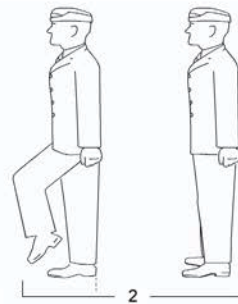
Practice the squad on the first movement collectively, individually and collectively.



Constant checking and correcting of all faults is essential. Faults shall be corrected immediately after they occur.

DEMONSTRATE AND EXPLAIN THE SECOND PART OF THE MOVEMENT

On the command SQUAD – TWO, the cadets shall bend the left knee, straightening it in double time and smartly placing the left foot beside the right to assume the position of attention.



A-PD-201-000/PT-000, The Canadian Forces Manual of Drill and Ceremonial, 2001

Figure 8-3-2 Squad Two – Right Turn at the Halt

PRACTICE THE SQUAD ON THE SECOND MOVEMENT

Practice the squad on the second movement collectively, individually and collectively.

A-CR-CCP-801/PF-001

GIVE TWO COMPLETE AND FINAL DEMONSTRATIONS

On the command RIGHT – TURN, combine the two movements. The standard pause shall be observed between the movements.

The instructor(s) shall provide a full demonstration and allow time for practice.



Standard Pause: The standard pause between each movement is two beats in quick time. For example, on the command MOVE TO THE RIGHT IN FILE, RIGHT – TURN, the squad:

1. executes the first movement of the turn on the executive order and simultaneously calls out "ONE";
2. after completing the first movement, calls "TWO", "THREE" while observing the standard pause; and
3. when executing the final movement, calls out "ONE".

CONFIRMATION OF TEACHING POINT 1

Cadets will execute right turns as a squad.

The cadets' participation in TP1 will serve as the confirmation of this lesson.

CONCLUSION

HOMEWORK/READING/PRACTICE

N/A.

METHOD OF EVALUATION

In accordance with A-PD-201-000/PT-000, *The Canadian Forces Manual of Drill and Ceremonial*, the cadet shall participate in an Annual Ceremonial Review (ACR) parade. This movement will be used in preparation for, and in the execution of, the ACR parade.

CLOSING STATEMENT

The hallmarks of cadet drill are efficiency, precision, and dignity. These qualities are developed through self-discipline and practice. They lead to unit pride and cohesion. Good drill that is well rehearsed, closely supervised and precise, is an exercise in obedience and alertness. It sets the standard for the execution of any duty, both for the individual and the unit, and builds a sense of confidence between commander and subordinate that is essential to high morale. The personal qualities developed on the parade ground must be maintained in all aspects of life.

INSTRUCTOR NOTES/REMARKS

N/A.

REFERENCES

- A0-002 A-PD-201-000/PT-000, DHH 3-2. (2001). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.

MODIFIED LESSON INSTRUCTIONS AND INSTRUCTIONAL GUIDES – LEFT TURN AT THE HALT

A-CR-CCP-801/PG-001

EO M108.03 – EXECUTE TURNS AT THE HALT

1. **Performance.** Execute Turns at 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, in favourable weather, an outdoor parade square.
3. **Standard.** In accordance with A-PD-201-000/PT-000, the cadet shall perform the movement of left turn at the halt.

4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain and demonstrate the movement of left turn at the halt and allow cadets to practice.	Demonstration and Performance	10 min	A0-002 (pp. 2-12 to 2-13)

5. **Time**
 - a. Introduction/Conclusion: 5 min
 - b. Demonstration and Performance: 10 min
 - c. Total: 15 min
6. **Substantiation.** The demonstration-performance method was chosen to allow cadets to participate in supervised exploration of practical instructional material. This method provides the instructor the opportunity to introduce the subject matter, demonstrate and explain procedures, and supervise the cadets while they imitate the skill. This method appeals to all learning styles.
7. **References.** A0-002 A-PD-201-000/PT-000 DHH 3-2. (2001). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.
8. **Training Aids.** Assistant instructors as required.
9. **Learning Aids.** N/A.
10. **Test Details.** There is no formal assessment of this EO. Instructors will confirm the cadets' ability to perform the movements during the end of lesson check, and ongoing feedback will be provided during future drill practices, weekly parade nights, and ceremonial parades.
11. **Remarks.** N/A.



