COMMON TRAINING

INSTRUCTIONAL GUIDE

SECTION 1

EO M206.01 – PARTICIPATE IN A RECREATIONAL MARKSMANSHIP ACTIVITY

Total Time: 90 min

PREPARATION

PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-702/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, unit range standing orders, and become familiar with the material, prior to delivering the lesson. Photocopies of the targets found in the Annexes may be required depending on the activities chosen.

Construct a range IAW A-CR-CCP-177/PT-001, *Canadian Cadet Movement: Cadet Marksmanship Program Reference Manual*.

PRE-LESSON ASSIGNMENT

N/A.

APPROACH

An interactive lecture was chosen for TP1 to present important information about the marksmanship activity.

A practical activity was chosen for TP2 as it is an interactive way to allow cadets to experience recreational marksmanship in a safe and controlled environment. This activity contributes to the development of marksmanship skills and knowledge in a fun and challenging setting.

INTRODUCTION

REVIEW

The review for this lesson will be from EO M106.02 (Carry Out Safety Precautions on the Cadet Air Rifle).

SUGGESTED QUESTIONS

Q1. Why do we follow safety regulations?

Q2. How would you verify the safety catch is ON?

Q3. What are the four “ACTS” of firearm safety?

ANTICIPATED ANSWERS

A1. We follow safety regulations to prevent accidents with the cadet air rifle.

A2. When the safety is ON, no red can be seen.

A3. The mnemonic “ACTS” stands for:

- Assume every firearm is loaded.
- Control the muzzle direction at all times.
- Trigger finger must be kept off the trigger and out of the trigger guard.
- See that the firearm is unloaded (prove it safe).

OBJECTIVES

By the end of this lesson, the cadets shall have participated in a recreational marksmanship activity.

IMPORTANCE

It is important for cadets to participate in a recreational marksmanship activity because it allows them to experience marksmanship in a fun, dynamic, and safe setting.

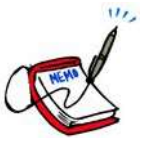
Teaching Point 1 **Conduct a Range Briefing**

Time: 10 min Method: Interactive Lecture

A range briefing is conducted to pass on vital information and answer any questions the cadets may have prior to participating in a marksmanship activity. The range briefing is required to ensure the safe execution of a marksmanship activity.

RANGE BRIEFING

- Explain pertinent sections of the local range standing orders.
- Rules to be observed on all ranges include:
  - proving that rifles are safe prior to being picked up, handed to or received from another person;
  - never pointing rifles at people;
  - inserting safety rods into the barrels of rifles when not in use on the range;
  - never horseplaying on a range;
  - always pointing rifles down range; and
  - following the Range Safety Officer’s (RSO) directions and orders at all times.



Review range commands with an explanation and demonstration for each command.

All loading/firing in this TP is to be simulated.

- Review commands used on an air rifle range (as illustrated in Figure 1).

Command	Action To Be Taken
Cover off your firing point	Stand up, move behind the firing point and await further commands.
Place your equipment down and stand back	Lay the equipment down on the mat and stand back when finished.
Adopt the prone position	Adopt the prone position, pick up the rifle, ready the equipment and put on hearing and eye protection.
Type of firing (GRIT)	GRIT is the acronym for: • Group (relay); • Range (distance); • Indication (number of rounds); and • Type (grouping, scored).
Relay, load	1. Pick up and hold the rifle with the dominant hand. 2. Ensure the safety catch is in the “ON” position. 3. Pump the rifle, observing a three second pause. 4. Load a pellet (flat end forward). 5. Close the bolt.
Relay, fire	1. Place the safety catch in the “OFF” position. 2. Aim the rifle at the target. 3. Squeeze the trigger. 4. Open the bolt. 5. Repeat the following sequence for each shot: a. Pump the rifle, observing a three second pause. b. Load a pellet (flat end forward). c. Close the bolt. d. Aim the rifle at the target. e. Squeeze the trigger. f. Open the bolt. 6. Place the safety in the “ON” position. 7. Partially open the pump lever. 8. Lay down the rifle.

Figure 1 Air Rifle Range Commands

D Cdts 3, 2006, Ottawa, ON: Department of National Defence

- Describe the layout of the air rifle range.
- Review hand-washing procedures on completion of firing. This is important because each time a person handles pellets, a small trace of lead is left on their hands. To decrease the risk of lead poisoning, it is important that all persons wash their hands thoroughly after handling pellets.

CONFIRMATION OF TEACHING POINT 1

QUESTIONS

Q1. What are two rules used on the range?

Q2. What is the action for the command “Cover off your firing point”?

Q3. What does the acronym GRIT stand for?

ANTICIPATED ANSWERS

A1. General rules observed on a range:

- Rifles must be proved safe prior to being picked up, handed to or received from another person.
- Never point rifles at people.
- Insert safety rods into the barrels of rifles when not in use on the range.
- Never horseplay on a range.
- Always point rifles down range.
- Obey the Range Safety Officer’s (RSO) directions and orders at all times.

A2. The action for the command is stand up, move behind the firing point and await further commands.

A3. GRIT stands for:

- Group (relay);
- Range (distance);
- Indication (number of rounds); and
- Type (grouping, scored).

Teaching Point 2 — **Supervise the Cadets’ Participation in a Recreational Marksmanship Activity**

Time: 70 min — Method: Practical Activity

ACTIVITY

OBJECTIVE

The objective of this activity is to provide cadets with the opportunity to participate in a recreational marksmanship activity.

RESOURCES

- Cadet air rifle (one per firing lane).
- Cadet air rifle safety rod (one per firing lane).
- Safety glasses/goggles.
- Approved air rifle pellets (.177).
- Target frame.
- Pen/pencil.
- Shooting mat.
- Flags (red and green).

Additional resources required for specific marksmanship activities can be found in the annexes.

ACTIVITY LAYOUT

Construct a range IAW A-CR-CCP-177/PT-001.

ACTIVITY INSTRUCTIONS

- Divide the cadets into relays according to the number of firing lanes.
- Conduct recreational marksmanship activities, choosing from the following categories:
  - classification (see Annex A);
  - fun activities (see Annexes B to E);
  - timed activities (see Annexes F to H); or
  - competitive team/individual activities (see Annexes I and J).

All marksmanship activities in this EO will be conducted in the prone position.

SAFETY

Range activities will be conducted IAW A-CR-CCP-177/PT-001.

CONFIRMATION OF TEACHING POINT 2

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

END OF LESSON CONFIRMATION

The cadets' participation in the activities in TP2 will serve as the confirmation of this lesson.

CONCLUSION

HOMEWORK/READING/PRACTICE

N/A.

METHOD OF EVALUATION

N/A.

CLOSING STATEMENT

Marksmanship is a fun and exciting activity that requires personal discipline and teamwork skills. This activity has also developed into highly competitive levels at the provincial, regional, and national levels.

INSTRUCTOR NOTES/REMARKS

Hand-washing stations must be available for clean-up after the activity is completed.

REFERENCES

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

A0-041 CATO 14-41 D Cdts 4. (2005). *Marksmanship Classification.* Ottawa ON: Department of National Defence.

C0-103 Free Fever. (ND). *Free Space Shuttle Clip Art.* Retrieved 21 February 2007, from http://www.freefever.com/freeclipart/spaceshuttle.html.

C0-109 Eight Planets. (ND). *Moon.* Retrieved 21 February 2007, from http://luna.eightplanets.net/.

C0-110 H2O University. (ND). *Moon*. Retrieved 21 February 2007, from http://www.h2ouniversity.org/html/K2_facts_earth.html.

CLASSIFICATION ACTIVITY

CLASSIFICATION ACTIVITY
Objective: To provide cadets the opportunity to obtain marksmanship classifications.
Scoring: There are four classification levels that must meet the following standards: 1. Marksman: Two five-round groupings within a circle of 3 cm in diameter. 2. First Class Marksman: Two five-round groupings within a circle of 2.5 cm in diameter. 3. Expert Marksman: Two five-round groupings within a circle of 2 cm in diameter. 4. Distinguished Marksman: Two five-round groupings within a circle of 1.5 cm in diameter.
Equipment Required: Mandatory: • CCT200GRTD Canadian Cadet Movement Air Rifle Grouping Target (one per cadet); • Air Rifle Grouping Template from A-CR-CCP-177/PT-001 (p. B1-1); and • A stopwatch. Optional aids to firing are limited to the following: • Cadet air rifle sling; • Marksmanship jacket; • Shooting glove; or • Hat.
Activity Guidelines: 1. Distribute an Air Rifle Grouping Target to each cadet. 2. Have cadets write their name and rank on the target and attach it to the target frame. 3. Cadets will fire in relays following the commands given by the RSO. 4. Cadets will fire five pellets into each circle on the target. 5. Give cadets a maximum of 15 minutes to fire. 6. Have cadets retrieve their targets. 7. Score the targets using the Air Rifle Grouping Template. The following is prohibited: • Alterations made to the rifles. • A pellet loading clip. • Supports used as a rest for the rifle or the forearm. • A spotting scope. • Use of sights not provided with the cadet air rifle. • Coaching.

