

# National SAR

# Program Plan

2006

January 2006











# **TABLE OF CONTENTS**

		<u>Page</u>
Fo	reword	3
Se	ctions:	
1.	Overview of the National Search and Rescue Program	4
2.	Planning Context and Synopsis of Environmental Scan	8
3.	Challenges and Risks	12
4.	Major SAR Plans and Initiatives	13
5.	SAR Program Resources	18
An	nexes:	20
	A) Departmental Roles & Responsibilities	
	B) SAR New Initiatives Fund Priorities and Approved Projects	
	C) Glossary of Terms & Abbreviations	

### **FOREWORD**

Canada's National SAR Program Plan for 2006 provides direction to the six federal organizations participating in the National Search and Rescue Program, as well as guidance to SAR organizations in other jurisdictions. The individual federal departmental and agency SAR roles and responsibilities are described at Annex A to this Plan. Federal organizations delivering search and rescue services are responsible to the government through Ministerial accountability both for their individual activities and for participation in and support of collective program level initiatives. As such, it is expected that in 2006 they will incorporate the applicable program priorities in their respective departmental Report on Plans and Priorities or organizational business plans.

The Plan has been developed cooperatively by staff of the six departments and agencies and is promulgated in accordance with the accountability of the Interdepartmental Committee on Search and Rescue and on the authority of the Lead Minister for Search and Rescue for the federal government.

<u>Note</u>: Many acronyms and abbreviations are used in the interest of brevity. A glossary is included at Annex C.

#### **SECTION 1**

# OVERVIEW OF THE NATIONAL SEARCH AND RESCUE PROGRAM

#### **General**

The National Search and Rescue (SAR) Program guides the collective activities of both the federal government in the federally mandated areas of Canada's search and rescue (SAR) system, and the activities of provinces, territories and municipalities having either primary or secondary roles and responsibilities with respect to the provision of SAR services.

#### Lead Minister for Search and Rescue (LMSAR)

The Minister of National Defence is the Lead Minister for Search and Rescue (LMSAR) in the federal government and as such responsible for coordination of the National SAR Program and the spokesperson on it.

#### **Participating Federal Organizations**

The following federal government organizations (and where indicated, their specific components) participate in the National SAR Program:

- Canadian Forces
- Canadian Coast Guard
- Environment Canada, Meteorological Service of Canada
- Parks Canada Agency
- Royal Canadian Mounted Police
- Transport Canada.

Details of departmental SAR roles and responsibilities are contained at Annex A.

#### Canadian SAR Area of Responsibility and the Federal Mandate

In addition to the entire landmass of Canada, the federal government has accepted, under international agreements and conventions, responsibility for providing aeronautical SAR services over certain portions of the surrounding oceans. The federal maritime (marine) SAR Area of Responsibility includes these same portions of the surrounding oceans and adds the Canadian portions of the Gulf of St. Lawrence and Great Lakes system. The Canadian SAR Area of Responsibility is depicted at Figure 1. In addition, response to marine and ground SAR (GSAR) incidents occurring within National Parks is also within the federal mandate. Response to all other GSAR and inland waters marine SAR incidents falls within the mandate of provincial/territorial authorities.

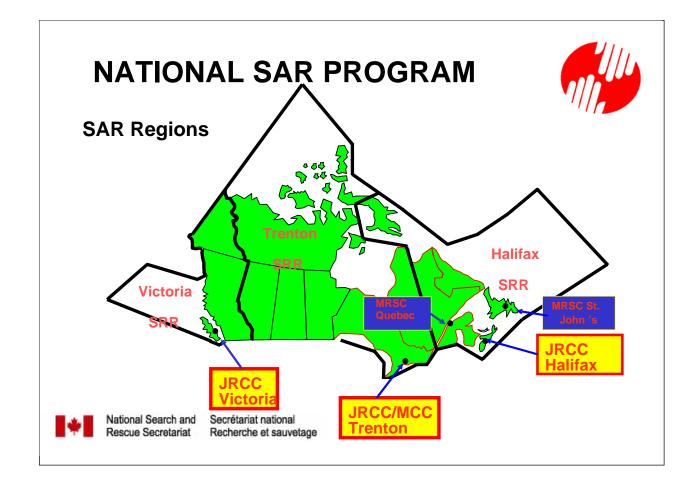


Figure 1 – Canadian SAR Area of Responsibility

#### Interdepartmental Committee on Search and Rescue

The management of the National SAR Program is accomplished through the Interdepartmental Committee on Search and Rescue (ICSAR). The membership of ICSAR includes senior representation from each of the six federal organizations engaged in search and rescue activities, plus observers from Public Safety and Emergency Preparedness Canada (PSEPC), Treasury Board Secretariat (TBS), the Privy Council Office (PCO), Indian and Northern Affairs Canada (INAC) and Natural Resources Canada (NRCan).

The ICSAR is chaired by the Executive Director of the National Search and Rescue Secretariat (described below) and is accountable to the LMSAR for review, reporting and approval of National SAR Program policies and plans on behalf of its member departments. ICSAR is supported by two Sub-Committees: Review and Coordination, consisting of subject matter experts from the ICSAR member departments.

#### **National Search and Rescue Secretariat**

The National Search and Rescue Secretariat (NSS) is accountable to the LMSAR through ICSAR for the development, coordination, analysis and review of National SAR Program policies, plans and specified National SAR Program components and activities. These components and activities include:

- administration of the SAR New Initiatives Fund (NIF)
- Canadian representation to the COSPAS/SARSAT program
- maintenance of the Canadian Beacon Registry
- publication of SARSCENE magazine
- conduct of an annual SARSCENE Workshop, and
- management of an annual Outstanding SAR Achievement Awards Program.

The NSS also provides leadership in enhancing the coordination between provincial/territorial SAR programs and the National SAR Program as well as providing program level advice and information to the LMSAR.

#### National SAR Program Vision and Objectives

The National SAR Program focuses on the achievement of a seamless SAR system in Canada via a vision statement and two objectives:

#### **SAR Vision Statement**

A Canada where the critical importance of Search and Rescue is reflected in a multi-jurisdictional approach to promoting individual, collective and organizational behaviour that minimizes the risk of injury or loss of life while maintaining timely and effective response services.

#### **SAR Response Objective**

To ensure an effective SAR response (capability) in all areas of Canada.