**COMMON TRAINING
PROFICIENCY LEVEL ONE
INSTRUCTIONAL GUIDE**



SECTION 3

EO M108.03 – EXECUTE TURNS AT THE HALT

Total Time: 15 min

PREPARATION

PRE-LESSON INSTRUCTIONS

A complete list of resources needed for the instruction of this EO is located at Chapter 4 of the QSP. Specific uses for said stores are identified throughout the Instructional Guide, within the teaching point for which they are required.

Prior to instructing this lesson the instructor shall:

- review the lesson content, and become familiar with the material; and
- select the most effective squad formation for the lesson being taught. A squad may be in a single rank, hollow square or semi-circle for elementary drill instruction. (Note: All cadets **must** be able to fully observe all demonstrations and explanations.)

PRE-LESSON ASSIGNMENT

N/A.

APPROACH

This lesson will be presented using the demonstration and performance method. The demonstration and performance method was chosen to allow cadets to participate in supervised exploration of practical instructional material. This method provides the instructor the opportunity to introduce the subject matter, demonstrate and explain procedures, and supervise the cadets while they imitate the skill. This method appeals to all learning styles.



The instructor shall develop and use a vocabulary of short, concise words to impress on the squad that the movements must be performed smartly. For example, the words “crack”, “drive”, “seize” and “grasp” suggest the degree of smartness required. Profanity or personal sarcasm shall never be used.

INTRODUCTION

REVIEW

N/A.

A-CR-CCP-801/PF-001

OBJECTIVES

By the end of this lesson the cadet shall be expected to execute turns at the halt.

IMPORTANCE

As members of the Canadian Cadet Movement (CCM) cadets will be required to perform drill movements at a competent level, developing sharpness, esprit de corps, physical coordination, and alertness. These movements will be executed with ease and without hesitation. Ensuring that the cadets efficiently move together as one will promote discipline, alertness, precision, pride, steadiness, and cohesion. This develops the basis of teamwork that the CCM depends on.

Teaching Point 1

Execute Left Turns

Time: 10 min

Method: Demonstration and Performance

DEMONSTRATE THE COMPLETE MOVEMENT WITH TIMING



Instructors are reminded that they are to present the example with regards to drill, from the moment they step onto the parade square. Proper drill movements, combined with a professional demeanour, are of paramount importance, and must be exemplified throughout the period of instruction.

The instructor shall provide a complete demonstration of the drill movement, with timing. A practiced assistant instructor may carry out this demonstration.

The demonstration shall be provided from various vantage points, as required.

Turns and inclines are made to change direction: right or left turns change direction by 90 degrees, about turns by 180 degrees, and right and left inclines (not instructed in this lesson) by 45 degrees.

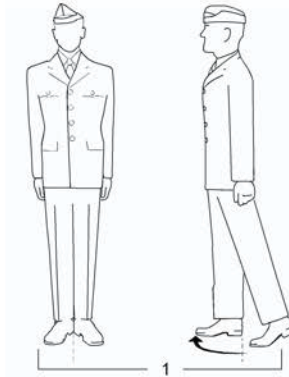
DEMONSTRATE FIRST PART OF MOVEMENT (FIRST NUMBER)



For ease of instruction, drill commands have been broken down into individual movements, or numbers. The instructor(s) shall demonstrate and explain each number

The cadet shall execute a left turn, by:

On the command LEFT TURN BY NUMBERS, SQUAD – ONE, turning 90 degrees to the left by pivoting on the left heel and right toe and raising the right heel and left toe simultaneously. Both knees will be kept braced during the turn, arms at the sides and body erect. On the completion of the movement, the weight of the body is placed on the left foot and the right leg is braced with the heel off the ground.



A-PD-201-000/PT-000, The Canadian Forces Manual of Drill and Ceremonial, 2001

Figure 8-3-1 Squad One – Turn at the Halt

PRACTICE THE SQUAD ON THE FIRST MOVEMENT

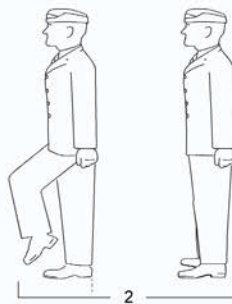
Practice the squad on the first movement collectively, individually and collectively.