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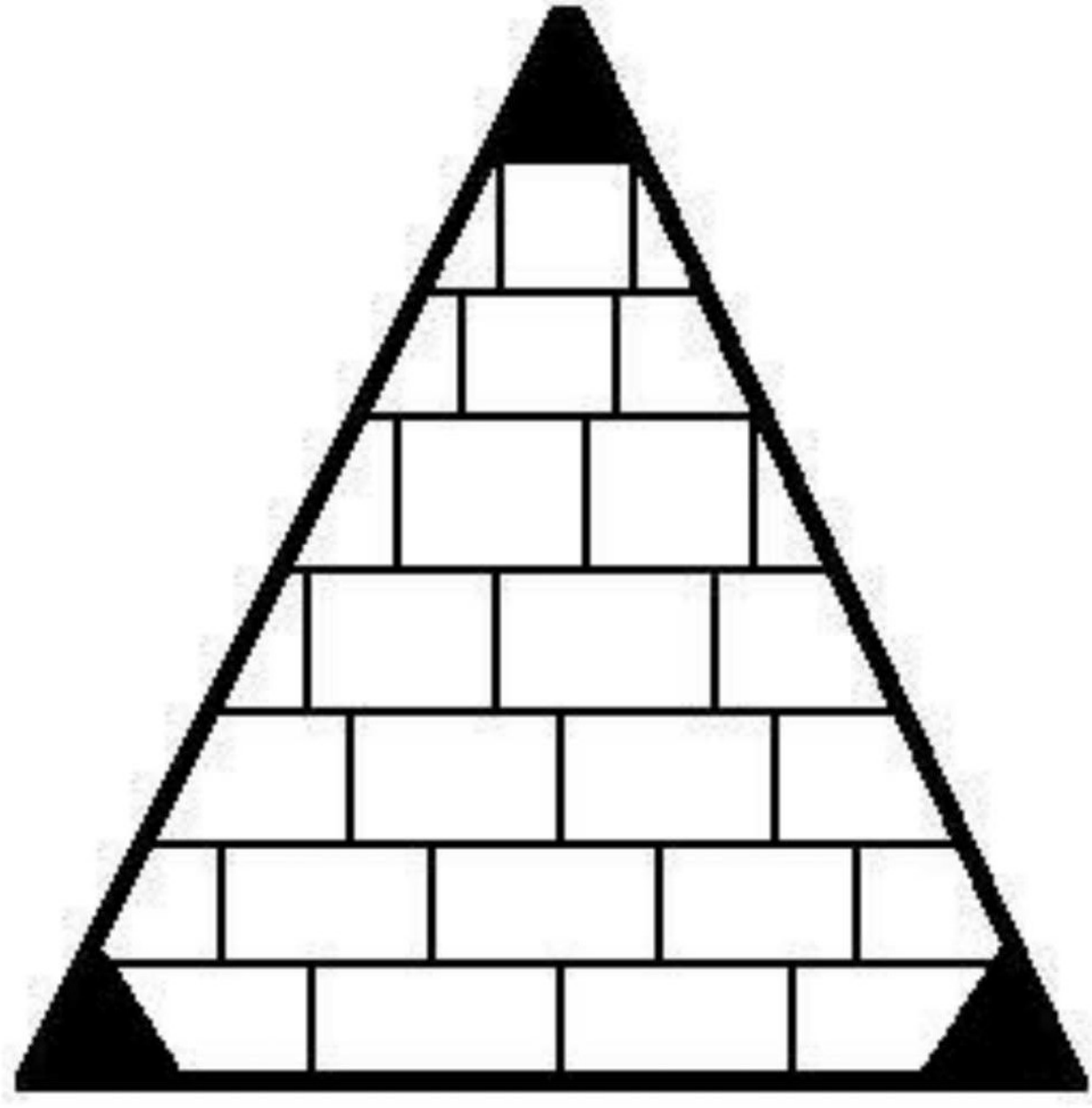
FUN ACTIVITY

PYRAMID
Objective: To fire pellets into each point on the pyramid.
Scoring: One point is awarded for each point on the pyramid that is hit by a pellet.
Equipment Required: Mandatory: Pyramid Target (one per cadet). Optional aids to firing are limited to the following: • Cadet air rifle sling; • Marksmanship jacket; • Shooting glove; or • Hat.
Activity Guidelines: 1. Distribute one Pyramid Target to each cadet. 2. Have cadets write their name and rank on the target and attach it to the target frame. 3. Cadets will fire in relays following the commands given by the RSO. 4. Cadets will be given three pellets to fire one pellet into each corner of the pyramid. 5. Give cadets three minutes to fire. 6. Score the targets awarding one point for each corner hit on the pyramid. 7. On completion of the activity or as time allows, place the targets out for the cadets to review. 8. Return the targets to cadets. The following is prohibited: • Alterations made to the rifles. • A pellet loading clip. • Supports used as a rest for the rifle or the forearm. • A spotting scope. • Use of sights not provided with the cadet air rifle.

PYRAMID TARGET



Name: _____ **Date:** _____

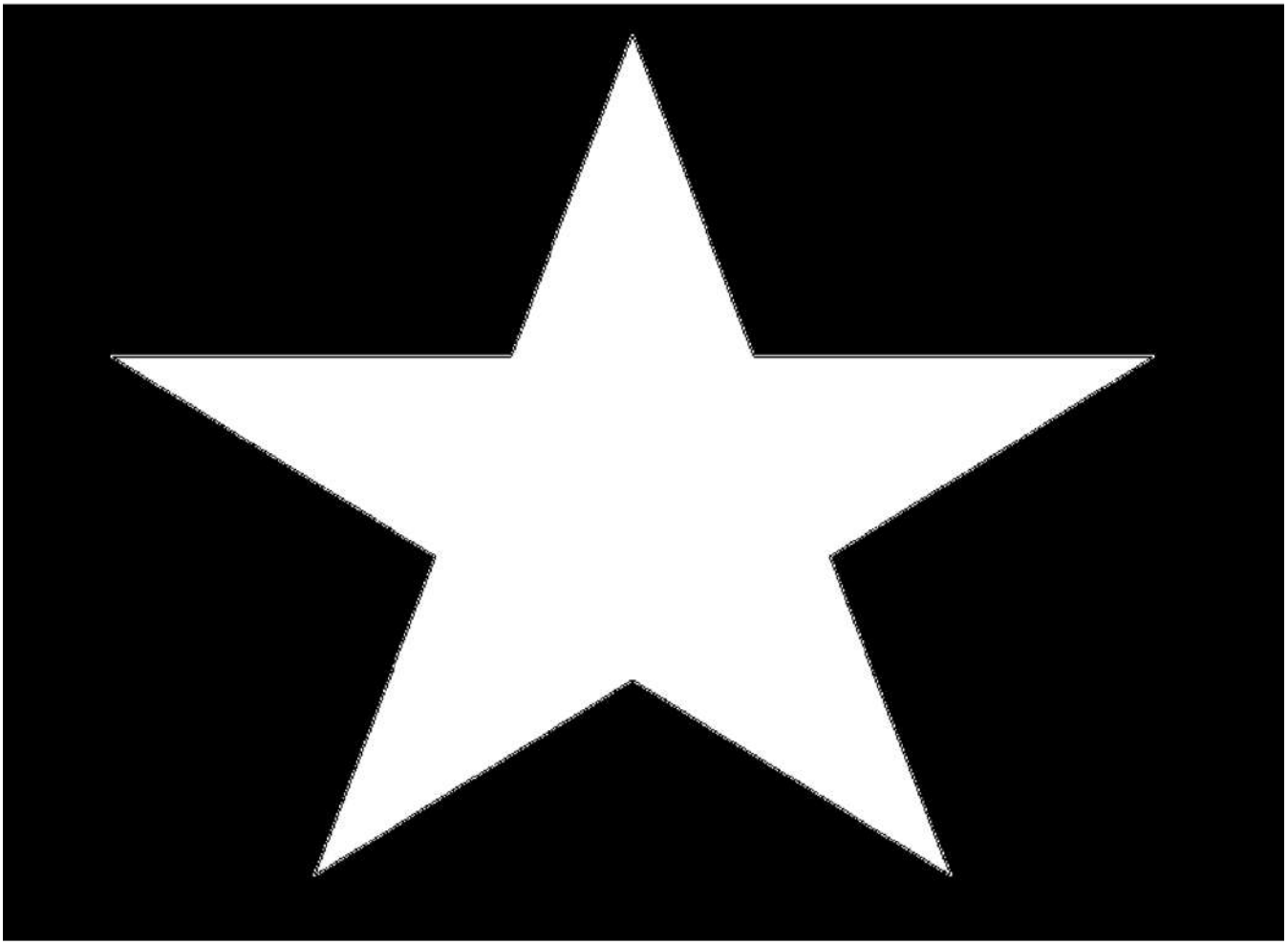
Figure B-1 Pyramid Target

D Cdts 3, 2007, Ottawa, ON: Department of National Defence

FUN ACTIVITY

SHOOTING STAR
Objective: To fire a pellet into each point on the star.
Scoring: One point is awarded for each point on the star that is hit by a pellet.
Equipment Required: Mandatory: Star Target (one per cadet). Optional aids to firing are limited to the following: • Cadet air rifle sling; • Marksmanship jacket; • Shooting glove; or • Hat.
Activity Guidelines: 1. Distribute one Star Target to each cadet. 2. Have cadets write their name and rank on the target and attach it to the target frame. 3. Cadets will fire in relays following the commands given by the RSO. 4. Cadets will be given five pellets to fire one pellet into each point on the star. 5. Give cadets five minutes to fire. 6. Score the targets awarding one point for a pellet hit within each point on the star. 7. On completion of the activity or as time allows, place the targets out for the cadets to review. 8. Return the targets to cadets. The following is prohibited: • Alterations made to the rifles. • A pellet loading clip. • Supports used as a rest for the rifle or the forearm. • A spotting scope. • Use of sights not provided with the cadet air rifle.

STAR TARGET



Name: _____ **Date:** _____

Figure C-1 Star Target

D Cdts 3, 2007, Ottawa, ON: Department of National Defence

FUN ACTIVITY

BEACH BALL
Objective: To fire ten pellets into the black circle on the beach ball.
Scoring: One point is awarded for each successful hit in the black circle.
Equipment Required: Mandatory: Beach Ball Target (one per cadet). Optional aids to firing are limited to the following: • Cadet air rifle sling; • Marksmanship jacket; • Shooting glove; or • Hat.
Activity Guidelines: 1. Distribute one Beach Ball Target to each cadet. 2. Have cadets write their name and rank on the target and attach it to the target frame. 3. Cadets will fire in relays following the commands given by the RSO. 4. Cadets will be given ten pellets to fire into the black circle on the beach ball. 5. Give cadets ten minutes to fire. 6. Score the targets awarding one point for each pellet hit within the black circle. 7. On completion of the activity or as time allows, place the targets out for the cadets to review. 8. Return the targets to cadets. The following is prohibited: • Alterations made to the rifles. • A pellet loading clip. • Supports used as a rest for the rifle or the forearm. • A spotting scope. • Use of sights not provided with the cadet air rifle.

