ROYAL CANADIAN AIR CADETS

PROFICIENCY LEVEL THREE

INSTRUCTIONAL GUIDE

SECTION 18

EO C390.13 – ACT AS A MEMBER OF A GROUND SEARCH AND RESCUE (SAR) PARTY

Total Time: 120 min

PREPARATION

PRE-LESSON INSTRUCTIONS

Resources needed for the delivery of this lesson are listed in the lesson specification located in A-CR-CCP-803/PG-001, Chapter 4. Specific uses for said resources are identified throughout the instructional guide within the TP for which they are required.

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

Examples of confinement methods and clues are to be created prior to the lesson.

The lost person's survival site is to be created prior to the lesson.

The briefing to be presented in TP 4 should be created based on the details of the lost person that will be found at the scenario's survival site. A sample briefing is located at Annex AK.

Additional staff will be required during TP 4 for supervision and assistance in the search.

PRE-LESSON ASSIGNMENT

N/A.

APPROACH

An interactive lecture was chosen for TP 1 to present the categories of lost persons and other general information to the cadets.

Demonstration was chosen for TPs 2 and 3 as it allows the instructor to explain and demonstrate limiting the search area and clue orientation which the cadet is expected to learn.

A practical activity was chosen for TP 4 as it is an interactive way to experience being a member of a search and rescue party. This activity contributes to the development of search and rescue skills and knowledge in a fun and challenging setting.

INTRODUCTION

REVIEW

N/A.

Unofficial convenience copy of A-CR-CCP-803/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-803-PF-001/A-CR-CCP-803-PF-001.pdf.
Verify against the official publication.

OBJECTIVES

By the end of this lesson the cadet, in pairs, shall have acted as a member of a ground SAR party.

IMPORTANCE

It is important for the cadets to know how a ground SAR party operates so they know what to look for when searching for a lost person. It is easier for them to plan their rescue in a survival situation.

Teaching point 1 **Explain Lost Person Behaviour and General Information**

Time: 10 min Method: Interactive Lecture

LOST PERSON BEHAVIOUR

Profiling. Recording and analyzing a person's psychological and behavioural characteristics, to assess or predict their capabilities or to assist in identifying a particular subgroup of people.

People that become lost exhibit specific traits that have been profiled from SAR statistics. These traits, if known to the SAR party, will greatly help in the search effort. While there will always be exceptions, lost persons will generally react to their situation based on these specific traits.

Children (1–3 Years)

Children will rarely be far from the point they were last seen, unless some mode of transportation is available (eg, a river, boat, vehicle). In general, children in this age group exhibit the following traits:

- unaware of the concept of being lost;
- navigation skills and sense of direction are practically non-existent;
- tend to wander aimlessly with no specific objective; and
- will seek out the most convenient location to lie down and go to sleep, for example:
    - inside a hollow log,
    - under a thick bush,
    - under an overhanging rock, or
    - under a picnic table.

Children (3–6 Years)

Children will rarely be far from the point they were last seen, unless some mode of transportation is available (eg, a river, boat, vehicle, bicycle). In general, children in this age group exhibit the following traits:

- more mobile and capable of walking further than children aged 1–3 years;
- have a concept of being lost and will generally try to return home or go back to a place they are familiar with;
- have definite interests and may be drawn away by animals, older children or just exploring;
- when tired, generally try to find a spot to sleep; and
- some have been instructed to stay away from strangers and as a result will not answer or talk to searchers when called by name.

Unofficial convenience copy of A-CR-CCP-803/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-803-PF-001/A-CR-CCP-803-PF-001.pdf.
Verify against the official publication.

Children (6–12 Years)

This group is much more complex than the previous groups in that they may intentionally be running away. They may also seek out some mode of transportation (eg, boat, vehicle, bicycle). In general, members of this group exhibit the following traits:

- navigational and directional skills are much more developed;
- generally oriented to their normal, familiar surroundings and become confused in a strange environment;
- may intentionally run away to avoid punishment, gain attention, or sulk;
- often will not answer when called;
- darkness usually brings on a willingness to accept help and be found;
- suffer from the same fears and problems an adult would, but with a greater sense of helplessness; and
- the circumstances of becoming lost often reflect they are being taken to an unknown environment or surroundings by parents or other adults they know.