Constant checking and correcting of all faults is essential. Faults shall be corrected immediately after they occur.

DEMONSTRATE AND EXPLAIN THE SECOND PART OF THE MOVEMENT (SECOND NUMBER)

On the command SQUAD – TWO, bend the right knee, straightening it in double time and smartly placing the right foot beside the left to assume the position of attention.



A-PD-201-000/PT-000, The Canadian Forces Manual of Drill and Ceremonial, 2001

Figure 8-3-2 Squad Two – Turn at the Halt

PRACTICE THE SQUAD ON THE SECOND MOVEMENT

Practice the squad on the second movement collectively, individually and collectively.

A-CR-CCP-801/PF-001

GIVE TWO COMPLETE AND FINAL DEMONSTRATIONS

On the command LEFT – TURN, combine the two movements. The standard pause shall be observed between the movements.

The instructor(s) shall provide a full demonstration and allow time for practice.



Standard Pause: The standard pause between each movement is two beats in quick time. For example, on the command MOVE TO THE LEFT IN FILE, LEFT – TURN, the squad:

1. Executes the first movement of the turn on the executive order and simultaneously calls out "ONE".
2. After completing the first movement, calls "TWO", "THREE" while observing the standard pause.
3. When executing the final movement, calls out "ONE".

CONFIRMATION OF TEACHING POINT 1

Cadets will execute LEFT turns as a squad.

END OF LESSON CONFIRMATION

The cadets' participation in TP1 will serve as the confirmation of this lesson

CONCLUSION

HOMEWORK/READING/PRACTICE

N/A.

METHOD OF EVALUATION

In accordance with A-PD-201-000/PT-000, *The Canadian Forces Manual of Drill and Ceremonial*, the cadet shall participate in an Annual Ceremonial Review (ACR) parade. This movement will be used in preparation for, and in the execution of, the ACR parade.

CLOSING STATEMENT

The hallmarks of cadet drill are efficiency, precision, and dignity. These qualities are developed through self-discipline and practice. They lead to unit pride and cohesion. Good drill that is well rehearsed, closely supervised and precise, is an exercise in obedience and alertness. It sets the standard for the execution of any duty, both for the individual and the unit, and builds a sense of confidence between commander and subordinate that is essential to high morale. The personal qualities developed on the parade ground must be maintained in all aspects of life.

INSTRUCTOR NOTES/REMARKS

N/A.

REFERENCES

- A0-002 A-PD-201-000/PT-000, DHH 3-2. (2001). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.

MODIFIED LESSON INSTRUCTIONS AND INSTRUCTIONAL GUIDES – ABOUT TURN AT THE HALT

A-CR-CCP-801/PG-001

EO M108.03 – EXECUTE TURNS AT THE HALT

1. **Performance.** Execute Turns at 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, in favourable weather, an outdoor parade square.
3. **Standard.** In accordance with A-PD-201-000/PT-000, the cadet shall perform the movement of about turn at the halt.
4. **Teaching Points**

TP	Description	Method	Time	Ref
TP1	Explain and demonstrate the movement of about turn at the halt and allow cadets to practice.	Demonstration and Performance	10 min	A0-002 (pp. 2-12 to 2-13)

5. **Time**
 - a. Introduction/Conclusion: 5 min
 - b. Demonstration and Performance: 10 min
 - c. Total: 15 min
6. **Substantiation.** The demonstration-performance method was chosen to allow cadets to participate in supervised exploration of practical instructional material. This method provides the instructor the opportunity to introduce the subject matter, demonstrate and explain procedures, and supervise the cadets while they imitate the skill. This method appeals to all learning styles.
7. **References.** A0-002 A-PD-201-000/PT-000 DHH 3-2. (2001). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.
8. **Training Aids.** Assistant instructors as required.
9. **Learning Aids.** N/A.
10. **Test Details.** There is no formal assessment of this EO. Instructors will confirm the cadets' ability to perform the movements during the end of lesson check, and ongoing feedback will be provided during future drill practices, weekly parade nights, and ceremonial parades.
11. **Remarks.** N/A.



