Upon completion of this chapter, you will be able to:

- Describe the three basic categories of search and rescue (SAR).
- Describe specifically the jurisdictional mandates of the Department of National Defence (DND), the RCMP and municipal police forces, the Provincial Emergency Program (PEP), the BC Ambulance Service (BCAS), and the Coroner’s Service.
- Outline PEP’s SAR Policy as it relates to:
  - Workers’ Compensation Board (WCB)
  - Liability insurance
- Outline the SAR training course structure in BC.
- Outline the roles and responsibilities of the
  - Emergency Coordination Centre (ECC)
  - Regional Manager
  - SAR (Incident) Commander
  - Emergency Program Coordinator
  - SAR Manager (Deputy Incident Commander)
  - SAR Team Leader
  - SAR Advisory Committee
  - Volunteer SAR Regional Representative
  - Rescue Coordination Centre (RCC)
  - PEP Air Service
- Outline SAR agreements between PEP and the RCMP, municipal police forces, the Coroner’s Service, Workers Compensation Board of BC and Parks Canada.
- Explain the following components of SAR operations:
  - preplanning
  - notification
  - planning/strategy
  - tactics/operations
  - suspension/termination
  - review
- Describe the functions of the Incident Command System (ICS).
Vision Statement

Ground Search and Rescue (GSAR) team members:

1. are dedicated volunteers who must possess the skills necessary to perform SAR related tasks with a high degree of proficiency;

2. must act professionally and follow a code of conduct which relies heavily on trust, integrity and teamwork;

3. must be able to follow directions, work with limited supervision, have strong communication skills, be able to assess risk and complete tasks without endangering themselves or others.

Introduction

As search and rescue (SAR) volunteers registered with the Provincial Emergency Program (PEP), it is necessary to appreciate and understand a sense of the “big picture”. Consequently, chapter one deals with SAR organization, agreements and training schemes.

Like all areas of emergency response, the field of ground search and rescue is in a continuous state of improvement and evolution. It is undergoing great change due to increasing technology, the development of alternate and improved techniques, the integration of volunteers and professionals, and concerns with legal liability, standard of care and negligence.

This reference is intended to serve as both an operational manual for the PEP and as a training manual administered and managed by the Justice Institute of BC to which PEP-registered SAR volunteers must refer in order to become a certified ground searcher. This edition updates the initial version primarily written by SAR volunteer and former regional advisory representative Andrew Spray and published by the JIBC in 1989.

Publication of this edition involved review and revision of the existing program by an advisory panel. This advisory panel was comprised of volunteer search and rescue representation from across British Columbia. They were consulted and have provided constructive feedback to the development of the new GSAR manual.

This manual effectively replaces the Basic Search and Rescue Manual produced and distributed by the JIBC. It is now regarded as the training and operational manual in Ground SAR for PEP and the Royal Canadian Mounted Police within the Province of British Columbia.

Intent

This manual has been prepared to present a minimum operating standard or guideline for ground searchers in BC. Personnel should possess certification in GSAR in order to be deployed into the field.
SAR is inherently dangerous. There should always be a conscious effort to balance the benefits against the costs of conducting a search or a rescue. SAR requires ground searchers to make informed decisions as opposed to ignorant guesses in the field. The consequences of making a wrong decision may be fatal or at least terribly inconvenient.

The GSAR Course is more than merely reading the manual. SAR is a serious undertaking and requires an enormous degree of commitment and effort. Ground SAR cannot be learned merely from a book. This manual is regarded as a reference guide to assist the ground searcher in improving their field skills.

Competency requires expert instruction, supervision, field exercises and practice. Only then will the ground searcher possess the knowledge, skills and abilities necessary to safely and swiftly perform their task. It is expected that the manual will be used in conjunction with standardized training provided by volunteer instructors and co-ordinated through the Justice Institute of BC.

SAR Categories

SAR operations within British Columbia fall into three basic categories: **Air SAR**, **Marine SAR**, and **Ground and Inland Waters SAR**.

Jurisdiction

When a SAR Emergency arises, the primary responsibility for the response depends on the category of search and/or rescue involved. Jurisdictional authority and responsibility for SAR operations is divided among several federal and provincial governmental departments and is supported by volunteer SAR Groups.

**Department of National Defence (DND)**

Both air and marine search and rescue are a federal responsibility. **Air SAR** is the responsibility of the **Canadian Armed Forces**. **Marine SAR** is the responsibility of the **Canadian Coast Guard**. Marine SAR is supported by the volunteer Canadian Coast Guard Auxiliary. Both air and marine SAR are coordinated by the **Rescue Coordination Centre (RCC)** in Victoria.