BEACH BALL TARGET

Name: _____ **Date:** _____

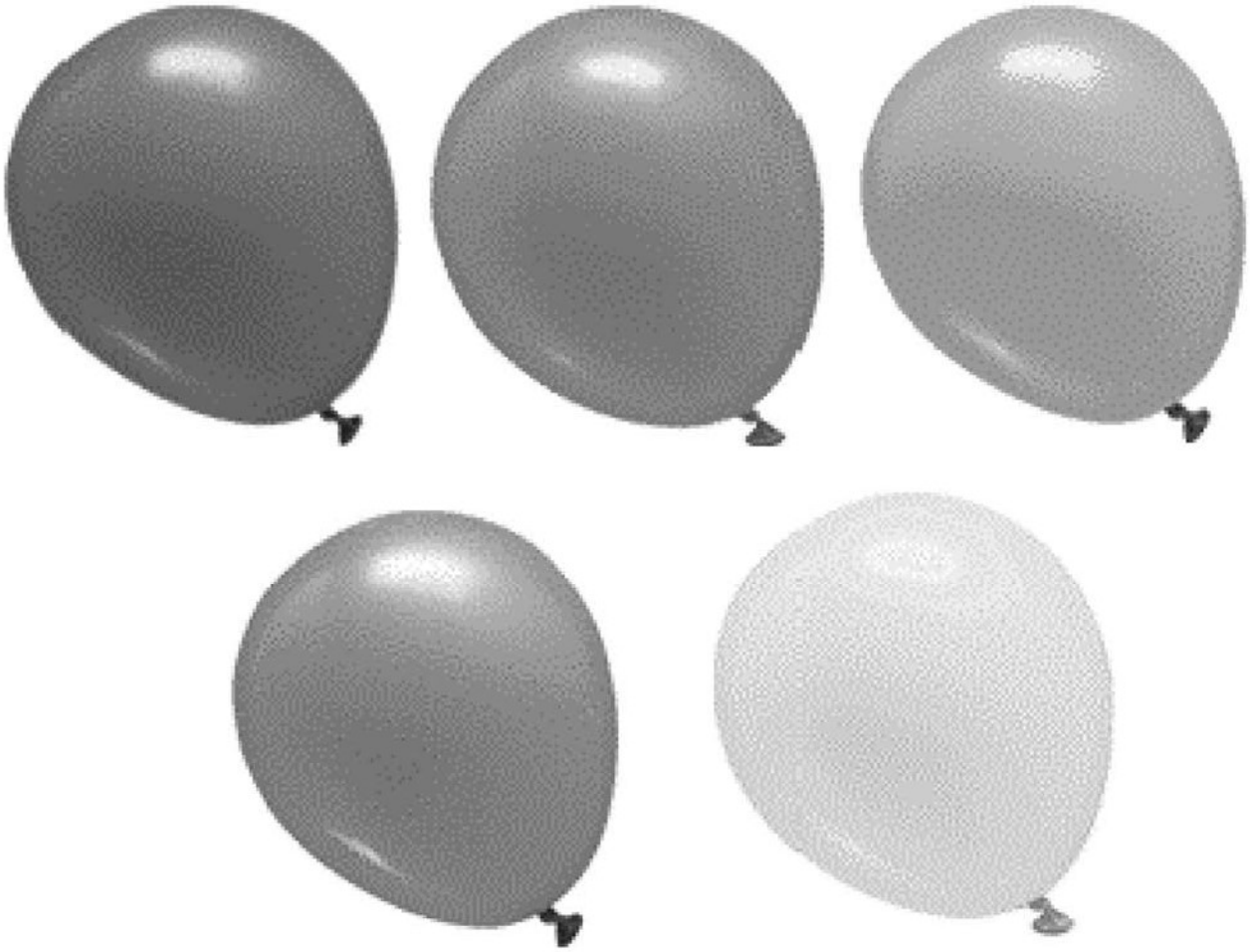
Figure D-1 Beach Ball Target

D Cdts 3, 2006, Ottawa, ON: Department of National Defence

FUN ACTIVITY

BALLOONS
Objective: To fire pellets into balloons on the target.
Scoring: One point is awarded for each balloon hit by a pellet.
Equipment Required: Mandatory: Balloon Target (one per cadet). Optional aids to firing are limited to the following: • Cadet air rifle sling; • Marksmanship jacket; • Shooting glove; or • Hat.
Activity Guidelines: 1. Distribute one Balloon Target to each cadet. 2. Have cadets write their name and rank on the target and attach it to the target frame. 3. Cadets will fire in relays following the commands given by the RSO. 4. Cadets will be given five pellets to fire one pellet into each point on the star. 5. Give cadets five minutes to fire. 6. Score the targets awarding one point for each balloon hit. 7. On completion of the activity or as time allows, place the targets out for the cadets to review. 8. Return the targets to cadets. The following is prohibited: • Alterations made to the rifles. • A pellet loading clip. • Supports used as a rest for the rifle or the forearm. • A spotting scope. • Use of sights not provided with the cadet air rifle.
Note: Actual balloons may be used in place of the paper targets.

BALLOON TARGET



Name: _____ **Date:** _____

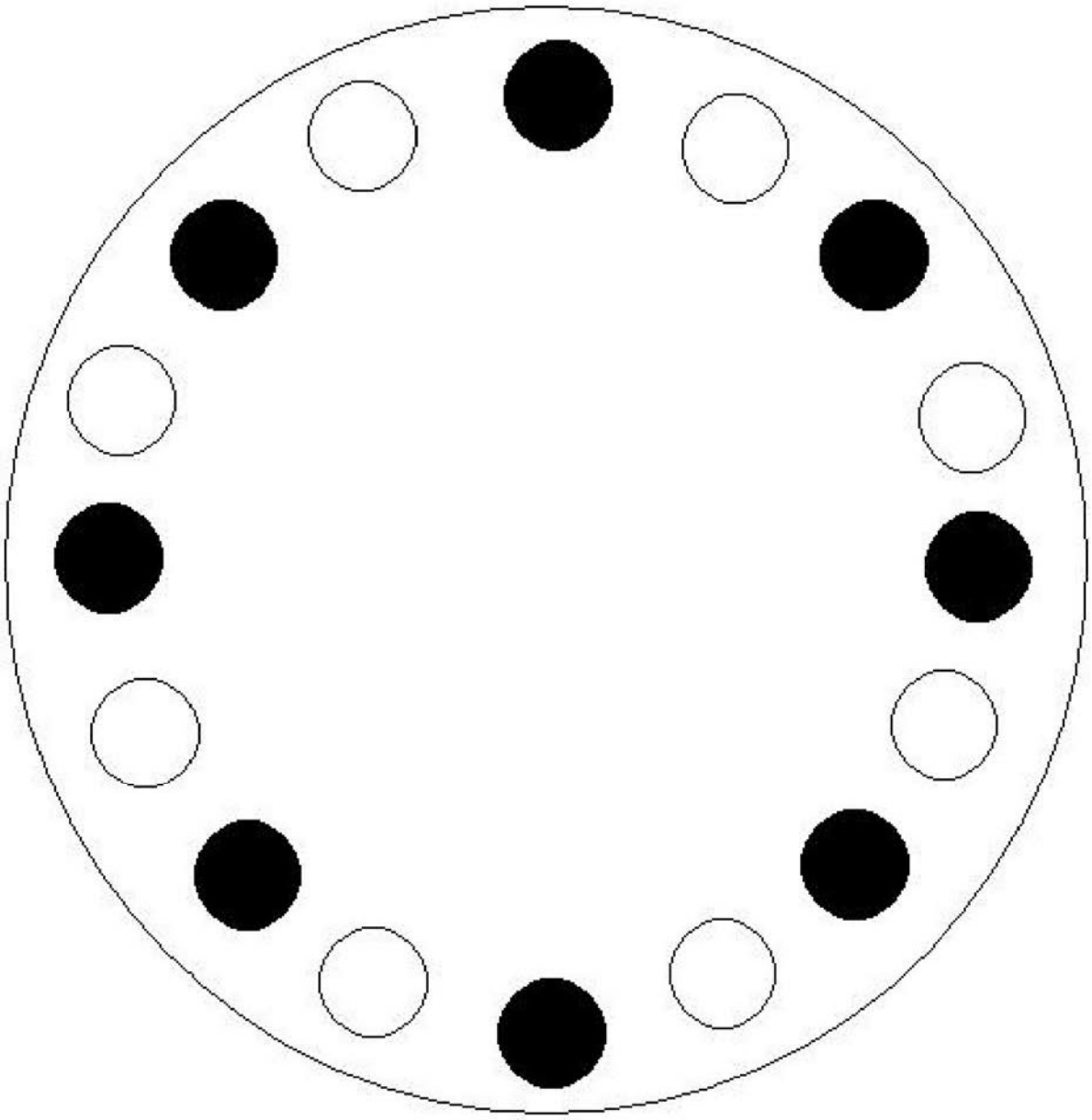
Figure E-1 Balloon Target

D Cdts 3, 2007, Ottawa, ON: Department of National Defence

TIMED ACTIVITY

CHASE THE DOTS
Objective: To fire pellets into the dots on the target in a clockwise direction, within a time limit.
Scoring: One point is awarded for each black dot that is hit by a pellet within the time allotted.
Equipment Required: Mandatory: • Chase the Dots Target (one per cadet); and • A stopwatch. Optional aids to firing are limited to the following: • Cadet air rifle sling; • Marksmanship jacket; • Shooting glove; or • Hat.
Activity Guidelines: 1. Distribute one Chase the Dots Target to each cadet. 2. Have cadets write their name and rank on the target and attach it to the target frame. 3. Cadets will fire in relays following the commands given by the RSO. 4. Cadets will be given sixteen pellets. 5. Cadets will fire one pellet into the black circles, in a clockwise direction, on the target. 6. A suggested time limit for this activity is eight minutes. 7. Have cadets retrieve their targets. 8. Score the targets based on the method described above. 9. On completion of the activity or as time allows, place the targets out for the cadets to review. 10. Return the targets to cadets. The following is prohibited: • Alterations made to the rifles. • A pellet loading clip. • Supports used as a rest for the rifle or the forearm. • A spotting scope. • Use of sights not provided with the cadet air rifle. • Coaching.
Note: To make this activity more difficult, shorten the time allowance.