Older Persons

Older persons have a wide variety of capabilities, but the many physical and mental conditions of this group define their behavioural characteristics. In general, members of this group exhibit the following traits:

- may be suffering from senility or Alzheimer's disease;
- may be easily attracted by something that catches their attention;
- their orientation may be to previously known environments rather than the present;
- some may have conditions that require the same type of supervision that children do;
- more lucid older persons may be more likely to over-extend and exhaust themselves rapidly, which can result in a heart attack or other fatal complications; and
- they may be hard-of-hearing or deaf which presents problems with detection.

People With Intellectual Disabilities (All Ages)

This group is very difficult to categorize due to the wide variety of disabilities; however some general behavioural characteristics are:

- they act and react in much the same way as children from the age of 6–12;
- they generally will not respond to their spoken name;
- they most often will be hidden from view as a result of fright or seeking shelter from the elements;
- many times they will stay in one place for days; and
- they usually have no physical impairments but may do nothing to help themselves.

Hikers

Hikers are one of the groups more likely to become lost and their behavioural characteristics include:

- they usually rely on trails with a set destination in mind;
- problems or complications may arise with navigation when trail conditions change or become obscure, for example:
    - a slide over the trail,

Unofficial convenience copy of A-CR-CCP-803/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-803-PF-001/A-CR-CCP-803-PF-001.pdf.
Verify against the official publication.

- the trail is not maintained,
- the trail is covered intermittently with snow in the spring, or
- poorly defined trail junctions;

- often hiking party members may be mismatched in abilities and one person falls behind, becomes disoriented and ultimately lost;
- cutting switchbacks (a type of road/trail used to ascend/descend a slope by using almost 180 degree turns to follow the slope at a gentler angle for ease of driving/walking) will many times lead to disorientation or going down the wrong hill or drainage; and
- they may be dependent on travel aids and trails for navigation.

GENERAL INFORMATION

Most adults and older youth do not have specific traits that may be used to predict their behaviour. The most important clue to predicting their behaviour is the reason (eg, hiking) they were in the wilderness in the first place. The following general information is relevant (to all groups) and may be used when trying to predict the behaviour of a lost person, their movements and whereabouts.

Category and Circumstances

Can a lost person be categorized? Children are different from hikers, who are different from the elderly, etc. By categorizing a lost person, the search effort may be orientated to the most likely area. The circumstances surrounding the person before they become lost contribute greatly to predicting their behaviour. Effort must be made to discover these circumstances.

Terrain

The terrain affects travel. The area should be examined for barriers, escape routes, drainages, ridges, etc. Flat terrain generally yields different travel distances (farther) than mountainous.

Weather

Weather may restrict the lost person's movement. It is also a principle contributor to hypothermia, which may affect movement and decision making. Poor weather increases the importance of the length of time a person has been lost (eg, increased risk of hypothermia) and may require increased SAR efforts.

Personality

It has a substantial effect on the lost person's ability to survive. Consider the aggressive personality versus the ponderer or pessimist.

Physical Conditions

Are the lost person's physical capabilities limited in any way? A poor physical condition means an increased susceptibility to hypothermia. It also has a direct bearing on the distance a lost person will travel.

Medical Problems

Is there any condition that could possibly precipitate abnormal behaviour? This could have a direct bearing on the distance a lost person will travel. Examples of medical problems that may affect a person's behaviour:

- weak heart,
- diabetes,
- allergies, and
- not having taken medication when needed (they do not have their prescription with them).

Unofficial convenience copy of A-CR-CCP-803/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-803-PF-001/A-CR-CCP-803-PF-001.pdf.
Verify against the official publication.

Through determining if the lost person is affected by any of the discussed conditions, logical assumptions may be made on their possible behaviour in order to determine the most likely area to focus the search effort.

CONFIRMATION OF TEACHING POINT 1

QUESTIONS

Q1. Where are the most likely places to find a lost child between the ages of 1–3?

Q2. Where would a hiker most likely be found?

Q3. How does weather affect the behaviour of a lost person and the need to find them?

ANTICIPATED ANSWERS

A1. Lying down/asleep inside a hollow log, under a thick bush, under an overhanging rock, or under a picnic table.

A2. On or near a trail.