Police Authority

The authority and responsibility for **Ground and Inland Water SAR** within the province of BC ultimately falls to the **police detachment having jurisdiction**. Throughout most of BC, this is the Royal Canadian Mounted Police (RCMP) while in thirteen communities it is municipal police forces.
The Provincial Emergency Program (PEP) is part of the Ministry of Attorney General. In cooperation with other ministries and agencies, PEP advises and assists in preventative measures, and coordinates the emergency preparedness, response and recovery measures of the provincial government. PEP encourages and assists local governments to develop and exercise local emergency plans.

Specific to SAR, PEP is responsible for facilitating the maintenance of a provincial ground and inland water SAR capability and assisting in coordinating the operational response of local SAR volunteer groups when requested by the police, BC Ambulance Service (BCAS), Department of National Defence (DND) or other agencies.

At present, PEP and the police authorities have a non-written agreement that PEP will provide SAR services when requested to do so by the RCMP or municipal forces. The intention is that PEP will act in support of the police authority's ultimate responsibility for SAR within British Columbia.

PEP supports authorized SAR activities providing individuals with Worker’ Compensation Board (WCB) coverage, third party liability insurance and legal representation as a result of losses or claims arising out of authorized operations and pre-approved training tasks. PEP will reimburse SAR volunteers for expenses incurred during operations and sometimes for training. PEP will replace some or all of essential equipment lost or damaged during an operation but not on training tasks. PEP will not purchase the SAR Group's initial capital outlay of equipment.

It should be realized that PEP's mandate covers more than SAR. PEP is involved in emergency planning, emergency preparedness and emergency social services.

The BC Ambulance Service (BCAS) is the agency with whom SAR Groups interact with when the subject is injured in a known location and requires pre-hospital care.

In the event that human remains are located, the matter becomes the responsibility of the Office of the Provincial Coroner who often act through the local police.

There is a written agreement between the Office of the Chief Coroner of BC, the RCMP and the Provincial Emergency Program which states that:

- SAR volunteers who are involved in police directed SAR operations may assist in or effect a body recovery under the direction of a Coroner or other person as provided under the Coroner’s Act;
- SAR volunteers may be tasked to assist in or effect a body recovery in instances which do not begin as SAR operations, and which are initiated as operations to recover a deceased person(s).
Workers’ Compensation Board Coverage

There are two written agreements between the Government of Canada and the Government of British Columbia. They use the term "Emergency Services Worker" to refer to what includes search and rescue personnel. It states that:

- Where the Workers’ Compensation Board (WCB) decides that an accident causing death or injury arose out of and in the course of "Emergency Services Work", it shall determine and pay the amount of compensation and provide medical aid including rehabilitation and retraining costs, according to the Workers’ Compensation Act of BC.

- "Emergency Services Work" means work, for no compensation, which is designed or intended to protect and preserve life, property, the environment or public services in the event of an emergency …and includes training therefor.

- "Emergency Services Worker" defines any person who has volunteered for Emergency Services work and has been registered with the Provincial Emergency Program for volunteer Emergency Services.

Further information regarding WCB, insurance and liability protection is located in the PEP brochure included with this manual.

SAR Training

Under the direction of the Provincial Emergency Program and in consultation with experienced SAR volunteers, the Emergency Management Division – PEP Academy at the Justice Institute of BC is responsible for developing, and designing the course curriculum, standards and evaluation practices for SAR volunteers in BC.

Course delivery is done either through the PEP Academy directly, or at the regional or local level with either the assistance of PEP funding or local fundraising efforts. Regionally-based SAR courses like Ground Search Team Leader, Rope Rescue, SAR Management and Organized Avalanche Response are co-ordinated by the Justice Institute of BC.

Figure 1.2 (located at the end of Chapter 1) depicts the Conceptual Framework for SAR Training in BC. Note: some of the listed courses have not been developed as of 1999.
The Emergency Coordination Centre (ECC), situated at PEP headquarters (PEP HQ) in Victoria, operates 24 hours a day, 7 days a week to provide a central coordinating agency for all routine provincial emergency response activities, particularly those for which the Ministry of Attorney General/PEP is the key ministry. Specific activities include:

- receiving notification of emergency incidents, records information and notifies applicable agencies;
- maintaining a chronological event log of all calls received and made; and
- allocating funds from the Emergency Assistance Vote for emergency responses on the direction of Regional Managers and PEP HQ Management.