CHASE THE DOTS TARGET



Name: _____ **Date:** _____

Figure F-1 Chase the Dots Target

D Cdts 3, 2007, Ottawa, ON: Department of National Defence

TIMED ACTIVITY

SPEED GRID
Objective: To fire pellets into the circles on the target, within a time limit.
Scoring: One point is awarded for each circle that is hit by a pellet within the time allotted.
Equipment Required: Mandatory: • Cadet air rifle five pellet clip (three per firing lane); • Speed Grid Target (one per cadet); and • A stopwatch. Optional aids to firing are limited to the following: • Cadet air rifle sling; • Marksmanship jacket; • Shooting glove; or • Hat.
Activity Guidelines: 1. Distribute one Speed Grid Target to each cadet. 2. Have cadets write their name and rank on the target and attach it to the target frame. 3. Cadets will fire in relays following the commands given by the RSO. 4. Five pellets will be pre-loaded into the cadet air rifle five pellet clip. Three clips will be used per cadet. 5. Cadets will fire one pellet into each circle on the target. 6. A suggested time limit for this activity is 15 minutes. 7. Have cadets retrieve their targets. 8. Score the targets based on the method described above. 9. On completion of the activity or as time allows, place the targets out for the cadets to review. 10. Return the targets to cadets. The following is prohibited: • Alterations made to the rifles. • Supports used as a rest for the rifle or the forearm. • A spotting scope. • Use of sights not provided with the cadet air rifle. • Coaching.
Note: To make this activity more difficult, shorten the time allowance.