#### **SAR Prevention Objective**

To educate individuals and organizations on the assessment of risks and the importance of acquiring and using the knowledge, skills and equipment needed to minimize injury and/or loss of life.

#### **Strategic Directions**

The following Strategic Directions, which will guide federal SAR Departments and Agencies from the current to the future business environment, were developed from issues identified in the Environmental Scan. The ICSAR has identified four areas to focus efforts upon over the next five years, in addition to managing ongoing activities.

#### Seamless SAR

To develop, through improved partnership arrangements, standards that would improve the effectiveness and efficiency of SAR services and promote greater cooperation

#### Marine SAR

To identify and implement solutions to reduce the number and the severity of incidents

#### **Northern SAR**

To review existing services and recommend possible adjustments in the approach to SAR service delivery, given increasing activity in the North

#### **Volunteers**

To support volunteer organizations in playing an active and essential role in the National SAR Program.

#### **Program Strategies**

At the Program Level, activities to support achievement of the Objectives and realization of the Vision are focused via six 'paths' or Strategies. These are described as follows:

#### **Partnerships**

Develop and strengthen partnerships to facilitate and enhance SAR prevention and response activities.

#### **Multi-Jurisdictional Exercises**

Participate in a program of multi-jurisdictional exercises with focus on areas of historical problems or future concern, and/or to confirm plans and procedures for SAR response activities.

#### Volunteers

Involve and maximize as appropriate the use of volunteers.

#### Technology and Innovation

Encourage the identification and development of best practices, innovation and/or new technologies to support SAR prevention and response activities.

#### Interoperability

Identify types and characteristics of SAR equipment, training and procedures that should be compatible and/or interoperable.

#### Data and information

Promote research and development and the collection and free exchange of information and data applicable to SAR prevention and response.

### **SECTION 2**

# PLANNING CONTEXT AND SYNOPSIS OF ENVIRONMENTAL SCAN

Several issues have an impact on the delivery of SAR services in Canada. These issues have been identified in the 2005 SAR Environmental Scan as having implications on the National SAR Program and may need to be further monitored or addressed in the years ahead. An overview of key issues is outlined below. More detailed information is available in the Environmental Scan portion of the Strategic Directions Paper.

#### **Seamless SAR and Interoperability Themes**

SAR operations routinely involve more than one of the ICSAR Departments' resources, along with volunteer groups, and Provincial/Territorial and Municipal organizations. This is especially evident in larger scale incidents. Effective coordination of, and communications between, these various service providers will continue to present challenges. To move towards the goal of Seamless SAR, it is essential that the prevention and response activities of all stakeholders be aligned in a complementary manner.

Interoperability among SAR responders, particularly in communications, rescue equipment and procedures, including command and control structures, continues to be highlighted as a problem area in post-operations reports. Advances in communications technology have resulted in different types of systems, with incompatibility issues, in use by various agencies. The efficiency and effectiveness of a SAR response can be seriously hampered by problems of interoperability, representing an increased risk of serious injury or loss of life.

#### **Canadian Forces Transformation**

In 2005, the Chief of Defence Staff has undertaken to transform the Canadian Forces. This transformation is intended to enable the Canadian Forces to better meet the emerging security challenges and threats.

Given the interdependency prevailing within the Canadian SAR system, changes of this magnitude within the Canadian Forces have the potential to impact the National SAR Program. As such, it will be important to remain abreast of any changes to the Canadian Forces. This transformation may also allow for opportunities to enhance the links between the Canadian Forces and its SAR partners.

#### Canadian Coast Guard as a Special Operating Agency

The Canadian Coast Guard became a Special Operating Agency on 1 April 2005 following a government decision in December 2003. This change of status affirms the standing of the CCG as a national institution committed to excellence in Maritime services for Canadians.

It is important that the National SAR Program implications of the new SOA be addressed through the ICSAR mechanism, ensuring that the CCG SOA's substantial future commitments to Maritime SAR continue to be identified and funded.

#### **Emergency Management and Public Safety**

Delivering Emergency Management and Public Safety in Canada is challenged by the risks of the new environment. The threat environment is changing and nations around the world are experiencing more frequent and severe disasters. In 2005, floods in Alberta and Manitoba, the Indian Ocean Tsunami, Hurricanes Katrina, Rita and Wilma and the Pakistan earthquake have had devastating effects, killing tens of thousands and costing hundreds of billions of dollars. Terrorist attacks from September 11, 2001 (Madrid, London, Bali), onward have become an unfortunate fact of life. Meanwhile, international health experts are warning that an influenza pandemic will inevitably emerge with effects so profound they could disable a nation's ability to govern. Responding to many of these types of emergencies requires robust search and rescue capabilities as part of an integrated national emergency management system.

The creation in December 2003 of the Department of Public Safety and Emergency Preparedness (PSEP) maximizes the Government of Canada's (GoC) ability to protect Canadians in the new threat environment by addressing the full range of issues – from personal safety to national security. Implementation of the 2004 National Security Policy is well underway and the *PSEPC Act* established the Department and its Minister's authority. As a component of the national emergency management system, the National Search and Rescue Program will benefit from this new emphasis on emergency management and public safety. Closer linkages between Canadian SAR and EM communities will further enhance both the National SAR Program and overall emergency management in Canada.

#### **Marine Security**

Securing Canada's coastline is a key plan in the National Security Policy. The National Security Policy sets out a plan to establish Marine Security Operations Centres (MSOCs), with two under CF command and one under RCMP command. They will be networked with the JRCC's, the Canadian Coast Guard's vessel traffic and communications system, and with the new Government Operations Centre in Ottawa. Additionally, new MSOCs are expected to work closely with the US Coast Guard Operations to provide a comprehensive picture of activities in Canada's contiguous waters.

To ensure the success of this initiative, the March 2005 budget announced \$276 million for the Canadian Coast Guard to modernize its fleet of vessels. In addition, the Coast Guard has received funding to purchase four patrol vessels, which will jointly operated with the RCMP on the Great Lakes and St. Lawrence Seaway for security purposes. This will have a significant positive effect on the National SAR Program, as modernization and additions to the fleet will provide more resources on the water that can respond as secondary SAR resources.

#### **Northern Strategy**

In December 2004, the Prime Minister with the three territorial Premiers presented a Framework for the Development of a Northern Strategy to significantly enhance the economic and social development of the North. The Framework included a draft vision for the North with suggested principles to guide the development of the strategy. Of particular interest was the objective of enhancing northern-based search and rescue capacity.