In regards to SAR, ECC responsibilities include:

- Issuing task numbers to SAR Managers and Emergency Program Coordinators. A SAR response is not authorized by PEP unless a task number has been issued. To receive a task number, SAR Group assistance must be requested by the RCMP/Local Police, BC Ambulance Department of National Defence (DND) or other agencies.
- Notification of PEP Regional Managers of all SAR activity 24 hours a day, 7 days a week. See responsibilities of PEP Regional Managers listed below. Notification of SAR activities as and when required to PEP HQ staff including PEP SAR Coordinator and the Deputy Director.

There are six PEP regions with a PEP Regional Manager (RM) and an Administrative Assistant in each, except for the Southwest Region Office which has an Assistant Regional Manager and second Administrative Assistant. PEP Regional Manager responsibilities include:

- Providing assistance to local governments and other ministries in emergency preparedness, response and recovery.
- Receiving training task applications, approving requests for funding and forwarding them to headquarters; and

In regards to SAR incidents, PEP Regional Manager responsibilities include:

- Providing assistance and/or coordination as and when required on a 24 hour basis to SAR Managers and other agency representatives to enhance SAR response. Aside from having a comprehensive knowledge of SAR operations, PEP Regional Managers have resources such as helicopters and other agency personnel at their disposal to assist with SAR incidents.
- Approval of costs associated with SAR incident task numbers, helicopter and fixed wing use as well as equipment such as snowmobiles and ATV’s.
SEARCH AND RESCUE IN BC

SAR (Incident) Commander - Police Authority

The SAR Commander (usually a police officer) is ultimately responsible and retains authority over the SAR operation. However, management of SAR operations is usually delegated to qualified SAR personnel. The delegation of responsibilities does not mean that the police have forfeited their authority over the incident. The police remain in charge.

It is a police decision whether or not to use a SAR Group.

The SAR Commander’s responsibilities include:

- Conducts pre-investigation prior to initial notification of PEP SAR Manager.
- Continues investigation regarding operation (may be done in conjunction with the SAR Manager).
- Contacts either the SAR Manager, Emergency Program Coordinator or PEP ECC to initiate the search and/or rescue.
- Initiates the start of the operation.
- Determines the extent of the operation.
- Determines suspension and termination of the operation.
- Maintains a liaison with the SAR Manager during the operation.
- Accesses police resources (search & tracking dogs, Forward Looking Infra-Red, helicopters).
- Develops and maintains the SAR operation progress report.
- Liaises with the media and the subject’s family.
- Chairs and contributes to operational reviews.
- Oversees body recovery for the Coroner’s office.

Emergency Program Coordinator

In most cities or municipalities there is an emergency program that is directed by the Emergency Program Coordinator. However, the relationship between the SAR Group and the Emergency Program Coordinator varies considerably between municipalities.

Responsibilities include:

- possibly receiving the initial search or rescue call-out from police or from the SAR Manager
- may call ECC to get a task number, report the incident, provide daily updates and for task closure
- possibly notifying and contacting the SAR Manager for group call-out
- liaising with the SAR Manager and the police regarding the operation
- functioning as the official link with municipal government and provincial ministries
- functioning as the official link between the SAR Group and PEP Regional Offices
- representing local, municipal or regional district government interests
- liaising with the PEP Regional Manager to request additional resources and for information updates
It must be remembered that the responsibilities of the Emergency Program Coordinator are not restricted to SAR activities.

GSAR team members are an essential component of ground and inland water SAR in BC. There are presently 75 active SAR Groups in BC comprised of approximately 5000 volunteers. GSAR team members volunteer tens of thousands of hours annually towards SAR operations and training.

The person who will lead the SAR Group during the operation is called the SAR Manager (Deputy Incident Commander). This person should be an experienced member of the group with good leadership skills.

Responsibilities include:

- Receives initial call-out usually from the police but may be from the emergency program coordinator or ECC.
- May contact ECC for acquisition of an operational task number.
- Manages the SAR Group during the operation.
- Liases with the police and possibly PEP Regional Manager during the operation.
- Manages the SAR operation with police permission and consent.
- Initiates SAR Group call-outs.
- Manages incident out of the Incident Command Post (SAR Base).
- Initiates other SAR Group mutual aid.
- Determines the strategy and tactics of search operations.
- Allocates SAR Group resources to the field.
- Oversees SAR Group functions and PEP requirements.
- Evaluates rescue requirements and allocates as necessary to the field.
- Delegates rescue operation control to the rescue team field leader.
- Initiates and may chair operation review.
- Completes required PEP registration and task reports.
- Provides daily updates to ECC and report task closure.
Team Leader