A3. Weather restricts the lost person's movement and is a principle contributor to hypothermia. Poor weather increases the importance of the length of time a person has been lost (eg, increased risk of hypothermia) and may require increased SAR efforts.

Teaching point 2 **Explain and Demonstrate Limiting the Search Area**

Time: 20 min Method: Demonstration



Demonstrate examples of limiting techniques, based on the types (eg, road block, track trap, string line) created (based on terrain) for the lesson, when it is being discussed.

LIMITING THE SEARCH AREA

Why Limit the Search Area?

The search area should be limited as the smaller the area, the less time that will be required to effectively cover it. In addition, fewer searchers are required, or smaller spacing can exist between party members.

Confinement. An effort made to establish a search perimeter which encompasses the lost person and beyond which the person is unlikely to pass without being detected.

Confinement Methods

Confinement methods are used to establish a perimeter around the area being searched and to detect a lost person that may wander out of the search area. Types of confinement methods include:

- **Road Block/Trail Block/Patrols.** Blocks and patrols are designed to cover the parts of the perimeter made up of roads and trails. Blocks serve to confine the search area and also inform through traffic of a search in progress. Patrols serve to cover stretches of roads and trails between the blocks.

Unofficial convenience copy of A-CR-CCP-803/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-803-PF-001/A-CR-CCP-803-PF-001.pdf.
Verify against the official publication.

- **Lookouts.** While aerial search has replaced the need for most fixed lookout towers, stationing lookouts on high ground is also a viable method of establishing a perimeter.
- **Track Traps.** Sections of trail or a road edge that has been brushed clear of all traces of use. Patrols would, on a regular basis, examine track traps for footprints for an indication that the lost person may have left the confinement area.
- **String Lines.** A method of confinement where a large spool of string is mounted in a backpack. As a SAR member walks through an area, the string unrolls, which is then tied by another SAR member approximately one metre (three feet) above the ground leaving a very visible perimeter. Arrows could also be placed on the string directing the lost person that comes across the string line to the closest SAR group, usually located at a road or trail block.

CONFIRMATION OF TEACHING POINT 2

QUESTIONS

Q1. Why limit the search area?

Q2. Define confinement.

Q3. What is a string line?

ANTICIPATED ANSWERS

A1. The search area should be limited as the smaller the area, the less time that will be required to effectively cover it. In addition, fewer searchers are required, or smaller spacing can exist between party members.

A2. Confinement is an effort made to establish a search perimeter which encompasses the lost person and beyond which the person is unlikely to pass without being detected.

A3. A string line is a method of confinement where a string is tied approximately one metre (three feet) above the ground leaving a very visible perimeter for the lost person.

Teaching point 3 **Explain and Demonstrate Clue Orientation**

Time: 10 min Method: Demonstration



Demonstrate examples of clues, based on the types (eg, footprint, food wrapper, trip plan, an eyewitness account, light flashing in the distance) created for the lesson, when it is being discussed.

CLUE ORIENTATION

Searching for clues helps discover the characteristics and possible behaviour of the lost person that are key to limiting the search area.

General Principles

The general principles of clue orientation are as follows:

- Clue seeking is a learned skill and must be practiced to develop a sense of what is the minimum information needed to decide on how to categorize a lost person. Clues found and deciphered allow the SAR leader to orientate the search effort to the most likely area.

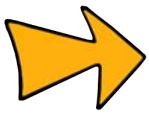
Unofficial convenience copy of A-CR-CCP-803/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-803-PF-001/A-CR-CCP-803-PF-001.pdf.
Verify against the official publication.

- Avoid forming opinions and then gathering information to support that opinion. It may limit the searcher to only accepting clues that support their opinion.
- A SAR leader gathers information from everyone, as no one person can know all the facts.
- Assemble a complete profile of the missing person and their situation and let it offer direction.

Searching for Clues

Types of clues that SAR leaders search for:

- **Physical.** Examples include footprints, food wrappers and dropped/lost items.
- **Recorded.** Examples include a trail register, summit logs and a trip plan.
- **People.** These are eyewitness accounts, the point last seen, family and friends.
- **Event.** Examples include a flashing light, a campfire or a ground-to-air signal.



The cadets should evaluate any physical clues they find for relevance. For example, a fresh candy wrapper possibly dropped by the lost person versus one that has been there for some time (dirty and weathered).