**COMMON TRAINING
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SECTION 3

EO M108.03 – EXECUTE TURNS AT THE HALT

Total Time: 15 min

PREPARATION

PRE-LESSON INSTRUCTIONS

A complete list of resources needed for the instruction of this EO is located at Chapter 4 of the QSP. Specific uses for said stores are identified throughout the Instructional Guide, within the teaching point for which they are required.

Prior to instructing this lesson the instructor shall:

- review the lesson content, and become familiar with the material; and
- select the most effective squad formation for the lesson being taught. A squad may be in a single rank, hollow square or semi-circle for elementary drill instruction. (Note: All cadets **must** be able to fully observe all demonstrations and explanations.)

PRE-LESSON ASSIGNMENT

N/A.

APPROACH

This lesson will be presented using the demonstration and performance method. The demonstration and performance method was chosen to allow cadets to participate in supervised exploration of practical instructional material. This method provides the instructor the opportunity to introduce the subject matter, demonstrate and explain procedures, and supervise the cadets while they imitate the skill. This method appeals to all learning styles.



The instructor shall develop and use a vocabulary of short, concise words to impress on the squad that the movements must be performed smartly. For example, the words “crack”, “drive”, “seize” and “grasp” suggest the degree of smartness required. Profanity or personal sarcasm shall never be used.

INTRODUCTION

REVIEW

N/A.

A-CR-CCP-801/PF-001

OBJECTIVES

By the end of this lesson the cadet shall be expected to execute turns at the halt.

IMPORTANCE

As members of the Canadian Cadet Movement (CCM) cadets will be required to perform drill movements at a competent level, developing sharpness, esprit de corps, physical coordination, and alertness. These movements will be executed with ease and without hesitation. Ensuring that the cadets efficiently move together as one will promote discipline, alertness, precision, pride, steadiness, and cohesion. This develops the basis of teamwork that the CCM depends on.

Teaching Point 1

Execute About Turns

Time: 10 min

Method: Demonstration and Performance

DEMONSTRATE THE COMPLETE MOVEMENT WITH TIMING



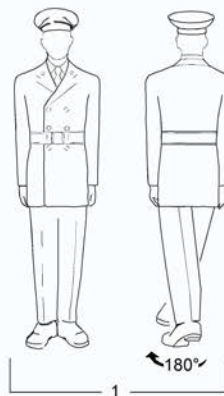
Instructors are reminded that they are to present the example with regards to drill, from the moment they step onto the parade square. Proper drill movements, combined with a professional demeanour, are of paramount importance, and must be exemplified throughout the period of instruction.

The instructor shall provide a complete demonstration of the drill movement, with timing. A practiced assistant instructor may carry out this demonstration.

The demonstration shall be provided from various vantage points, as required.

DEMONSTRATE FIRST PART OF MOVEMENT (FIRST NUMBER)

On the command ABOUT TURN BY NUMBERS, SQUAD – ONE, turning 180 degrees to the right by pivoting on the right heel and left toe and raising the left heel and right toe simultaneously. Both knees will be kept braced during the turn, arms at the sides and body erect. On the completion of the movement, the weight of the body is placed on the right foot and the left leg is braced with the heel off the ground.



A-PD-201-000/PT-000, *The Canadian Forces Manual of Drill and Ceremonial*, 2001

Figure 8-3-3 Squad One – About Turn at the Halt

PRACTICE THE SQUAD ON THE FIRST MOVEMENT

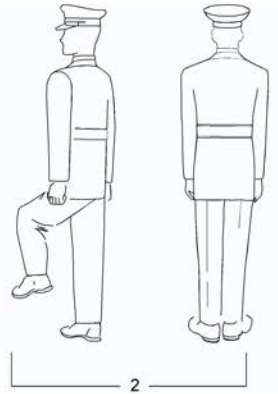
Practice the squad on the first movement collectively, individually and collectively.