During a SAR incident a group of volunteers may be sent into the field as a team. One person will be designated the Team Leader. There are various types of team leaders in SAR such as Ground Search Team Leader (GSTL), Rope Rescue Team Leader, or Swiftwater Rescue Team Leader. The role of the team leader is to supervise and monitor the conduct and activities of the team. This includes:

- Safety
- Performance
- Supervision
- Accountability
- Logistics
- Briefing
- Review
- Communications
- Record keeping
- Liaising with the SAR Manager

SAR Advisory Committee

In 1990 the SAR Advisory Committee was formed to:

- Advise PEP on SAR policy, legislation, standards, resources, training and related priorities;
- Provide channels of communication among participating SAR Groups as well as between agencies such as the RCMP and the PEP;
- Facilitate the establishment of a standards and assessment group to ensure one standard of SAR is adopted for the province and to assess the quality of delivery of the service.

The members of the SAR Advisory Committee include:

- SAR Coordinator (volunteer) appointed as Chair.
- Eight (8) volunteer SAR Regional Representatives
- RCMP Representative
- Municipal Police Representative
- PEP SAR Coordinator
- JIBC SAR Training Program Coordinator

Volunteer SAR Regional Representative

The volunteer SAR Regional Representative is selected from the SAR Groups in the region. The SAR regional rep duties include:

- Provides communication between SAR Groups, the Regional Manager, the SAR Advisory Committee, police, PEP headquarters, the Justice Institute, etc.
- Creating regional training plans in consultation with SAR Groups in their area, the Regional Manager and the Justice Institute.
- Hosting an annual regional workshop/meeting.
- Involvement in issues relating to mutual aid.
The Canadian Forces Rescue Coordination Centre (RCC) in Victoria is responsible for the coordination of all air and marine search and rescue activities within the province. The RCC maintains a squadron of both fixed and rotary winged aircraft at the Canadian Forces Base in Comox and coordinates the deployment of marine vessels located throughout many communities in British Columbia.

During an air or marine SAR operation, the RCC may request the services of PEP SAR Groups or PEP Air/CASARA (Civil Air Search and Rescue Association).

PEP Air consists of volunteers, whose interests lie with aviation and who dedicate their time and/or aircraft to assist PEP, Search and Rescue Groups, Canadian Armed Forces or the Canadian Coast Guard. PEP Air crews operate under the volunteer umbrella of the Civil Air Search and Rescue Association (CASARA).

Each PEP region of BC has a commander who is the coordinator for all air volunteers in the region. The commander is responsible to the PEP Regional Manager and is the regional manager’s advisor during SAR operations involving the use of fixed wing aircraft. PEP Air may be called upon to respond to requests from PEP and may be of particular assistance in spotting parked vehicles, locating overturned boats, and acting as a communications platform. The PEP Air Service contact with the Province is through the PEP Regional Manager.

There is a written agreement between Parks Canada and PEP which states that:

- It is the intent of PEP and the Canadian Parks Service to assist each other in BC and in Federal Parks within BC with personnel, equipment or other resources in any emergency or disaster as deemed appropriate.

“Preplanning” is a term applied to the overall planning which occurs before an incident and addresses all phases of likely SAR situations. Good preplanning means being ready in terms of equipment, organization, management and training. In most cases, this is the most important, yet overlooked, component of the SAR incident cycle. A proper preplan can minimize the need for, and enhance the safety of every subsequent action. Lessons learned from previous situations provide the foundation for a preplan.
**Notification**

First notice is the moment in time that an incident is made known to SAR personnel. SAR personnel are most often informed of a SAR incident by either the police directly, the Emergency Coordination Centre, their Municipal Emergency Program Coordinator or a SAR Manager from an adjacent SAR Group. Regardless of the reporting party, the SAR response now begins to take shape.

**Planning and Strategy**

As each SAR phase begins (ie. Locate, Access, Stabilize, Transport), situation-specific planning and strategy development arise from and compliment preplanning efforts and plans. This incident planning stage is where the details are developed regarding how the current incident will be managed.

Investigation is usually the first stage of planning and involves the timely gathering of accurate information so that an effective assessment of the situation can be made. Once the initial investigation has been accomplished, a list of options are outlined with backup contingencies for optimum flexibility.

A relative urgency rating is determined by weighting factors that might effect the risk to the subject(s) such as their age, skill level, equipment, weather conditions, etc. The specific level of urgency determines the speed and nature of the response by rescuers.