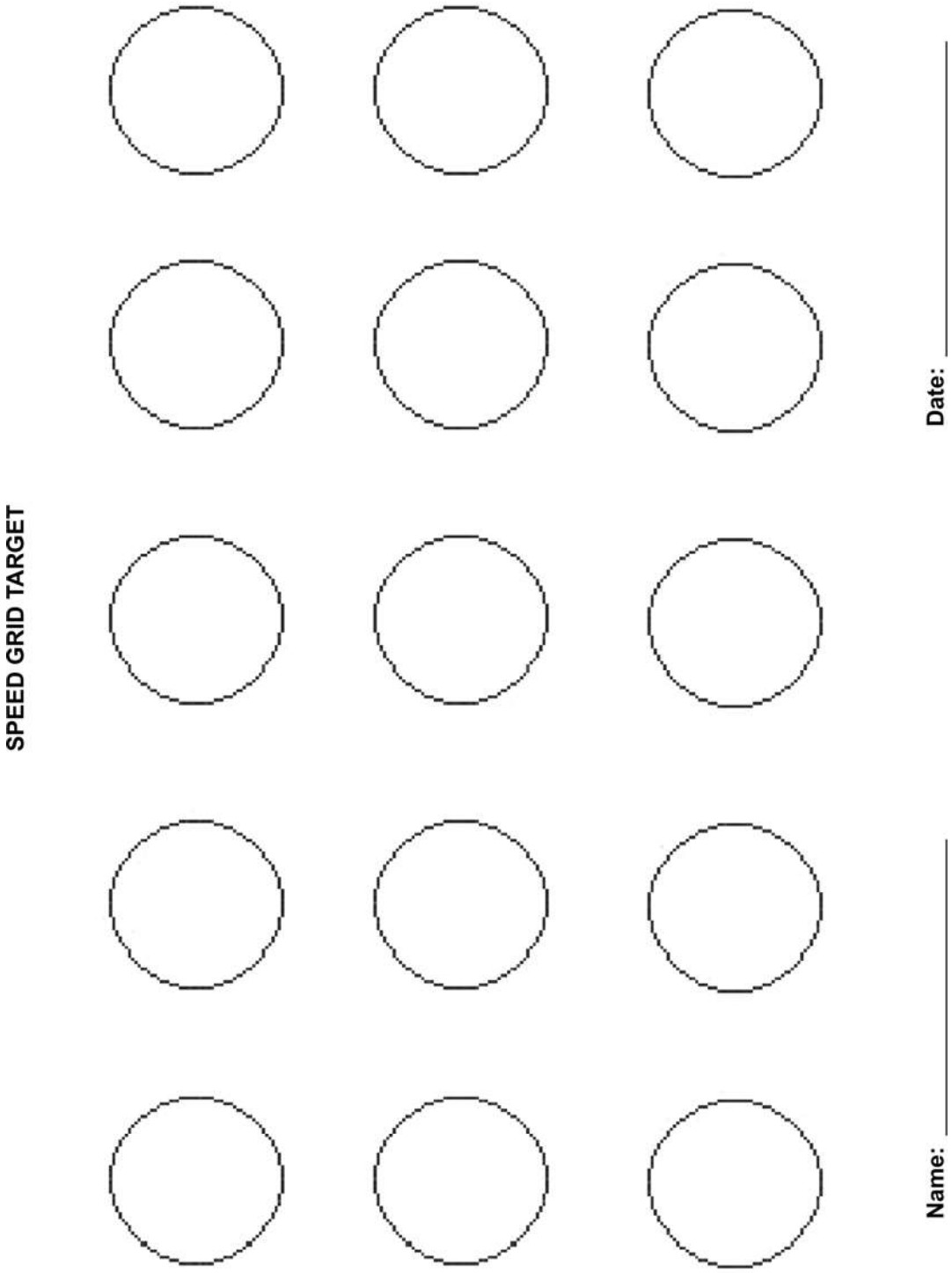


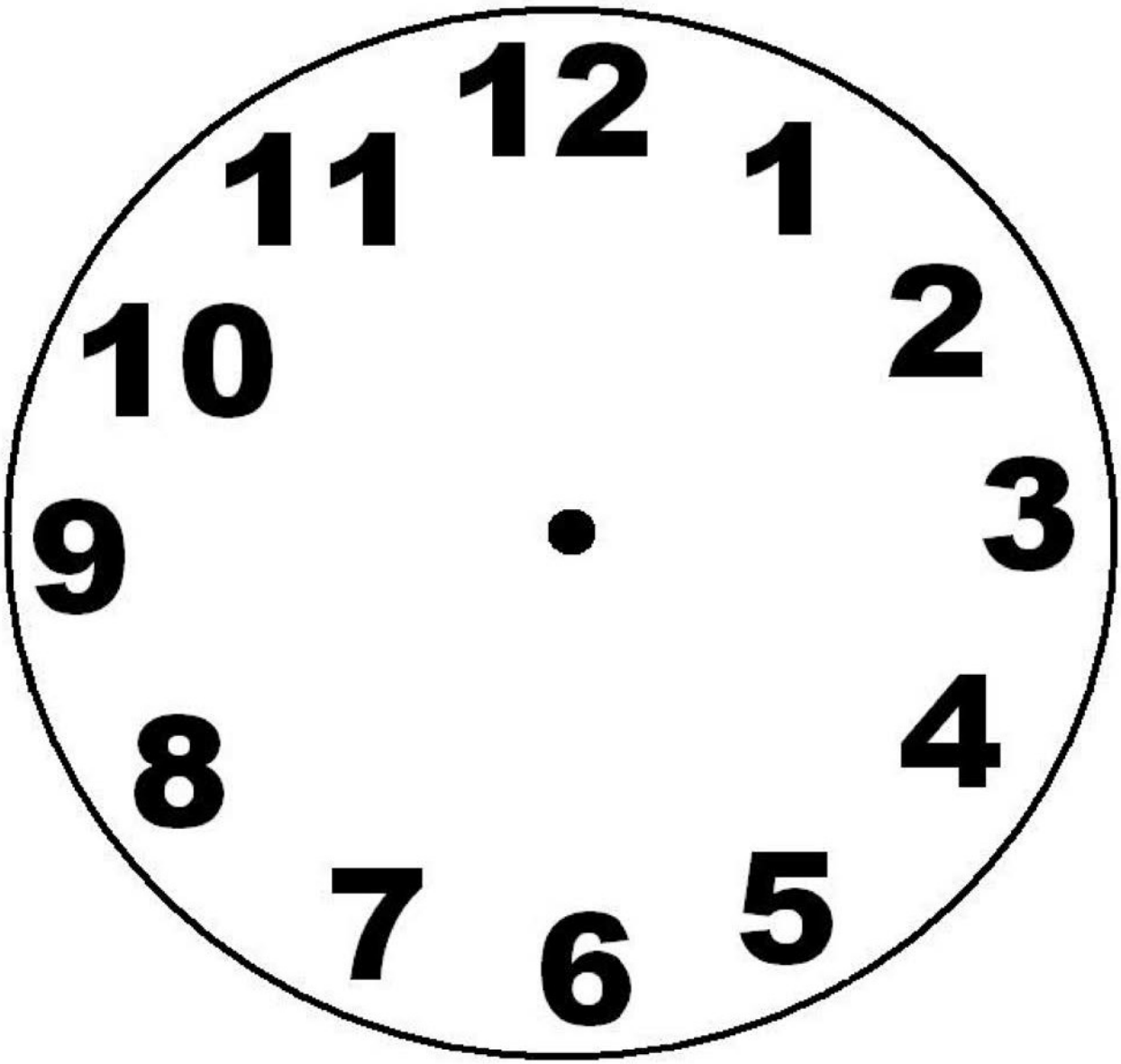
Figure G-1 Speed Grid Target

D Cdts 3, 2007, Ottawa, ON: Department of National Defence

TIMED ACTIVITY

BEAT THE CLOCK
Objective: To fire pellets into the designated hours (numbers) within a time limit.
Scoring: One point is awarded for each correct hour (number) hit by a pellet within the time allotted.
Equipment Required: Mandatory: • Beat the Clock Target (one per cadet); and • A stopwatch. Optional aids to firing are limited to the following: • Cadet air rifle sling; • Marksmanship jacket; • Shooting glove; or • Hat.
Activity Guidelines: 1. Distribute one Beat the Clock Target to each cadet. 2. Have cadets write their name and rank on the target and attach it to the target frame. 3. Cadets will fire in relays following the commands given by the RSO. 4. Cadets will be given six pellets. 5. The RSO will call out six hours (numbers) in five second increments using the 24-hour clock. 6. Cadets will fire one pellet at each hour (number) as it is called by the RSO (e.g. if 1300 hrs was called the cadet will fire at the 1 on the clock face). 7. Have cadets retrieve their targets. 8. Score the targets awarding one point for each correct number hit on the target. 9. On completion of the activity or as time allows, place the targets out for the cadets to review. 10. Return the targets to cadets. The following is prohibited: • Alterations made to the rifles. • Supports used as a rest for the rifle or the forearm. • A spotting scope. • Use of sights not provided with the cadet air rifle. • Coaching.
Note: To make this activity more difficult, shorten the time allowance.

BEAT THE CLOCK TARGET



Name: _____ **Date:** _____

Figure H-1 Beat the Clock Target

D Cdts 3, 2007, Ottawa, ON: Department of National Defence

COMPETITIVE ACTIVITY

CORPS/SQUADRON MARKSMANSHIP COMPETITION

Objective: To provide cadets the opportunity to compete within the corps/squadron.

Scoring: Targets will be scored IAW A-CR-CCP-177/PT-001, to include:

- Each target has a highest possible score of 100 points (10 diagrams worth 10 points each).
- All shot holes are scored using the highest value of the scoring ring that it is touching.
- Shots outside the scoring rings are given a value of zero.
- If more than the prescribed number of shots are fired at a target, the shots with the highest value will be discarded until the correct number of shots remain on the target. A two-point penalty will be deducted for each excess shot.
- If more than one shot is fired at a scoring diagram, only the prescribed number of shots may be fired at the remaining diagrams [e.g., if two shots were fired at the first diagram, one diagram on the target would remain blank (free of shots)]. If this occurs more than twice, a two-point penalty will be deducted for each excess shot.

Equipment Required:

Mandatory: CCT2001AR853 Canadian Cadet Movement Competition Targets (two per cadet).

Optional aids to firing are limited to the following:

- Cadet air rifle sling;
- Marksmanship jacket;
- Shooting glove; or
- Hat.

Activity Guidelines:

1. This activity may be conducted as individuals or teams of four.
2. Distribute two CCT2001AR853 Canadian Cadet Movement Competition Targets to each cadet.
3. Have cadets write their name and rank on the target and attach it to the target frame.
4. Cadets will be given 30 minutes to fire 20 pellets (one pellet at each diagram [zeroing pellets are permitted]).
5. On completion of the activity or as time allows, place the targets out for the cadets to review.
6. After viewing, all targets will be collected by the RSO to record results.
7. Return the targets to cadets.

The following is prohibited:

- Cross-firing.
- Alterations made to the rifles.
- Supports used as a rest for the rifle or the forearm.
- A spotting scope.
- Use of sights not provided with the cadet air rifle.

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COMPETITIVE ACTIVITY

LUNAR LAUNCH
Objective: To provide cadets the opportunity to compete within the corps/squadron.
Scoring: The average distance from the earth to the moon is 384 400 km. All targets from marksmanship activities conducted during the training year will be added together to achieve a distance from earth and position on the space shuttle crew. The four scoring levels/positions must meet the following standards: 1. Mission Commander: A score of 100 or more: 384 400 km from earth, lunar landing! 2. Mission Specialist: A minimum score of 75: 288 300 km from earth. 3. Chief Engineer: A minimum score of 50: 192 200 km from earth. 4. Science Officer: A minimum score of 25: 96 100 km from earth, lunar launch!
Equipment Required: Mandatory: Any targets used in marksmanship activities during the training year.
Activity Guidelines: 1. Add the scores from the targets used by each cadet during the training year. 2. Use the scoring method described above to assign the cadets levels/positions on the space shuttle crew.
Notes 1. If this activity is conducted, a record must be kept of the cadets' scores from marksmanship activities. 2. This activity may be conducted over multiple training years. 3. The certificate found at Annex J may be awarded to cadets who achieve levels/positions in this activity.

This is to certify that

_____

has achieved the position of

_____

in the

Lunar Launch Marksmanship Activity

_____ _____

Date Range Safety Officer

COMMON TRAINING

INSTRUCTIONAL GUIDE

SECTION 2

EO C206.01 – PRACTICE HOLDING TECHNIQUES

Total Time: 30 min

PREPARATION

PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-702/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.

For comfort during this class, it is recommended that cadets be dressed in PT gear.

Ensure all cadet air rifle slings are properly assembled (except one for demonstration).

PRE-LESSON ASSIGNMENT

N/A.

APPROACH

Demonstration was chosen for TP1 and TP2 as it allows the instructor to explain and demonstrate the holding techniques that the cadet is expected to acquire.

Performance was chosen for TP3 as it provides an opportunity for the cadets to practice holding techniques under supervision.

INTRODUCTION

REVIEW

The review for this lesson is from EO M106.03 (Apply Basic Marksmanship Techniques), specifically adopting the prone position.

Have an assistant instructor lie down on a mat and assume the prone position without the cadet air rifle sling. Allow the cadets two minutes to identify and/or correct aspects of the position.

OBJECTIVES

By the end of this lesson the cadet shall have practiced holding techniques.

IMPORTANCE

It is important for cadets to practice holding techniques using the cadet air rifle sling, as it will enhance the cadets' marksmanship skills through added stability of the firing position.

Teaching Point 1 **Explain and Demonstrate Adopting the Prone Position**

Time: 5 min Method: Demonstration

An assistant instructor may be used to demonstrate as the instructor explains the prone position.

THE PRONE POSITION

The first principle of marksmanship is to find a comfortable firing position. The prone position is the most stable firing position in which the cadet air rifle is supported by the body structure. The prone position requires little movement and muscular tension while holding the cadet air rifle, so that:

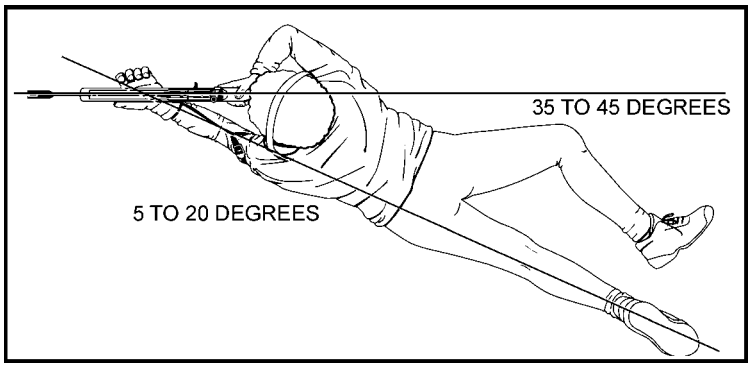


Figure 1 Prone Position

A-CR-CCP-177/PT-001 (p. 1-5-3)

- the bodyweight is equally distributed;
- the position is consistent throughout the relay;
- the body forms a 5 to 20 degree angle to the line of sight with the target;
- the body and spine are straight;
- the left leg is parallel with the spine;
- the right foot is straight out or turned to the right;
- the left foot is straight behind on the toe or pointed to the right; and
- the right knee is brought up so the thigh forms a 30 to 45 degree angle with the left leg.

By bending the right knee, stability is improved. This causes the body to roll slightly, raising the chest off the ground to improve breathing and to minimize body movement caused by a normal heartbeat.

CONFIRMATION OF TEACHING POINT 1

The cadets' participation in the holding technique activity in TP3 will serve as the confirmation of this TP.

Teaching Point 2 **Explain and Demonstrate Holding Techniques Using the Cadet Air Rifle Sling**

Time: 10 min Method: Demonstration

The cadet air rifle sling helps the cadet maintain a comfortable and stable position, improving the ability to hold the cadet air rifle. It also allows the right hand to be free to load the air rifle while the rifle remains in position.

Arrange the cadets so they can all hear the explanation and see the demonstration.

ASSEMBLING THE SLING

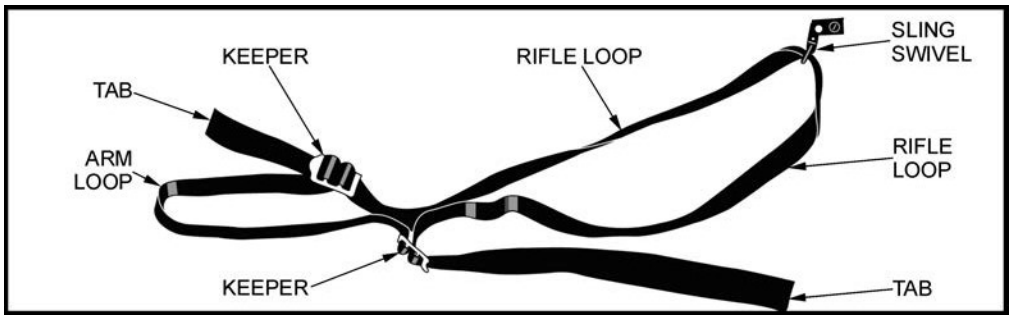
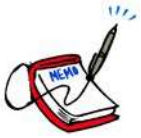


Figure 2 Cadet Air Rifle Sling

A-CR-CCP-121/PT-001, Royal Canadian Army Cadet Reference Book (p. 6-17)

The cadet air rifle sling is assembled in the following sequence:

1. Hold the sling parallel to the ground with the short section in the left hand, ensuring the rounded tip of the keeper is pointing to the left.
2. Take the tab of the short section, loop it through the middle slot of the keeper and then back down through the front slot nearest to the rounded tip. The short section will now form the arm loop.
3. Turn the sling over and slide the sling swivel onto the long section. Ensure the sling swivel hangs downwards, as it will later attach to the rifle.
4. Loop the tab of the long section up through the middle slot of the keeper and then back through the rear slot nearest to the rounded tip. The long section will now form the rifle loop.