Constant checking and correcting of all faults is essential. Faults shall be corrected immediately after they occur.

DEMONSTRATE AND EXPLAIN THE SECOND PART OF THE MOVEMENT

On the command SQUAD – TWO, bending the left knee, straightening it in double time and smartly placing the left foot beside the right to assume the position of attention.



A-PD-201-000/PT-000, The Canadian Forces Manual of Drill and Ceremonial, 2001

Figure 8-3-4 Squad Two – About Turn at the Halt

PRACTICE THE SQUAD ON THE SECOND MOVEMENT

Practice the squad on the second movement collectively, individually and collectively.

GIVE TWO COMPLETE AND FINAL DEMONSTRATIONS

On the command ABOUT – TURN, combine the two movements. The standard pause shall be observed between the movements.

The instructor(s) shall provide a full demonstration and allow time for practice.

A-CR-CCP-801/PF-001



Standard Pause: The standard pause between each movement is two beats in quick time. For example, on the command ABOUT – TURN, combine the two movements. The standard pause shall be observed between the movements:

1. Executes the first movement of the turn on the executive order and simultaneously calls out "ONE".
2. After completing the first movement, calls "TWO", "THREE" while observing the standard pause.
3. When executing the final movement, calls out "ONE".

CONFIRMATION OF TEACHING POINT 1

Cadets will execute about turns as a squad.

END OF LESSON CONFIRMATION

The cadets' participation in TP1 will serve as the confirmation of this lesson

CONCLUSION

HOMEWORK/READING/PRACTICE

N/A.

METHOD OF EVALUATION

In accordance with A-PD-201-000/PT-000, *The Canadian Forces Manual of Drill and Ceremonial*, the cadet shall participate in an Annual Ceremonial Review (ACR) parade. This movement will be used in preparation for, and in the execution of, the ACR parade.

CLOSING STATEMENT

The hallmarks of cadet drill are efficiency, precision, and dignity. These qualities are developed through self-discipline and practice. They lead to unit pride and cohesion. Good drill that is well rehearsed, closely supervised and precise, is an exercise in obedience and alertness. It sets the standard for the execution of any duty, both for the individual and the unit, and builds a sense of confidence between commander and subordinate that is essential to high morale. The personal qualities developed on the parade ground must be maintained in all aspects of life.

INSTRUCTOR NOTES/REMARKS

N/A.

REFERENCES

A0-002 A-PD-201-000/PT-000, DHH 3-2. (2001). *The Canadian Forces Manual of Drill and Ceremonial*. Ottawa, ON: The Department of National Defence.

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DRILL INSTRUCTIONAL TECHNIQUES – ASSESSMENT FORM

Cadet's Name: _____

Flight: _____

Lesson Topic: _____

CRITERIA	COMMENTS	Incomplete	Completed with Difficulty	Completed Without Difficulty
PREPARATION				
Maintained dress and deportment.				
Selected an appropriate squad formation.				
Used a lesson plan.				
Reviewed previous lesson.				
INTRODUCTION				
Stated what the cadets will learn.				
Stated why it is important.				
Stated where/when this skill will be applied.				
BODY				
Demonstrated complete movement, calling the time.				
Demonstrated and explained the first part of the movement (Squad 1).				
Had the squad practice the first part of the movement collectively, individually and collectively again.				
Taught the second part of the movement and each subsequent part in the same manner.				
Gave two complete demonstrations.				

CRITERIA	COMMENTS	Incomplete	Completed /ith Difficulty	Completed Without Difficulty
Practiced the complete movement with: <ul style="list-style-type: none"> • the instructor calling the time, • the cadets calling the time, and • the cadets judging the time. 				
Used clear words of command and correct pauses.				
Gave appropriate and immediate feedback.				
Allowed questions after each movement.				
END OF LESSON CONFIRMATION				
Demonstrated the movement taught.				
Confirmation was conducted as a squad.				
Emphasized aspects of the movement with which the cadets experienced difficulty.				
CONCLUSION				
Summarized the lesson.				
Re-motivated the cadets.				
FEEDBACK				

 Assessor's Signature

 Date

 Cadet's Signature