#### **Alzheimer's and Dementia**

Most recent estimates show that there are approximately 420,600 Canadians over 65 who suffer from Alzheimer's and related dementia. By 2011, it is expected that the number of new cases per year will rise from the current 94,270 to 111,560. Currently the Alzheimer's Society of Canada and RCMP operate a voluntary 'Safely Home Registry' which has been in operation for over 10 years. This registry currently holds 20,149 registrants. In 2004 there were 3,662 new registrants. Anecdotal evidence indicates that approximately 60% of missing person calls involve individuals with Alzheimer's and related dementias. This may result in increased tasking for SAR organizations involved in searching for missing persons

#### **Technology Use in SAR**

The growing use of technology in everyday life makes its applications to SAR planning, command and control and post operation evaluations a natural progression. From laptop computers with high processing capabilities and long battery life to mobile GPS with direct interface to software, the use of technology can provide great benefits for SAR.

#### Outdoor Recreation in Canada

Canadians' participation in recreational activities has continued to rise over the last few years. Half of all Canadians are involved in water-based recreation: sailing, power boating, canoeing, kayaking, fishing, swimming and diving. It is expected that recreation in Canada will continue to rise, therefore putting more pressure on the SAR system and resources.

#### **Global Warming**

The effects of global warming and climate change continue to be felt across Canada. All regions of the country are expected to endure increased incidents of extreme weather such as thunder, hailstorms and freezing rain. This extreme weather may lead to larger numbers and increased severity of SAR-related incidents nationwide. Recent studies also indicate a shrinking of the polar ice cap, which should lead to increased maritime activities in the Arctic. This could lead to pressure to base more SAR resources in the north.

#### Increase in Cell Phone Use

Recognizing the increase use of cellular telephones, the Canadian Radio-Television and Telecommunications Commission (CRTC) updated its 9-1-1 regulations regarding cellular carriers. Cellular providers now have to provide Enhanced 9-1-1 (E9-1-1) to all of their subscribers.

E9-1-1 is a tremendous asset and tool for SAR but it gives a false sense of security to the public. People may be led to feel that as long as they have a cell phone they are safe. However due to issues such as coverage gaps and battery failure the public must be made aware that cell phones can be useful but should not be the sole means of emergency communication.

### **SECTION 3**

### **CHALLENGES AND RISKS**

#### Key Risks

The following six key risks have the greatest impact as agents for change in the National SAR Program. They have been identified through the Accountability and Risk Management Framework and are reviewed annually.

- Changing Government Priorities. Ongoing government expenditure review and focus on specific priorities, such as the security agenda, may affect the National SAR Program and must be monitored and addressed.
- <u>Horizontal Program Management</u>. Progress in developing an integrated, seamless SAR system depends on the willingness and capability of the partners to support horizontally led initiatives, and to collaborate and compromise.
- <u>Interoperability</u>. Interagency command, control and co-ordination is crucial to a successful SAR operation involving multiple parties.
- <u>Sustainability of Volunteer SAR Organizations</u>. SAR volunteers are an integral
  component of the National SAR Program. Rising costs for insurance, equipment and
  training, as well as demographic changes leading to declining participation, are all
  putting pressure on the SAR volunteer community.
- **SAR Events That Go Wrong.** An actual or perceived failure to respond effectively to a SAR event is a constant risk in a program that responds to more than 8,000 cases a year in which lives are at risk.
- <u>The Physical Environment</u>. The single most important characteristic of SAR in Canada is the vast area and harsh physical environment of the Canadian SAR Area of Operational Responsibility.

### **SECTION 4**

### MAJOR SAR PLANS AND INITATIVES

#### General

The following major plans and initiatives will commence or will be ongoing in 2006 within individual SAR organizations or through collective action. Each activity is described, followed by the identification of the responsible department or agency.

#### 2006 SAR Activities

#### Fixed Wing Search and Rescue (FWSAR) Aircraft Procurement (CF)

The objective of the FWSAR project is to analyze the available fixed-wing SAR aircraft options against selected criteria, select the most suitable aircraft, and then implement the introduction of the new aircraft. This aircraft must provide the CF with a robust yet cost-effective capability that meets the requirements of the CF in support of the National SAR Program. It is anticipated that a request for proposals will be issued in 2006. It should be noted it will be some years before the procurement process results in the delivery of these new aircraft.

#### Fleet Renewal (CCG)

The CCG rejuvenation strategy includes a need to examine options to renew the fleet's asset base. This is to ensure that CCG's capacity to support the government's maritime priorities and programs, including SAR, are on a sustainable footing. Fleet renewal also allows for enhanced on-water presence that will enable Canada to protect its territorial interests on all three coasts. There is also a need to examine a strategic investment and refurbishment of equipment to reinforce the Coast Guard infrastructure.

#### 406 MHz Beacon Transition (TC/NSS)

The international COSPAS-SARSAT system will cease satellite processing of 121.5/243 MHz beacons from 1 February 2009. All beacon owners and users should begin taking steps to replace their 121.5/243 MHz beacons with 406 MHz beacons as soon as possible. Beginning in 2009, only 406 MHz beacons will be detected by the COSPAS-SARSAT satellite system. This affects all maritime beacons (EPIRBs), all aviation beacons (ELTs) and all personal beacons (PLBs). COSPAS-SARSAT made the decision to cease satellite processing at 121.5 MHz in response to guidance from the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO). These United Nations organizations make recommended practices for safety requirements regarding aircraft and maritime vessels and have recognized the limitations of the 121.5 MHz beacons and the superior capabilities of the 406 MHz alerting system. Initiatives have been undertaken through the SAR New Initiatives Fund to develop low cost 406 beacons.

#### DASS MEOSAR (NSS/National Defence)

The Department of National Defence, in collaboration with the National Search and Rescue Secretariat (NSS), exercises project sponsorship and project management responsibilities for Canadian-built Search and Rescue Repeaters (SARR) carried on American and European SARSAT. DND has the overall responsibility for management, procurement, delivery and support of SARR.