An assistant instructor can be used to demonstrate as the instructor explains wearing, adjusting and attaching the cadet air rifle sling.

POSITIONING THE SLING ON THE ARM

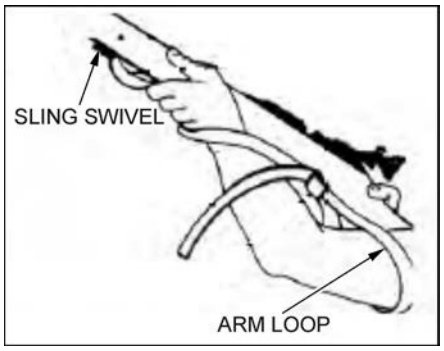


Figure 3 Positioning Sling

Daisy Outdoor Products, Operational Manual – AVANTI Legend EX Model 853C, Daisy Outdoor Products (p. 7)

The sling arm loop should be positioned on the upper part of the arm, above the bicep muscle near the shoulder. The sling can be held in place by the rubber pad on a shooting jacket. When a shooting jacket is not worn, the sling can be kept in place using a safety pin. This will prevent the sling from slipping down the arm while in the prone position.

ADJUSTING THE ARM LOOP

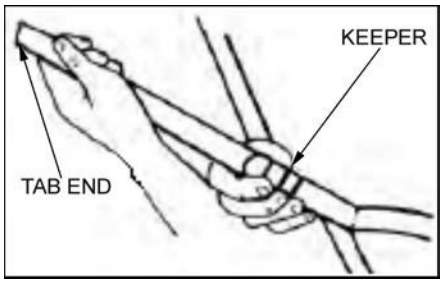


Figure 4 Adjusting Arm Loop

Daisy Outdoor Products, Operational Manual – AVANTI Legend EX Model 853C, Daisy Outdoor Products (p. 8)

To adjust the arm loop, pull the tab away from the keeper. If the sling is too loose, it will not fully support the cadet air rifle and it will have to be kept in place using muscles. If the sling is too tight, it will restrict the blood flow to the arm and can cause discomfort, numbness, or a more pronounced feel of the body's pulse. Therefore, the sling must be comfortable without pinching the arm, while providing maximum support of the cadet air rifle.

ATTACHING THE SLING TO THE CADET AIR RIFLE

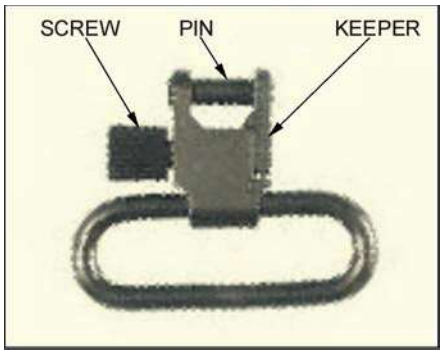


Figure 5 Sling Swivel

D Cdts 3, 2007, Ottawa, ON: Department of National Defence

To attach the sling to the cadet air rifle, simply:

1. open the keeper on the sling swivel by pressing on the screw;
2. insert the swivel pin into the hole of the sling swivel on the fore end of the rifle; and
3. screw the keeper over the pin to lock the swivel in place.

ADJUSTING THE RIFLE LOOP

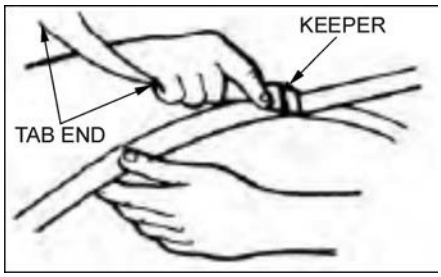


Figure 6 Adjusting Rifle Loop

Daisy Outdoor Products, Operational Manual – AVANTI Legend EX Model 853C, Daisy Outdoor Products (p. 8)

To adjust the rifle loop, pull the tab away from the keeper. The tension of the sling should allow the forearm to be in its proper position. If the sling is too loose, it will not provide maximum support of the cadet air rifle. If the sling is too tight, it could cause discomfort and affect the cadet's position.

CONFIRMATION OF TEACHING POINT 2

The cadets' participation in the holding technique activity in TP3 will serve as the confirmation of this TP.

Teaching Point 3 **Conduct a Holding Technique Activity**

Time: 10 min Method: Performance

ACTIVITY

OBJECTIVE

The objective of this activity is to have cadets adopt the prone position, positioning the sling on the arm, adjusting the arm loop, attaching the sling to the air rifle, and adjusting the rifle loop.

RESOURCES

- Cadet air rifle (one per firing lane).
- Cadet air rifle sling (one per air rifle).
- Shooting mat (one per firing lane).

ACTIVITY LAYOUT

An air rifle range constructed IAW A-CR-CCP-177/PT-001, Chapter 1, Section 8. If a range is not available, set up the training area to have a defined mock firing point. The assistant instructor shall be used to confirm the cadet's position.

ACTIVITY INSTRUCTIONS

1. Divide cadets into equal groups according to the number of cadet air rifles.
2. Have each group of cadets take turns lying down on mats and assume the prone position.
3. With assistance, allow the cadets to practice the prone position as taught.
4. Have cadets position the sling on the arm and adjust the arm loop.
5. Have cadets attach the sling to the air rifle and put the cadet air rifle into the shoulder.
6. Have cadets adjust the rifle loop of the sling.
7. Have cadets adjust their prone position.
8. Inspect each cadet for proper placement of the sling on the arm and tension of the sling loops.
9. Repeat steps as required, within the allotted time.

SAFETY

Ensure that the cadet air rifles are pointed in a safe direction at all times. Cadets will treat air rifles as though they are loaded.

CONFIRMATION OF TEACHING POINT 3

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

END OF LESSON CONFIRMATION

The cadets' participation in the holding technique activity in TP3 will serve as the confirmation of this lesson.

CONCLUSION

HOMEWORK/READING/PRACTICE

N/A.

METHOD OF EVALUATION

N/A.

CLOSING STATEMENT

The prone position and the cadet air rifle sling are essential to improving marksmanship techniques. With practice using the sling in the prone position, cadets can improve their technique and their marksmanship score.

INSTRUCTOR NOTES/REMARKS

Instructions may be modified for left-handed cadets (e.g., switching left hand/foot when instructions call for right hand/foot).

This EO is intended to enhance and further develop techniques taught in EO M106.03 (Apply Basic Marksmanship Techniques).

REFERENCES

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

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COMMON TRAINING

INSTRUCTIONAL GUIDE

SECTION 3

EO C206.02 – PRACTICE AIMING TECHNIQUES

Total Time:	60 min

PREPARATION

PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-702/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

Demonstration and performance was chosen for TP1 and TP3 as it allows the instructor to explain and demonstrate aiming techniques while providing an opportunity for the cadets to practice these skills under supervision.

An interactive lecture was chosen for TP2 to introduce the aspects of aiming.

INTRODUCTION

REVIEW

Review the following points from EO M106.03 (Apply Basic Marksmanship Techniques).

- The aiming process is achieved by adopting a comfortable prone position and ensuring body alignment with the target.
- Sight alignment is the alignment of the eye, the rear sight, and the front sight.
- The sight picture is obtained by keeping the bull's-eye centred with the circles of the front sight and rear sight.

OBJECTIVES

By the end of this lesson the cadet shall have practiced aiming techniques.

IMPORTANCE

It is important for cadets to practice aiming techniques while wearing the cadet air rifle sling as it will enhance the cadets' marksmanship skills through added stability of the firing position.

Teaching Point 1 **Explain, Demonstrate and Have Cadets Practice Proper Eye Usage**

Time: 15 min Method: Demonstration and Performance

Before completing a manual task, it must first be determined which hand or foot to use. Is one left or right-handed? The same is true for sight; it must first be determined the proper eye to use when aiming the cadet air rifle. To do this cadets' must determine their master eye, learn to fire with both eyes open and avoid fixed vision.

DETERMINING THE MASTER EYE

Everyone has a master eye, which is the brain's main source for the visual image of what we see. The non-master eye is used by the brain for depth perception or sense of direction. The master eye is the eye to be used when aiming the cadet air rifle.

The master eye is usually on the same side of the body as the dominate hand. If your master eye is opposite from your dominate hand, you should try firing on the side of your master eye.

ACTIVITY

OBJECTIVE

The objective of this activity is to have the cadets determine their master eye.

RESOURCES

N/A.

ACTIVITY LAYOUT

N/A.

ACTIVITY INSTRUCTIONS

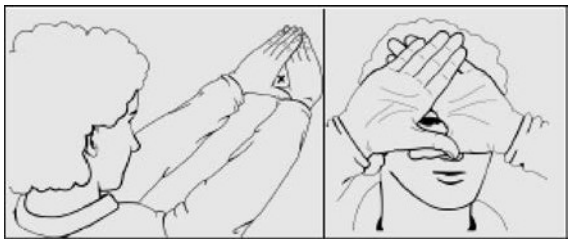


Figure 1 Determining the Master Eye

A-CR-CCP-177/PT-001 (p. 1-5-2)

1. Have cadets stand and face away from each other.
2. Select a small object preferably at least 5 m away.

3. Face the object and extend both arms in front of the face.
4. Form a small triangle opening around the object with both hands.
5. Look through the opening at the object, and draw the hands back towards the face.
6. Ensure the object remains centred through the opening of the hands.
7. Cadets should be looking at the object through the opening with one single eye (the stronger of the two). This is their master eye.

