

ISSUE FEATURES



# SAR SCENE

The Canadian Search and Rescue Magazine

Winter/Spring 2004 Vol. 14, #1

Aircraft Icing

Frequent  
beacon  
questions

SAR mission  
management  
system

Remembering  
a hero

Last issue  
in print

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## Search and rescue in Canada's national parks



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## SAR SCENE

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### RCMP Corporal awarded Meritorious Service Medal

Corporal Dwayne Jennings, of Vancouver, British Columbia has another medal to add to his collection.

Cpl. Jennings, an RCMP helicopter pilot, was awarded the Meritorious Service Medal by Governor General Adrienne Clarkson in December 2003 for rescuing a stranded police crew in November 2001.

A helicopter pilot, Cpl. Jennings transported a search and rescue crew to the mountainside where his colleagues were trapped. In spite of extreme weather conditions, Cpl. Jennings was able to land the helicopter on the tip of one skid three times to unload search and rescue personnel and supplies to aid the stranded officers.

Cpl. Jennings has received two other awards for his life-saving efforts, including the RCMP Commissioner's Commendation in February 2002 and the federal government's Treasury Board Award of Excellence in June 2003.

### 444 Squadron wins 2003 Mynarski trophy

In July 2002, 444 Squadron's Rescue 475 crew responded to a Canadian Forces Griffon crash north of Goose Bay, Newfoundland and Labrador, saving the life of a seriously injured crash victim.

The conditions were poor with fading light, deteriorating weather and fuel running low. Despite the situation, the Rescue 475 crew was able to save a Griffon crew member.

The crew is being recognized with the Mynarski trophy for the professionalism, determination and bravery they showed in the face of adversity. The trophy, Canada's highest award for excellence in the field of air search and rescue, memorializes Petty Officer Andrew Charles Mynarski of 419 Squadron who was posthumously awarded the Victoria Cross for attempting to free a rear air gunner from their burning Lancaster bomber.

### Pirated TV cards interfere with emergency beacon signals

Pirated video cards for satellite TV receivers are causing interference with satellite receivers used for search and rescue operations.

Video cards capture the satellite signal and allow the user to watch television channels sent out by the satellite. For those who pay for satellite service, they capture only the signals they pay for. For example, if you do not pay for the travel channel, you do not receive the signal for it.

For those who do not pay for satellite service and program their card via a computer, they receive all the signals sent by a satellite and can watch any and all channels.

The Canadian Mission Control Centre (CMCC), Trenton, Ontario, became aware of the problem in late 2001 when it noticed interference with emergency locator beacon (ELTs) signals used by aircraft. It became apparent in early 2002 this was a larger problem than first imagined.

The emergency transmitters send a beacon signal when an aircraft has crashed. Signals from video cards have caused search and rescue officials to believe aircraft have crashed when no accident has occurred.

When a beacon sends a distress signal, it is picked up by one of the orbiting satellites which will then relay the beacon position to rescue authorities.

Although CMCC can usually tell the difference between signal



interference and an actual distress call, the real hazard is the signal sent out by the pirated card. These false signals can mask the real distress signals and hamper search and rescue operations.

### Municipal sponsorship improves ground SAR in Alberta

An Alberta government special grant initiative will provide \$150,000 for ground search and rescue training in small and medium-sized communities with a population of 20,000 or less.

The funds are part of a \$500,000 grant that was provided by the Municipal Sponsorship Program.

The money can be used for workshops, seminars, disaster exercises and mock disasters.

The Municipal Sponsorship Program was established in 1998 to ensure public safety services across Alberta are strong.

### Emergency beacons on display in Montreal

Transport Canada's Transportation Development Centre (TDC) helped launch an exhibition at the Montreal Science Centre this past January of emergency position indicating radio beacons and personal locator beacons.



Howard Posluns, Chief of Advanced Technology with the TDC, was at the opening event talking about emergency beacons and their applications for search and rescue.

The exhibit, which will last approximately three years, is largely youth-oriented.