The USA suggests that performance enhancements of the SARSAT system would be achieved by placing SARR payloads, similar to those currently produced by Canada, on mid-earth orbit (MEO) satellites. The USA plans to fly SARSAT payloads on GPS Block III satellites as the Distress Alerting Satellite System (DASS), and has invited Canada to participate by producing the SARR payloads for DASS. The NSS and National Defence will work with the US Air Force, National Oceanic and Atmospheric Administration (NOAA) and National Aerospace Administration (NASA) to develop a bilateral MEOSAR strategy, which will include in 2006 a bilateral DASS Research and Development Arrangement.

#### Northern SAR Strategy (NSS/YT/NT/NU)

The objective of the Northern SAR Strategy is to identify the strengths and weaknesses of existing Northern SAR infrastructure and SAR-related plans and procedures, and provide solutions for risk reduction. Key to the development of a successful approach to this issue will be the development of lasting partnerships with northern stakeholders, particularly with Territorial governments and Aboriginal peoples. In 2006, a Northern SAR Capacity Assessment will be completed and a Federal/Territorial Working Group will be established, with a three-year mandate to identify and implement concrete actions toward achieving the objectives of the Strategy.

#### Search and Rescue Radio Interoperability Initiative (PSEPC/Provinces/Territories)

Radio interoperability is necessary for public safety agencies (police, fire, ambulance, border officials etc.) to communicate seamlessly amongst themselves, using wireless voice, such that they can effectively respond to events and emergencies. Currently, front line public safety officials experience significant radio communication problems, and find themselves unable to readily contact and communicate with each other during an emergency. The NSS has made a submission to Industry Canada to establish interagency calling frequencies, which should be implemented in 2006. The GSAR Council has agreed to hold the document on behalf of all first responders, with individual provinces and territories being responsible to communicate and administer it within their own jurisdictions.

#### **Major Exercise Plans**

Major SAR exercises are the cornerstone of interoperability, the development of robust procedures and the testing of capability. For this reason, public safety agencies encourage and perform annual exercises in each of the regions of Canada to ensure that best practices can be verified and all members of the SAR community benefit from multi-agency coordination.

#### **Evolution of the Canadian Coast Guard as a Special Operating Agency (CCG)**

The Canadian Coast Guard is committed to the continued effective and efficient delivery of its mandate and to the provision of essential services to Canadians. DFO will continue to implement the federal government's decision, announced in December 2003 and approved by Treasury Board, effective 1 April 2005, to create CCG as a special operating agency (SOA) within the Department of Fisheries and Oceans. This will allow CCG to focus on providing essential and valuable services to mariners in Canadian waters as well as support the Department's mandate.

#### **Canadian Forces Transformation (CF)**

The CF will become more effective, relevant, and responsive, and its profile and ability to provide leadership at home and abroad will be increased. The transformation of the CF will focus on the establishment of new integrated (beyond joint) organizations and structures, including a unified national command and control system. These goals demand that the CF move beyond traditional thinking to adopt a fully integrated and unified approach to operations.

### **SAR PROGRAM PRIORITIES**

#### <u>General</u>

The following priorities have been developed from the ICSAR partners' inputs to the National SAR Program development process and represent National SAR Program issues warranting program level action.

Each issue is described with actions to address it at the program level, followed by the identification of the program strategies the issue supports. These responses are in addition to the activities and initiatives that may be undertaken by one or more of the participants in accordance with their Roles and Responsibilities to deal with the issue.

#### 2006 National SAR Program Plan Priorities

**Public Education and Awareness.** To focus on reducing the number and severity of SAR incidents. The development of creative inducements can result in lower cost to all agencies, including public health care, the insurance industry and federal/provincial SAR responders. Partners will achieve this through:

- Investing in prevention and mitigation education;
- Using the Prevention Working Group to identify and share best practices, tools and evaluation techniques; and
- Enhancing data collection and analysis to guide prevention and awareness education

**Data Management.** To establish priorities and allocate resources, the NSS and partners need to have the ability to collect, analyze and evaluate SAR incidents and/or responses by:

- Identifying key data requirements;
- Establishing best sources for required data;
- Creating standards and protocols for access to and analysis of data;
- Creating a data warehouse that will allow SAR partners to extract, use and apply data.

**SAR Volunteer Community.** To work with volunteer SAR organizations to ensure their sustainability by addressing such issues as training, funding, support and engagement. Planned activities in 2006-2007 include:

- Completing the scheduled program review of the volunteer sector to determine issues and concerns;
- Assessing the impact of the Canada Labour Code on SAR volunteers and the Federal/Provincial organizations that use their services; and
- Enhancing the link between the Ground Search and Rescue (GSAR) Council and ICSAR to advance volunteer sustainability issues.

**Financial Resources**. Ensure the SAR system is able to respond to changes in resource availability for SAR response by:

 Developing better performance information, agreed by partners, which shows the relationship between resource inputs, service outputs and safety outcomes.

**Training Standards and Exercises.** To promote and develop common training and standardized procedures across disciplines, and validate them through multi-jurisdictional exercises that include common command, control and communications. This can be done by:

- Identifying standards and training requirements at all levels;
- Ensuring the provision and evaluation of required training;
- Using technology to provide training in the most cost-effective way; and
- Conducting and evaluating multi-jurisdictional exercises to identify areas for improvements in training programs.

**Technology.** To develop methods and vehicles to better integrate new alerting and communications technologies in order to enhance interoperability. They can accomplish that goal by:

- Ensuring the appropriate routing of cell phone emergency calls (911) requiring a SAR response;
- Ensuring Canada's participation with the U.S. in the Medium Earth Orbit Search and Rescue System (MEOSAR) and Search and Rescue Satellite-Aided Tracking (SARSAT);
- Developing an ICSAR position on the mandatory carriage of 406 technology beacons for emergency locator transmitters (ELTs); and
- Ensuring the standardization and interoperability of communications procedures, equipment and systems.

**SAR Partnership with the Public Safety Community.** To strengthen ICSAR's leadership and guidance of the National SAR Program through improved co-ordination between the National SAR Program and emergency management and public safety activities. They can accomplish this goal by:

- Continuing involvement in the development of the Emergency Management Act;
- Ensuring renewed Public Safety and Emergency Preparedness Canada participation in ICSAR to bring issues to the table;
- Encouraging the GSAR Council to continue to reflect both emergency management organizations (policy) and police (operations) perspectives at their meetings; and
- Ensuring the NSS has a voice in planning and follow-up to major exercises in emergency preparedness and public security.