SAFETY

N/A.

FIRING WITH BOTH EYES OPEN

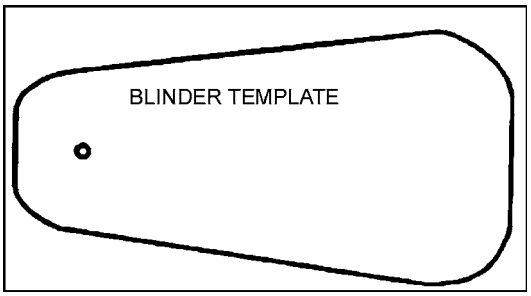


Figure 2 Blinder Template

A-CR-CCP-177/PT-001 (p. 1-5-2)

The human eyes are always working together. If one eye is closed, the opposite eye will strain and affect focusing of the open eye.

Some cadets will have difficulty focusing, so a blinder should be used in front of the non-aiming eye to help prevent squinting and fatigue. The blinder allows the cadets to see a focused sight picture while having both eyes open.

A good blinder should be translucent (plastic or paper) so that images are blocked, but light can still penetrate it. It should be easily attachable to the rear sight or to the cadet's glasses.

Have cadets look at a spot on the wall with both eyes open, then have cadets hold a blank piece of white paper in front of their non-aiming eye. The object should come into a clear focus.

AVOIDING FIXED VISION

When anyone's vision is fixed on one object for more than a few seconds, such as a target bulls-eye, the image can be burned in their mind and a "ghost" image can be seen when glancing to the side. It is important for cadets to avoid this fixed vision during marksmanship training, as it may result in a loss of visual perception and can greatly hinder performance. To avoid fixed vision, cadets need only to blink or slightly shift their vision every four to five seconds.

CONFIRMATION OF TEACHING POINT 1

The cadets' participation in determining the master eye will serve as the confirmation of this TP.

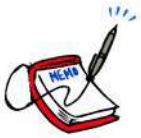
Teaching Point 2 **Identify and Explain Aspects of Aiming**

Time: 25 min Method: Interactive Lecture

Before cadets can aim the cadet air rifle with accuracy, they must first identify aspects of aiming. To do this cadets must understand that the sight system of the cadet air rifle, natural head position, and eye relief all work together when aiming.

SIGHT SYSTEM OF THE CADET AIR RIFLE

The sight system of the cadet air rifle is made up of two main components—the front sight and the rear sight.



Explain to the cadets that the front and rear sights of the cadet air rifle must be used together when acquiring a sight picture.

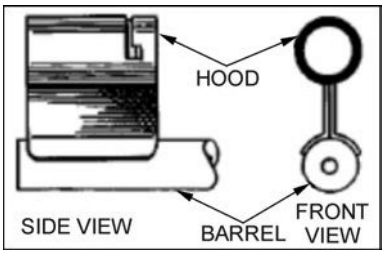


Figure 3 Front Sight

A-CR-CCP-177/PT-001 (p. 1-5-5)

Front Sight. The front sight of the cadet air rifle is made of a short tube, which is called a hood. The hood is designed to shield the front sight from overhead and side light. The most common front sights used for the cadet air rifle is the aperture or circle sight. The aperture is inserted in the hood through a slit on the top.

The adjusting of the sights on the cadet air rifle will be covered in Year Three. Instruct the cadets that they are not to make any adjustments to the sights.

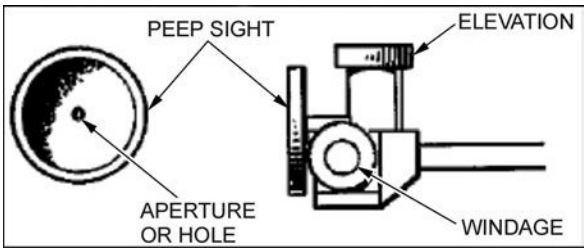


Figure 4 Rear Sight

A-CR-CCP-177/PT-001 (p. 1-5-5)

Rear Sight. The adjustable rear sight of the cadet air rifle has three main parts; peep sight, elevation knob, and windage knob.

- **Peep Sight.** The peep sight is the penny-sized dish-shaped part at the rear of the sight. It has a small hole in the centre to look through.
- **Elevation Knob.** The elevation knob is on the top of the sight and moves the point of impact on the target up or down.
- **Windage Knob.** The windage knob is on the side of the sight and moves the point of impact on the target left or right.

NATURAL HEAD POSITION

The head should be kept as close as possible to a natural position, allowing the eyes to look straight forward from the eye socket. It is perfectly normal to tilt the head forward slightly, but cadets must resist allowing it to tilt to the left or right as this may affect their sense of balance.

EYE RELIEF

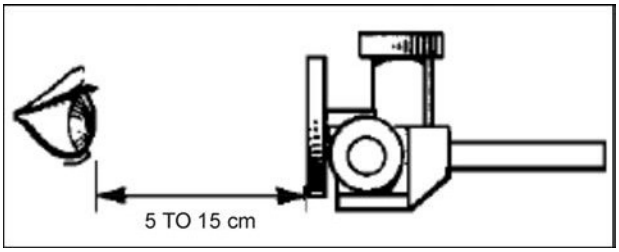


Figure 5 Eye Relief

A-CR-CCP-177/PT-001 (p. 1-5-6)

Eye relief is the distance between the eye and the peep sight on the rear sight. Depending on an individual's build and position, the distance is usually 5 to 15 cm. Eye relief should be comfortable, natural and allow the head to be as erect as possible during the firing process. It is important to maintain the same eye relief from shot to shot and to find an eye relief that allows a circle of light to be seen around the front sight while looking through the rear sight. If the eye relief is less than 5 cm, the line of white around the front sight becomes larger, making the sight picture more difficult to keep aligned.

CONFIRMATION OF TEACHING POINT 2

QUESTIONS

Q1. What are the two main components of the cadet air rifle sight system?

Q2. What are the three parts of the rear sight?

Q3. What is the usual distance for eye relief?

ANTICIPATED ANSWERS

A1. The front and rear sights.

A2. The peep sight, elevation knob and windage knob.

A3. 5 to 15 cm.

Teaching Point 3 **Explain, Demonstrate and Have Cadets Practice Marksmanship-related Breathing**

Time: 15 min Method: Demonstration and Performance

Breathing supplies the blood stream with oxygen and eliminates waste elements (such as carbon dioxide) from the blood. While breathing, the oxygen inhaled is used to supply muscles with energy, ensuring optimal potential of the muscles. Just like in sports, controlled breathing can affect marksmanship outcomes.

CONTROLLED BREATHING

Once a stable prone position is established, cadets must integrate the principles of controlled breathing. For maximum stability when firing, cadets will have to hold their breath for five to seven seconds. It is very important that they do not hold their breath for more than seven seconds, as tension will increase in the chest, muscles will lack oxygen and stability will be reduced. When the body lacks oxygen, muscles will quiver and eyesight will be negatively affected.

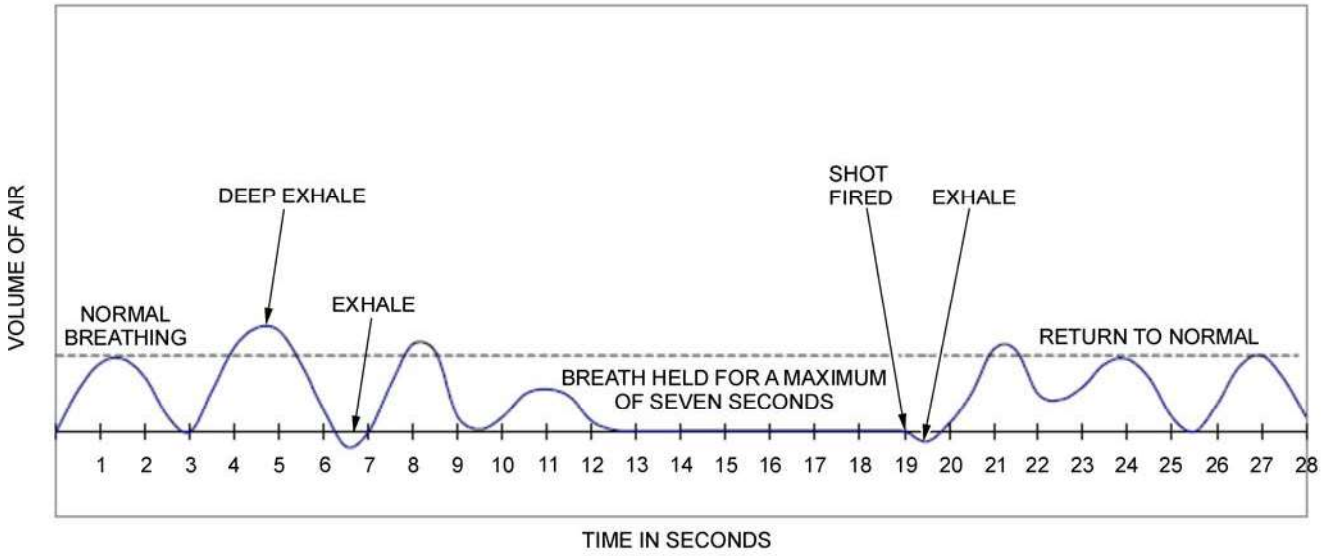


Figure 6 Breathing Cycle

A-CR-CCP-177/PT-001 (p. 1-5-9)

ACHIEVING A CONTROLLED BREATHING SEQUENCE

During the breathing sequence, cadets should confirm that the cadet air rifle is moving up and down and it is not canted. Also, when breathing in and out, cadets can visually confirm that they are aiming on the proper diagram.

ACTIVITY

Time: 10 min

OBJECTIVE

The objective of this activity is to have cadets practice a controlled breathing sequence.