### Fire brigade practices winter water and ice rescue by Robert Lynch

The Harbour Grace Volunteer Fire Brigade Land Based Cold Water Rescue team held their winter practice schedule one evening in mid-February, 2003.

Conditions were ideal for rescue scenarios and broken ice entry techniques. The slipway area of the marina was frozen enough to walk on and once out on the ice an area of open water was available under a board walk overpass. The opening in the ice was large enough to practice scenarios using the *Rescue Alive* equipment.

The team placed four members in the icy water wearing full dry suits fitted with knives, ice picks, harnesses, flashlights, strobe lights, safety lines and goggles. The four members practised with the *Rescue Alive* platform while eight members served as shore tenders and safety officers.

Team leader Bill Ryan set up scenarios whereby the teams would walk the *Rescue Alive* platform across the ice surface, enter the water and complete the rescue of the victims in the water. The practice stressed proper hand signals, because unclear signalling presents many problems.

Team members demonstrated water entry from the ice edge and from broken ice. The team also practised the do's and don't's of using the *Rescue Alive* platform.

*Robert Lynch is a 16-year veteran volunteer firefighter with the Brigade.*



Photo courtesy of Robert Lynch  
Members of the Brigade practice using the *Rescue Alive* platform on ice and in the water.

Correction: The new National Directory of Emergency Services contains 136 pages, not 36 as reported in the last issue of SARSCENE.

Correction: The article "How hunters help and hinder search and rescue," in SARSCENE magazine's Vol 13, #2 issue, concluded that there hadn't been a search for a missing hunter in seven or eight years. However, according to

Keith Crosland, Nova Scotia Emergency Measures Organization Western Zone Controller and Provincial Ground Search and Rescue Coordinator, there have been 29 searches for lost hunters between 1999 and 2003.

### New Search and Rescue Initiatives Fund projects approved for 2004-05

The 2004-05 New Search and Rescue Initiatives Fund projects include the development of a multi-agency incident command structure for ground SAR, a new volunteer marine SAR training program using a marine simulator, a helicopter hover exit training and wilderness rescue exercise, to a public avalanche safety awareness project.

The Honourable David Pratt, Lead Minister for Search and Rescue, announced the projects in February 2004.

The fund, with an annual budget of \$8.1 million, supports search and rescue projects that enhance air, marine and ground search and rescue activities in Canada. Since 1988, it has invested \$130 million in over 700 projects.

New rescue laser flare a handy tool for search and rescue

A new hand-held signaling device can help rescuers find victims faster, especially in low visibility areas and conditions.

Tested in Calgary, Alberta in August 2003, the rescue laser flare was used by the Calgary Police Air Services Unit during a nighttime search for four rafters who were overdue.

Rescue crews located the victims and transported two of the four rafters to safety.

The last two rafters were given the rescue laser flare to assist the flight crew in relocating them on the return trip.

In this case, the laser was very effective as a position marker and a signaling device.

The rescue laser flare can be seen up to 20 miles away at night, and as far away as three miles during the day.

It is waterproof up to 80 feet and can run for 15 hours on two replaceable batteries.



Not only can it be seen from far way, but it can penetrate smoke and fog.

For more information about this device, visit [www.concordeaerosales.com/signal/laserflare.html](http://www.concordeaerosales.com/signal/laserflare.html)

Canoeist is first PLB rescue in the U.S.

November 2003 marked a new era for personal locator beacon (PLB) use in the United States. Carl Skalak, from Cleveland, Ohio, became the first person outside Alaska to be rescued using

PLB technology since it was approved for use in the U.S. in July 2003.

Before July, PLBs were in use only in Alaska under a test program to evaluate their usefulness for search and rescue.

While on a solo canoe trip in the Adirondack Mountains in upstate New York, Skalak, 55,

became disoriented in the frigid weather and activated his beacon.

Because he had properly registered his PLB, his location was confirmed and it wasn't long before a rescue operation was launched.

Without the beacon, Skalak's life could have been in danger if he had become hypothermic, run out of supplies or wandered far away from his campsite and any hope of rescue.