CONFIRMATION OF TEACHING POINT 3

QUESTIONS

Q1. Why is searching for clues important?

Q2. Why should a searcher avoid making an opinion and then search for clues?

Q3. Name the four types of clues.

ANTICIPATED ANSWERS

A1. Searching for clues helps discover the characteristics and possible behaviour of the lost person that are key to limiting the search area.

A2. It may limit the searcher to only accepting clues that support their opinion.

A3. The four types are: physical, recorded, people and an event.

Teaching point 4 **Cadets, in Pairs, Will Participate in a Ground SAR Exercise**

Time: 70 min Method: Practical Activity



Planning and preparation are key to the running of this activity. Ensure the lost person is in position before beginning the search.

Unofficial convenience copy of A-CR-CCP-803/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-803-PF-001/A-CR-CCP-803-PF-001.pdf.
Verify against the official publication.

ACTIVITY

OBJECTIVE

The objective of this activity is to have the cadets, in pairs, act as a member of a SAR party.

RESOURCES

- Prepared briefing,
- Compasses (one per pair),
- Two first aid kits (to be given to the anchor [end] pairs),
- Hand-held radios (one per pair),
- Spare batteries, and
- Whistle (one per cadet).

ACTIVITY LAYOUT

A large confined outdoor area.

ACTIVITY INSTRUCTIONS

1. Issue equipment, to include:
    a. compass,
    b. first aid kit,
    c. hand-held radio,
    d. spare batteries, and
    e. whistle.
2. Give a briefing, to include:
    a. situation,
    b. details of the confinement area,
    c. formation: creeping line (as when cadets do a garbage sweep),
    d. distance between pairs: 10–20 m (30–60 ft) based on the terrain,
    e. call signs and radio frequency to be used,
    f. magnetic bearing (search direction),
    g. safety bearing (if lost or disoriented), and
    h. actions to take if the cadets discover a clue/lost person: radio in, wait for instructions.
3. Have the cadets deploy to the search start line.
4. Have the cadets respond to a radio check.
5. Begin the search.

Unofficial convenience copy of A-CR-CCP-803/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-803-PF-001/A-CR-CCP-803-PF-001.pdf.
Verify against the official publication.

6. Have the cadets radio in if they find a clue.

7. Have the cadets radio in if they find the lost person.

8. Have first-aid trained cadets perform first aid on simulated minor injuries of the lost person (only if designed into the scenario).

9. Have the cadets examine the (mock) survival site.

10. Have the SAR leader conduct a debriefing of the activity.

11. Have the cadets return equipment.

SAFETY

- A safety bearing shall be given to the cadets.
- Staff should be placed in the centre and at the ends of the search formation.

CONFIRMATION OF TEACHING POINT 4

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

END OF LESSON CONFIRMATION

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

CONCLUSION

HOMEWORK/READING/PRACTICE

N/A.

METHOD OF EVALUATION

N/A.

CLOSING STATEMENT

Understanding how a SAR party operates, a person in a survival situation will have a better idea of knowing what is being looked for and where. If you know how to search, you should know how to be found. This information should allow the cadets to better plan for being rescued through selecting their site location, signal placement and clues known and also found.

INSTRUCTOR NOTES/REMARKS

A briefing will be conducted before the practical activity, to inlcude the scenario (eg, downed pilot, lost hiker), the confinement area, search bearing, and call signs.

The scenario's survival site should be set up prior to the activity.

REFERENCES

A3-052 (ISBN 0-913724-30-0) LaValla, P. (1999). *Search is an Emergency*. Olympia, WA: ERI International Inc.

Unofficial convenience copy of A-CR-CCP-803/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-803-PF-001/A-CR-CCP-803-PF-001.pdf.
Verify against the official publication.

C3-208 (ISBN 0-7637-4807-2) National Association for Search and Rescue. (2005). *Fundamentals of Search and Rescue*. Mississauga, ON: Jones and Bartlett Publishers Canada.

Unofficial convenience copy of A-CR-CCP-803/PF-001, cached 2026-11-08 from https://app.cadets.gc.ca/cadet-publications/A-CR-CCP-803-PF-001/A-CR-CCP-803-PF-001.pdf.
Verify against the official publication.