Finally, just before the physical operation begins, goals and objectives are established for the first operational period. These objectives are key to the proper field operations being carried out.

**Tactics / Operations**

Once the incident strategy is laid out and the objectives have been established, the tactical component of the incident cycle can begin. This component of the cycle is where the plans are implemented and physically carried out in the field. Tactical assignments may include both passive (ie. Investigation, confinement, attraction, etc) and/or active (ie. Field searching, tracking) search techniques.

**Suspension**

At the end of a search, if the subject has been located, the search is terminated and the access phase can commence. However, if the subject has not been found, the decision to discontinue active search efforts is a difficult one which involves complex management issues that are rarely easy to resolve.

Once there is no longer a need to continue the current phase for whatever reason (ie. Subject is located, access has been accomplished, stabilization is completed, or subject has been transported), suspension of that particular phase takes place. Incident suspension or termination occurs when an incident is called-off and resources are demobilized to ready status.
In larger incidents, this may involve structured deactivation of multiple resources, pulling teams out of the field, dismantling facilities, completion of documentation, and returning resources to service. All of this takes planning and preparation, and should be addressed in the overall preplan long before it is required.

**Review**

After every incident, participants will realize that if they had to do it all over again, they would do some things differently. If these thoughts and ideas are not documented, they can be lost and future incidents are destined to relive past mistakes. This is one reason every incident should contain some type of evaluation.

It can be formal, involving every participant at a sit-down meeting, or informal, involving just a brief discussion of recent events. Whichever the case, it serves to document lessons learned and allows a basis for revision of the preplan.

**ICS**

The Incident Command System (ICS) is used to manage a SAR emergency incident or non-emergency event. It can be used equally well for both small and large situations. The system has considerable internal flexibility. It can grow or shrink to meet differing needs. This makes it a very cost-effective and efficient management system.

Organization of the ICS is built around five major management activities: Command, Operations, Planning, Logistics, Finance/Administration.

![ICS Organization Chart](image-url)
Command

- sets objectives and priorities
- has overall responsibility of the incident

As mentioned earlier, the Incident Commander (SAR Commander) is the police officer in charge. It is the Incident Commanders role to deal with the media and with the family and friends of the missing person. Sometimes this responsibility is handed over to the SAR Manager (Deputy Incident Commander) who may have a better understanding of what is happening in the field.

As the SAR Manager is more directly involved in the planning of the SAR tactics, the safety officer often reports directly to the SAR Manager instead of the Incident Commander.

Operations

- conducts tactical operations to carry out the plan
- develops the tactical objectives and organization
- directs all resources

Planning

- develops the Incident (SAR) Action Plan to accomplish the objectives
- the situation unit collects and evaluates information
- the resource unit maintains information on personnel and equipment status
- the documentation unit maintains all documents relevant to the incident

Logistics

- provides support to meet incident needs (eg. supplies, facilities)
- provides services (eg. communications, medical)

Finance/Administration

- monitors costs related to incident
- provides accounting, procurement, time recording and cost analysis

ICS Forms

Throughout this manual standardized ICS forms are referred to and samples provided. These forms are available on the SARINFO web site at [http://www.sarinfo.bc.ca](http://www.sarinfo.bc.ca).

The current PEP policy permits the use of SAR specific ICS forms as well as team specific forms.
Additional Resources


SARINFO web site at http://www.sarinfo.bc.ca

Further references listed in the Bibliography.

Chapter Review

Please answer the following questions on a separate sheet of paper so that another student can use this manual. The answers to these questions are located at the end of the manual.

1. What are the three categories of Search and Rescue operations?
2. What is the mandate of the RCMP (or local police force)?
3. The ________ decides whether a Search and Rescue Group will be used on an incident.
4. Who supervises the activities of a SAR team in the field?
5. What are the three functions of the SAR Advisory Committee?
6. The ________ issues a task number for a SAR incident.
7. SAR volunteers may assist in a body recovery under the direction of the ________________.

Answer True or False to the following statements:

8. SAR volunteers receive WCB coverage during training tasks.
9. ICS is only useful in large scale incidents.
10. The SAR Manager controls the budget for their region.
11. SAR training only occurs at the Justice Institute.
12. The operations section sets objectives and priorities for the SAR incident.
13. Demobilization is an important part of a preplan.
14. The Volunteer SAR Advisory Representatives are involved in determining training needs for their area.
15. PEP Air crews are paid staff of PEP.
Figure 1.2  A Conceptual Framework for SAR Training