# **SECTION 5**

## **SAR PROGRAM RESOURCES**

Tables 1 and 2 indicate the level of resource allocation Federal SAR organizations dedicate towards the delivery of SAR services.

Table 1: Search and Rescue (SAR) Personnel Requirements (FTEs)

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	Estimated 2005-06	Planned 2006-07	Planned 2007-08	Planned <b>2008-09</b>
National Search and Rescue Secretariat	23	23	23	23
Environment Canada - Meteorological Service of Canada	17	17	17	17
Parks Canada	64	64	64	64
Department of Fisheries and Oceans – Canadian Coast Guard <sup>1</sup>	N/A	N/A	N/A	N/A
Department of National Defence – Canadian Forces	676	677	677	677
RCMP <sup>2</sup>	N/A	N/A	N/A	N/A
Transport Canada <sup>3</sup>	U/R	U/R	U/R	U/R
Total	780	781	781	781

Source: National Search and Rescue Secretariat

#### Notes:

- FTE figures for the Canadian Coast Guard were not available because CCG operations involve multitasking.
- The RCMP is unable to provide exact costs as it relates to personnel requirements due to the fact that personnel are tasked with a wide variety of duties one of which is SAR. The SAR expenditures nationally would be substantial.
- 3. TC has no mandate for primary SAR response and does not identify or dedicate resources to these activities. The level of personnel commitment to SAR prevention work is under review. (U/R).

Table 2: Costs (\$ 000) by participating department/organization

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	Estimated Spending 2005-06	Planned Spending 2006-07	Planned Spending 2007-08	Planned Spending 2008-09
National Search and Rescue Secretariat <sup>1</sup>	10,946	9,478	10,188	10,870
Environment Canada - Meteorological Service of Canada	2,100	2,100	2,100	2,100
Parks Canada	4,929	4,929	4,929	4,929
Department of Fisheries and Oceans – Canadian Coast Guard	93,578	93,460	93,460	U/R
Department of National Defence – Canadian Forces <sup>2</sup>	98,437	87,931	105,269	U/R
RCMP <sup>3</sup>	N/A	N/A	N/A	N/A
Transport Canada <sup>4</sup>	U/R	U/R	U/R	U/R
Total	209,990	197,898	215,946	17,899

Source: National Search and Rescue Secretariat

#### Notes:

- Changes due to transfers of funding from SAR New Initiatives Fund (NIF) to other departments for implementation of SAR New Initiatives Fund projects. This includes the transfer of \$3,150 K (FY 05/06), \$1,550K (FY 06/07) \$847K (FY 07/08) and \$208K (FY 08/09).
- 2. The decrease in the estimate from 2005-06 to 2006-07 is mainly due to the SARSAT Project and the Canadian Search and Rescue Helicopter (CSH) Project being closed. Increases in the estimate in 2007-08 are due to the Fixed Wing Search and Rescue Aircraft (FWSAR) project.
- As the resource allocations for SAR are provided under provincial auspices no figures are available for RCMP federal SAR activity. RCMP supports other departments with multi-tasked assets when required
- 4. TC has no mandate for primary SAR response and does not identify or dedicate resources to these activities. The level of financial commitment to SAR prevention work is under review. (U/R)

# **ANNEXES**

- A) Departmental Roles and Responsibilities for the National Search and Rescue Program
- B) SAR New Initiatives Fund
- C) Glossary of Terms and Abbreviations

#### ANNEX A

# <u>Departmental Roles and Responsibilities for the National Search and Rescue Program</u>

### **Table of Contents**

FOREWORD	22
Fisheries and Oceans/Canadian Coast Guard	23
Department of National Defence/Canadian Forces	25
Environment Canada/Meteorological Service of Canada	28
Parks Canada Agency	31
PSEPC/Royal Canadian Mounted Police	34
Transport Canada	36

#### **FOREWORD**

The following Roles and Responsibilities Statements have been developed and approved by individual SAR authorities in the federal government for the federal SAR Program Framework. The Statements provide clear accountabilities for each of the federal departments involved in SAR. In providing individual statements, the departments recognize their explicit responsibility to collaborate and coordinate their activities so that the objective of an efficient, effective and economical SAR program can be achieved.

The following Roles and Responsibilities Statements represent the responsibilities the partners are committed to, to contribute to a seamless national SAR system. Please refer to the source legislation for specific authorities.

Fisheries and Oceans Canada/Canadian Coast Guard				
Search and Rescue Roles and Responsibilities				
Primary Search and Rescue Responsibility	Authority			
Management				
Fisheries and Oceans Canada/Canadian Coast Guard is responsible for the marine component of the federal search and rescue program including:  Evaluation and planning for departmental SAR equipment and procedures, analyzing maritime SAR needs and corresponding resources and facilities.  Develop and implement departmental SAR planning, management and operational policy and recreational boating safety policy. Make recommendations for national SAR policy initiatives, through ICSAR, relevant to Canadian Coast Guard's responsibilities.	<ul> <li>British North America Act</li> <li>Dept of Fisheries &amp; Oceans Act</li> <li>Oceans Act</li> <li>Department of Transport Act</li> <li>Canada Shipping Act [Canada Shipping Act, 2001]</li> <li>Aeronautics Act</li> <li>Criminal Code</li> </ul>			
Develop and support Canadian Coast Guard Auxiliary policy.				
In accordance with IMO agreements, establish SAR agreements with other agencies responsible for maritime SAR at international, national and regional levels.				
Represent Canada at the International Maritime Organization (IMO) and other organizations such as the International Lifeboat Federation (ILF) on matters pertaining to maritime Search and Rescue. Ensuring Canadian maritime SAR policies conform to international agreements and conventions.				
<u>Operations</u>				
To detect maritime incidents and to coordinate and conduct SAR operations in maritime SAR situations within the Canadian area of responsibility.				
To provide the primary maritime SAR response element of Canadian SAR coverage, where warranted.				
To provide maritime resources in support of the resolution of aeronautical SAR operations, where				

appropriate.

Fisheries and Oceans Canada/Canadian Coast Guard  Search and Rescue Roles and Responsibilities		
Prevention  To work together with stakeholders for safe boaters, safe boats and a safe boating environment.	responsibilities	
Secondary Search and Rescue Responsibility		
Operations  To provide Canadian Coast Guard resources, when and where available and upon request, to assist in the resolution of humanitarian incidents within provincial or municipal areas of responsibility.		
Area of Responsibility		
The Canadian area of responsibility for maritime Search and Rescue as provided under the International Maritime Organization (IMO) Agreements, and in Canadian waters of the Great Lakes and the St. Lawrence System.		