RESOURCES

- Cadet air rifles (one per firing lane).
- Cadet air rifle slings (one per air rifle).
- Cadet air rifle safety rods (one per air rifle).
- Suitable targets (one per firing lane).

ACTIVITY LAYOUT

N/A.

ACTIVITY INSTRUCTIONS

1. Divide the cadets into groups based on the number of air rifles available.
2. Have cadets adopt the prone position using the cadet air rifle sling.

3. Have the cadets relax and breathe normally.
4. Have the cadets obtain a sight picture.
5. Have the cadets inhale and exhale deeply.
6. Have the cadets inhale deeply and exhale normally.
7. Have the cadets relax the chest muscles, hold a breath for 5 to 7 seconds and squeeze the trigger.
8. Have the cadets exhale completely and resume normal breathing.

It is important for cadets not to fire if they feel they want to take another breath. Their shot will not be perfect and their end result will be affected. Relaxed breathing decreases "vibrations" caused by tension.

SAFETY

Ensure control at all times. Cadets will treat air rifles as though they are loaded.

CONFIRMATION OF TEACHING POINT 3

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

END OF LESSON CONFIRMATION

QUESTIONS

Q1. What is the master eye used for in marksmanship?

Q2. How much eye relief is between the eye and the rear sight?

Q3. During a controlled breathing sequence, what direction should the cadet air rifle move?

ANTICIPATED ANSWERS

A1. To aim the cadet air rifle.

A2. 5 to 15 cm.

A3. Up and down.

CONCLUSION

HOMEWORK/READING/PRACTICE

N/A.

METHOD OF EVALUATION

N/A.

CLOSING STATEMENT

Breathing is essential to marksmanship as it supplies the muscles with oxygen and helps the cadet to maintain the prone position. With practice using the controlled breathing sequence, cadets can improve their aiming of the cadet air rifle and marksmanship scores can improve.

INSTRUCTOR NOTES/REMARKS

N/A.

REFERENCES

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

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COMMON TRAINING

INSTRUCTIONAL GUIDE

SECTION 4

EO C206.03 – PRACTICE FIRING TECHNIQUES

Total Time: 30 min

PREPARATION

PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-702/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.

For comfort during this class, it is recommended that cadets be dressed in PT gear.

PRE-LESSON ASSIGNMENT

N/A.

APPROACH

Demonstration and performance was chosen for TP1 as it allows the instructor to explain and demonstrate firing techniques while providing an opportunity for the cadets to practice these skills under supervision.

Demonstration was chosen for TP2 as it allows the instructor to explain and demonstrate trigger control.

An interactive lecture was chosen for TP3 to present basic material on follow-through.

INTRODUCTION

REVIEW

The review for this lesson is from EO M106.03 (Apply Basic Marksmanship Techniques). The sequence required to fire the cadet air rifle when the RSO gives the command “Fire”, will include:

1. place safety catch in the OFF position;
2. aim the cadet air rifle at the target;
3. squeeze the trigger;
4. open the bolt, pump the rifle, reload, aim and fire;
5. repeat the last step until firing is complete;

6. upon completion, place the safety catch in the ON position and partially open the pump lever; and
7. lay down the cadet air rifle.

OBJECTIVES

By the end of this lesson the cadet shall have practiced firing techniques.

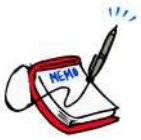
IMPORTANCE

It is important for cadets to practice natural alignment, trigger control and follow-through when firing the cadet air rifle, as it helps cadets achieve a stable prone position and sight picture.

Teaching Point 1 **Explain, Demonstrate and Have the Cadets Practice Natural Alignment**

Time: 15 min Method: Demonstration and Performance

NATURAL ALIGNMENT



With the use of an assistant instructor, demonstrate and explain natural alignment as listed below, prior to cadets practicing this procedure.

Natural alignment describes the direction that the cadet air rifle is aimed when the marksman is in the prone position with the cadet air rifle at the ready. In a comfortable position, the cadet air rifle should not be forced to point at the target. Even with a perfect prone position and sight alignment, forcing the air rifle can cause muscle tension and will affect the accuracy of each shot.

Natural alignment is obtained by:

1. adopting a comfortable prone position;
2. acquiring a sight picture;
3. closing both eyes;
4. taking several normal breaths to relax the muscles;
5. looking through sights when comfortable;
6. adjusting body position until a proper sight picture is achieved; and
7. proceeding with firing.

ACTIVITY

Time: 10 min

OBJECTIVE

The objective of this activity is to have cadets practice natural alignment.

RESOURCES

- Cadet air rifle (one per firing lane).
- Cadet air rifle safety rod (one per rifle).
- Shooting mat (one per firing lane).
- Suitable target (one per firing lane).

ACTIVITY LAYOUT

Construct an air rifle range IAW A-CR-CCP-177/PT-001, Chapter 1, Section 8. If a range is not available, set up the training area to have a defined mock firing point. Ensure that the air rifles are pointed in a safe direction at all times.

ACTIVITY INSTRUCTIONS

1. Divide cadets into equal groups according to the number of cadet air rifles available.
2. Have cadets lie on the mats and assume the prone position using the cadet air rifle and sling.
3. Cadets will acquire a sight picture by aligning the eye, rear sight, front sight, and the target bull's eye.
4. When cadets have a sight picture, have them close their eyes.
5. Have cadets relax by taking 3 to 4 normal breaths.
6. After approximately 10 seconds, have cadets open their eyes and inspect their sight picture.
7. Cadets shall adjust their bodies to re-acquire an accurate sight picture.
8. Repeat steps 4 to 9, as required, within the allotted time.

SAFETY

Ensure control at all times. Cadets will treat cadet air rifles as though they are loaded.

CONFIRMATION OF TEACHING POINT 1

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

Teaching Point 2 **Demonstrate and Explain Trigger Control**

Time: 5 min Method: Demonstration

TRIGGER CONTROL

With the use of an assistant instructor, allow the cadets to observe the demonstration and hear the explanation for each aspect of trigger control as listed below.

Trigger control is the handling of the trigger in such a way that there is no disturbance. It must be constant, controlled, slow and deliberate.

Position of the Hand on the Rifle. Cadets should have a relatively firm grip so the three lower fingers wrap around the small of the butt. The thumb is pointed forward in a relaxed position behind the rear sight along the rifle stock, or wrapped around the small of the butt.

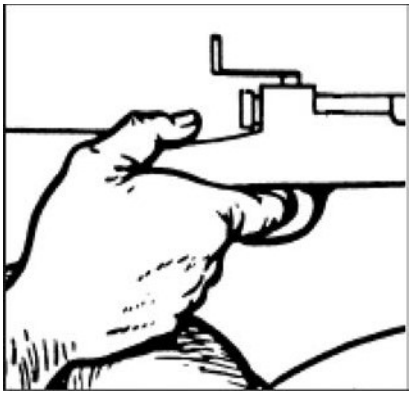


Figure 1 Position of the Hand on the Rifle

D Cdts 5, Royal Canadian Army Cadets Visual Aids Rifle Shooting Figures, Department of National Defence (p. 11)

Trigger Finger Position. The index finger is placed on the trigger halfway between the tip of the finger and the first joint. The index finger never touches the stock of the rifle and must be vertically centred on the trigger.

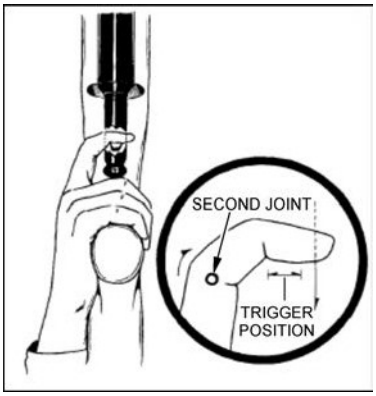


Figure 2 Trigger Finger Position

A-CR-CCP-177/PT-001 (p. 1-5-9)

Squeezing the Trigger. Squeezing the trigger is simply applying pressure to the trigger, by bending the second joint of the index finger straight to the rear. While the breath is being held, apply constant pressure and slowly squeeze the trigger. Trigger pressure is to be applied only when ready to fire.

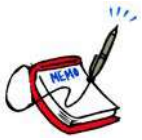
CONFIRMATION OF TEACHING POINT 2

The cadets' observation of the trigger control demonstration will serve as the confirmation of this TP.

Teaching Point 3 **Define Follow-through**

Time: 5 min Method: Interactive Lecture

FOLLOW-THROUGH



Since no pellets will be fired, position the cadets so they may observe an assistant instructor perform a simulation and hear the explanation of follow-through.

Follow-through is defined as the act of remaining in a stable prone position for two seconds and reacquiring the sight picture after firing the air rifle. Follow-through is critical to ensuring there is no movement as the cadet air rifle is being fired. If the cadet moves the cadet air rifle during firing, the pellet will not hit the target in the spot that it was aimed. Ensuring proper follow-through allows cadets to improve their skills, and their score.

CONFIRMATION OF TEACHING POINT 3

QUESTIONS

Q1. How long must a stable position be held after firing the cadet air rifle?

Q2. What will happen to a pellet during follow-through?

Q3. If the rifle moves before the pellet leaves the muzzle, how will it affect the target?

ANTICIPATED ANSWERS

A1. A stable position must be held for two seconds.

A2. It will leave the muzzle.

A3. The pellet will not hit the target in the spot that it was aimed.

END OF LESSON CONFIRMATION

The cadets' participation in marksmanship activities using natural alignment, trigger control and follow-through, will serve as the confirmation of this lesson.

CONCLUSION

HOMEWORK/READING/PRACTICE

N/A.

METHOD OF EVALUATION

N/A.

CLOSING STATEMENT

Natural alignment, trigger control and follow-through are essential to developing marksmanship skills. They help cadets maintain a stable position and sight picture when firing the cadet air rifle. With practice using these firing techniques, cadets can improve their skills and their score.

INSTRUCTOR NOTES/REMARKS

N/A.

REFERENCES

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