Department of National Defence/Canadian Forces SAR Mission Statements (Roles and Responsibilities)				
Primary Responsibilities	Authority			
Management  Develop, review, and implement Canadian Forces search and rescue policies, to include levels of service, mission statements, departmental strategies and goals, unit resource allocations, and through the Interdepartmental Committee on Search and Rescue make recommendations for national SAR policy initiatives relevant to Canadian Forces responsibilities.	<ul> <li>Cabinet Directive #18, 26 Sep 1950</li> <li>Cabinet Directive #22, Jul 1951</li> <li>Cabinet Directive 243-76RD(2) / 321-76RD(2), Aug 1963</li> </ul>			
Provide a Canadian Forces representative to the Interdepartmental Committee on Search and Rescue for departmental SAR policy coordination.  Establish governing policy documents and support services for the Civil Air Search and Rescue Association in coordination with Transport Canada.	<ul> <li>Memorandum to Cabinet # D120, May 1947</li> <li>Record of Cabinet Direction 425- 82RD(C), 03 Aug 1982</li> <li>Contribution Agreement between the Minister of National Defence and the Civil Air Search and Rescue Association, April 1999</li> <li>Memorandum of Understanding between the Minister of Transport, the Minister of National Defence, and the Civil Air Search and Rescue Association, April 1999</li> </ul>			
Liaise, coordinate, and when necessary, establish appropriate agreements with relevant national and international departments, organizations, agencies, and other groups public or private concerning SAR matters.	<ul> <li>Chief of Staff Committee Paper No 5(61), 30 May 1961</li> <li>International Civil Aviation Organization, Annex 12</li> </ul>			
Establish Search and Rescue Region(s) and Joint Rescue Coordination Centre(s) to effectively deliver a response to aeronautical and maritime SAR incidents that occur within the Federal area of responsibility.	<ul> <li>International Maritime Organization, SAR Convention</li> <li>International Civil Aviation Organization, Annex 12</li> <li>Cabinet Directive #22, 12 Jul 1951</li> </ul>			

# Department of National Defence/Canadian Forces SAR Mission Statements (Roles and Responsibilities)

#### Operations

Provide SAR services that effectively respond to aeronautical and maritime incidents occurring within the Canadian SAR area of responsibility.

RG2, A5a, Vol 2640, 18 Jun 1947Cabinet Directive #22, 12 Jul 1951

Privy Council Cabinet Conclusions

- Chief of Staff Committee Paper No 5(61), May 1961
- Deputy Minister (DND) letter to Deputy Minister (DOT) 979-74/68 (VCAS), 31 Aug 1961

Ensure the effective operation of the coordinated aeronautical and maritime SAR system within the Canadian Search and Rescue Region.

Provide the Canadian ground segment of the COSPAS/SARSAT system.

Distribute distress beacon data in accordance with established international data distribution procedures.

Provide data processing equipment for the space segment of the SARSAT system.

Conduct ground searches in relation to aeronautical SAR incidents.

International COSPAS/SARSAT

Program Agreement

Same as above

Same as above

- Same as above
- Chief of Air Staff File #976-1 (DTRO), 21 Jun 1960

### **Secondary Responsibilities**

#### Operations

Provide Canadian Forces resources to respond to searches for missing persons and other humanitarian incidents when requested and in accordance with Canadian Forces directives.

Provide support and coordination to Civil Air Search and Rescue Association training and operational activities.

 Memorandum from Office of the Deputy Minister (DND), 03 Aug 1961

Authority

- Deputy Chief Defence Staff Direction 2/98
- Contribution Agreement between the Minister of National Defence and the Civil Air Search and Rescue Association
- Memorandum of Understanding between the Minister of Transport, the Minister of National Defence, and CASARA, April 1999

# Department of National Defence/Canadian Forces SAR Mission Statements (Roles and Responsibilities)

#### **Prevention**

Provide support to Transport Canada and Canadian Coast Guard SAR prevention programs.

Advise appropriate authorities of SAR concerns identified from aeronautical and maritime SAR operations.

- Cabinet Directive 425-82RD(C), 03 Aug 1982
- International Civil Aviation Organization, Annex 12
- International Maritime Organization, SAR Convention

Environment Canada/Meteorological Service of Canada (MSC)			
Search and Rescue Roles ar	nd Responsibilities		
General Overview			
MSC contributes to the health, safety and economic prosperity of Canadians by providing timely, accurate and accessible information on daily weather, water and ice conditions within the country.			
Primary Responsibilities	Authority		
MSC manages its resources to ensure the monitoring of atmospheric and sea conditions, and to ensure the provision of forecasts and warnings with respect to weather, ice, sea state, and other physical phenomena.  Through ICSAR, MSC makes recommendations for national SAR policy initiatives related to its			
mandate.  MSC develops and implements departmental SAR operational and prevention policy.			
Operations  Provision of meteorological information and expert	Department of the Environment Act <sup>i</sup>		
consultations to agencies with SAR responsibilities in support to the conduct of SAR operations.			

# Environment Canada/Meteorological Service of Canada (MSC) Search and Rescue Roles and Responsibilities

#### Prevention

Reduces the number and severity of SAR incidents through the conduct of observations and forecasts and provision of timely warnings with respect to weather, ice sea-state and other physical phenomena (Note: the provision of meteorological products & services for aviation is provided by MSC under a contractual agreement with NAVCANADA. The Aeronautics Act identifies Transport Canada as the department responsible for those services, and the Canadian Air Navigation Services Commercialization Act delegates this responsibility to NAVCANADA);

The development and delivery of safety awareness promotional and educational programs related to the mandate of MSC:

The provision of expert advice and meteorological information to official investigating agencies; The provision of expert advice for the development of regulations in the marine and aviation sector.

- Department of the Environment Act<sup>i</sup>
- Emergency Preparedness Act<sup>ii</sup>

#### **Secondary Responsibilities**

Management: none

Operations: none

#### **Prevention**

Assists in promotional and educational SAR prevention programs related to MSC's mandate, and presented by other federal, provincial/ territorial and municipal department.

#### Area of Responsibility

Over the Canadian territory.

On request from SAR responding agencies, MSC will provide operational support over the Canadian SAR area of responsibility (as defined under ICAO and IMO Agreements).

# Environment Canada/Meteorological Service of Canada (MSC) Search and Rescue Roles and Responsibilities

#### Notes:

<sup>1</sup>The Department of the Environment Act establishes the Minister's responsibilities for "all matters relating to... meteorology; ..."

<sup>11</sup> The Emergency Preparedness Act provides for advancing civil preparedness in Canada for emergencies of all types. The Minister of

advancing civil preparedness in Canada for emergencies of all types. The Minister of Environment is responsible for developing and maintaining emergency plans covering for example: conducting observations and forecasts and providing timely warnings with respect to weather, ice sea-state and other physical phenomena.

Parks Canada Agency			
Search And Rescue Roles ar Primary Search And Rescue Responsibility	Authority		
General Overview  Search And Rescue is an integral part of Parks Canada's Public Safety program. Public Safety in the context of Parks Canada's program is defined as "a coordinated effort to ensure that visitors to parks, canals and sites have a positive experience while minimizing the potential for suffering or loss. Public safety deals with the measures employed to reduce the risk of an incident occurring or to protect visitors from a hazard; and measures to be implemented in the event that an incident develops requiring emergency response capabilities".	<ul> <li>Canada National Parks Act</li> <li>Parks Canada Agency Act</li> <li>Canada National Marine Conservation Areas Act</li> <li>Interim Bulletin 4.4.3,</li> <li>Public Safety Management</li> <li>Management Directive 3.1.3,</li> </ul>		
The objectives of the Public Safety Program are:  1) To minimize the number and severity of incidents 2) To fulfill Parks Canada's federal role in support of the National Search and Rescue Program.	<ul> <li>Public Safety Measures for National Historic Sites and Historic Canals</li> <li>Management Directive 2.2.4, Emergency Services</li> </ul>		
The mandate for public safety in national parks and national historic sites, including historic canals is established in the <i>Canada National Parks Act</i> (CNPA) and the Parks Canada Agency Act (PCAA). Section 8(1) of the CNPA states that "The minister is responsible for administration, management and control of national parks and national historic sites, including historic canals (Section 42(3)."			
The Act respecting the <i>national marine conservation</i> areas of Canada, defines the Minister's responsibility for the management and control of marine conservation areas.			
Parks Canada's Public Safety Management Directive (Interim Bulletin 4.4.3) states that Parks Canada will provide land and marine search and rescue services in the national parks to minimize the number of fatalities and the extent of injuries and human suffering of people who are lost and/or in distress. Public Safety Directive Bulletin 3.1.3 requires that all historic sites, including historic canals, develop and implement risk management programs for the safety of visitors.			

# Parks Canada Agency Search And Rescue Roles and Responsibilities

#### <u>Management</u>

#### Planning

The Visitor Risk Management (VRM) framework identifies and assesses visitor related risks at national parks, national historic sites and canals. The steps consist of establishing a VRM program, assessing visitor risks, organizing risk issues, developing service objectives and evaluating issues, establishing action plans for risk control, preparing public safety plans, and implementing, evaluating and updating plans. Public safety operational plans would also address legal, policy, contractual obligations, and disaster planning.

Parks Canada is responsible for developing national public safety policy and performance indicators for heritage protected areas managed by the Parks Canada Agency.

#### Coordination

Parks Canada will cooperate with other search and rescue agencies to provide improved levels of search and rescue service in national parks and on lands and marine areas adjacent to parks.

# Parks Canada Agency Search And Rescue Roles and Responsibilities

#### Operations

Provides SAR services for incidents on land or in the waters of heritage- protected areas managed by the Parks Canada Agency.

#### **Prevention**

Prevention is a key element in public safety. Parks Canada places a high priority on providing comprehensive prevention programs to minimize the potential for occurrences. These directives state that Parks Canada will provide visitors with the information they need to protect themselves, and offer advice and warnings to protected heritage area users.

Prevention programs and activities consist of

- designing and implementing a Visitor Risk Management Framework;
- 2. developing the necessary training; and
- 3. researching and promoting prevention.

#### **Secondary SAR Responsibility**

#### **Operations**

Provides SAR resources when and where available and on request in order to assist other agencies.

<u>Prevention</u>: Assists other Federal, Provincial/ Territorial governments and NGO's in implementation of SAR prevention programs related to the National SAR Program.

Royal Canadian Mounted Police		
Search and Rescue Roles and Responsibilities		

The RCMP's mandate as a federal department

**Primary Responsibilities** 

**General** 

involved in Search and Rescue is to provide multitasked resources, when available, in support of federal SAR missions.

The RCMP also carries Ground Search and Rescue (GSAR) responsibilities, as described in Provincial Police Service Agreements, in its role as the police force of jurisdiction under contract with the relevant province or territory.

Cabinet Directive Circular #22, 12 July 1951

**Authority** 

1 Tilliary Nesponsibilities	Additiontly
<u>Operations</u>	
Provide multi-tasked resources, on request, in support of federal SAR missions.	
<u>Prevention</u>	
Enforce the safety related sections of the Aeronautics Act, Small Vessel Regulations, Canada Shipping Act and accompanying regulations throughout Canada. Develop and assist in promotional and educational programs related to federal SAR prevention.	
Area Of Responsibility	
Throughout Canada, RCMP resources may be called upon to assist in federal SAR response.	

# Royal Canadian Mounted Police Search and Rescue Roles and Responsibilities

#### **Management**

The RCMP manages the Canadian Police Information Centre which hosts a copy of the Alzheimer's 'Safely Home Registry'. The RCMP ensures that weekly updates are done thereby providing current information to police officers across Canada.

#### **Operations**

The RCMP maintains a fleet of marine assets deployed to both the east and west coasts of Canada.

#### **Prevention**

The RCMP promotes boating safety by performing education and enforcement through boater checks under the Small Vessel Regulations in Canada's tidal waters, the St Lawrence River and in the Great Lakes.

Note: Competency is achieved through formal training courses on piloting aircraft and vessels and the accompanying safety requirements. Dedicated marine services also receive training through Canadian Coast Guard on Marine Emergency Duties, including Search Patterns, Survival and Life Saving appliances.

- RCMP Act
- Provincial Police Service Agreements

Transport Canada			
Search and Rescue Roles and Responsibility	Authority		
•			

# Transport Canada Search and Rescue Roles and Responsibilities

#### Prevention

Transport Canada's regulatory and other related activities are intended to keep transportation safe and secure. These activities include various educational, promotional and awareness programs that, while focused on facilitating a safe transportation system, make an incidental contribution to the reduction of the need to resort to the use of primary SAR services. Of specific note though, the Civil Air Search And Rescue Association (CASARA) program is jointly supported by the Department of National Defence and Transport Canada and involves the provision of training and information to volunteers who assist with primary SAR responses.

### **SAR New Initiatives Fund (NIF)**

The SAR New Initiatives Fund (NIF) provides funding for new initiatives that will enhance the effectiveness, efficiency and economy of search and rescue (SAR) activities in Canada.

The NIF provides funding in six strategic areas:

#### **Partnerships**

Develop and strengthen partnerships to facilitate and enhance SAR prevention and response activities.

#### **Multi-Jurisdictional Exercises**

Participate in a program of multi-jurisdictional exercises with focus on areas of historical problems or future concern, and/or to confirm plans and procedures for SAR response activities.

#### Volunteers

Involve and maximize as appropriate the use of volunteers.

#### Technology and Innovation

Encourage the identification and development of best practices, innovation and/or new technologies to support SAR prevention and response activities.

#### Interoperability

Identify types and characteristics of SAR equipment, training and procedures that should be compatible and/or interoperable.

#### **Data and information**

Promote research and development and the collection and free exchange of information and data applicable to SAR prevention and response.

During 2005-2006, the SAR NIF, along with all federal government Grants and Contributions programs, had to renew the terms and conditions of the program with the Treasury Board in order to strengthen financial management and ensure fiscal prudence. The renewed terms and conditions for the contribution component of NIF were approved on August 30, 2005.

The renewal process resulted in some delays and following consultation with the funding partners, NSS decided not to issue a call letter for 2006-07, but to refresh the unfunded projects in the 2005-06 Merit List for possible funding in 2006-2007.

Initiatives are forwarded by either a federal SAR managing department/agency or by a provincial/territorial authority (e.g. Emergency Measures Organization (EMO)) and are evaluated individually and collectively by representatives of the partnering departments, agencies, provinces or territories based on their merit against competing proposals.

The Lead Minister for Search and Rescue approves the new projects to be funded each year, following a rigorous evaluation process of proposed projects by the NIF Merit Board, which includes representatives of ICSAR departments, and provinces and territories, and consideration by the Interdepartmental Committee on Search and Rescue (ICSAR). The list of approved projects is then posted on the NSS website.

The next call letter for new projects will be in spring 2006, for projects starting on April 1, 2007.

#### ANNEX C

### **Glossary of Terms and Abbreviations**

CCG Canadian Coast Guard (see Annex A)

**CF** Canadian Forces (see Annex A)

**CFNA** Canadian Forces Northern Area – A Regional Command of the Canadian

Forces responsible for operations in the Yukon, Nunavut and the Northwest

Territories.

COSPAS/ SARSAT An international program of which Canada is a founding member, providing

satellite-aided alerting and locating of distress incidents using radio

beacons.

**DFO** Department of Fisheries and Oceans (see Annex A)

**DND** Department of National Defence (see Annex A)

IAMSAR Manual International Aeronautical and Marine SAR Manual – A manual developed

jointly by ICAO and IMO to guide nations in adopting common procedures

and techniques for SAR.

ICAO International Civil Aviation Organization – An organization of the United

Nations dealing with civil aviation policies, practices and regulation.

ICSAR Interdepartmental Committee on Search and Rescue (see page 5)

**IMO** International Maritime Organization – An organization of the United Nations

dealing with maritime policies, practices and regulation.

JRCC Joint Rescue Coordination Centre – A facility established to coordinate

response to both aeronautical and marine search and rescue incidents.

**LMSAR** Lead Minister for Search and Rescue (see page 4)

MAJAID Major Air Disaster – an aeronautical incident which, because of its location

or number of passengers and crew involved, is beyond the response

capability of the normal SAR system.

**MAJMAR** Major Marine Incident – a marine incident which, because of its location or

number of passengers and crew involved, is beyond the response

capability of the normal SAR system.

MJX Multi-Jurisdictional (SAR) Exercise(s) – Search and rescue exercise

involving participants from more than one level of jurisdiction (i.e.:

federal/provincial/municipal). (see Annex B)

MRSC Maritime Rescue Sub-Centre – A facility established to coordinate

response to marine search and rescue incidents in a Marine Rescue Sub-

Region of a Search and Rescue Region.

MRSR Marine Rescue Sub-Region – A portion of a Search and Rescue Region in

which search and rescue services are normally coordinated by a MRSC

(see preceding definition).

MSOC Marine Security Operations Centres

MSC Meteorological Service of Canada (see Annex A)

**NIF** SAR New Initiatives Fund – A federal program providing funding for

initiatives to enhance search and rescue services. Funding is provided for capital and operations and maintenance projects carried out by Federal departments and agencies, and through contributions to some federal

organizations.

NSM National Search and Rescue Manual – A joint Canadian Forces and

Canadian Coast Guard publication providing policy and operational

guidance to federal aeronautical and marine SAR activities. (Note: the NSM is scheduled to be replaced by Volume IV (National Supplement) of the

IAMSAR Manual).

NSS National Search and Rescue Secretariat (see page 6)

**OIC** Officer-in-Charge – Generally used as a military term to denote an officer in

charge of a unit or establishment (i.e. a Joint Rescue Coordination Centre),

but lacking Commanding Officer status.

PCA Parks Canada Agency (see Annex A)

**PSEPC** The creation of Public Safety and Emergency Preparedness Canada

(PSEPC) fulfills the fundamental role of government to secure the public's safety and security. PSEPC is dedicated to minimizing a continuum of risks

to Canadians -- from risks to personal safety from crime or naturally

occurring events such as severe blizzards, floods or forest fires, to threats

to national security from terrorist activity.

**RCMP** Royal Canadian Mounted Police (see Annex A)

**RSMS** Regional Supervisor/Superintendent for Marine Search and Rescue – The

senior Canadian Coast Guard officer at a Joint Rescue Coordination Centre

or Maritime Rescue Sub-Centre.

SAR Search and Rescue

**SRR** Search and Rescue Region

TC Transport Canada (see Annex A)