## Nominate a group or individual for a SAR Award

Nominations are due May 31, 2004

The NSS awards program was introduced in 1995 to acknowledge outstanding work done by search and rescue providers and organizations to raise awareness of search and rescue efforts across Canada.

The Outstanding SAR Achievement award recognizes exceptional contribution to Canadian SAR by an individual or organization. The Certificates of Achievement recognize individuals or groups who have made significant contributions to SAR.

Nomination information and forms are available at [www.nss.gc.ca](http://www.nss.gc.ca). Click on **Awards** in the menu on the left or call 1-800-727-9414.

The awards will be presented at SARSCENE 2004 in Calgary, Alberta on October 16. ■

## Sign up for SARSCENE magazine online

SARSCENE magazine introduces its new service to alert subscribers by e-mail that the latest issue of SARSCENE magazine is available online. This way, you will never miss an issue.

To subscribe to the alerting service, go to [www.nss.gc.ca/site/SARScene/index\\_e.asp](http://www.nss.gc.ca/site/SARScene/index_e.asp) and follow the prompts.

The growing use of the Internet, the increase in popularity of online magazines and the rising costs of publishing have led to the decision to discontinue

the printed version of SARSCENE magazine. This is the final issue of SARSCENE magazine for Canadian subscribers. The final issue for international subscribers was January 2004.

We value your continued support of SARSCENE magazine online and look forward to your suggestions for articles on a broad range of topics of interest to the search and rescue community. ■





## New funding for Nunavik search and rescue operations

New funding to Nunavik's search and rescue operations will improve current resources and help local groups in future searches. The \$1.5 million funding from the regional government will help fund specialized equipment, tailored for search and rescue in the North.

By virtue of its remoteness, search and rescue in the north is inherently different from the south; resources are limited and weather conditions can be extreme.

Having specialized equipment tailored to Northern Canada's search and rescue needs, will help local groups respond to SAR emergencies and to be less dependent on outside help.



## Program transfer to Transport Canada finalized

John Adams, Commissioner of the Canadian Coast Guard, announced the official transfer of all marine safety policy development to Transport Canada.

Named in the transfer are the Office of Boating Safety, the Navigable Waters Protection Program, the policy component of the Environmental Protection Program and the Canada Shipping Act Regulatory Reform.

The shift provides mariners with a single point of contact for marine navigation policy and related issues.

## RCMP Officer mourned

RCMP Corporal James Galloway died tragically in late February 2004 while responding to a domestic disturbance call in a community near Edmonton.

A tragic loss to the search and rescue community, Cpl. Galloway will be remembered for his dedication to ground search and rescue and his leadership in the RCMP Civilian Search and Rescue Dog Association.

Ann Odgers, a volunteer with CASARA Ontario, said Cpl. Galloway "truly was the epitome of a SAR person. 'So Others May Live' was how he lived his life and eventually lost it. He was a strong supporter of volunteers and we certainly don't have enough of those."

Cpl. Galloway was recognized by his colleagues in 2002 when he was awarded the NSS Certificate of Achievement for initiatives in search and rescue. Cpl. Galloway will be greatly missed.

"Jim's death was a great tragedy to his family, his fellow police officers, dog handlers everywhere and the SAR community," Ms. Odgers added.

## Interactive directory of Canadian search and rescue organizations

Just a reminder to update your organization's information on the interactive directory of Canadian search and rescue organizations.

SAR organizations can access the database directly to change, update or delete information or to add new entries.

## New online independent study course

Called the "Introduction to Community Response Teams," this new initiative is an online, independent study course that can serve as either an introduction to those wanting to join a community emergency response teams (CERTs), or as a refresher to current team members.

It has six modules with topics that include an introduction to CERT, fire safety, hazardous material and terrorist incidents, disaster medical operations, and search and rescue. It takes between six and eight hours to complete the course, and those who are successful will receive a certification of completion from the Independent Study Office. For more information visit <http://training.fema.gov/emiweb/IS/is317.asp> ■

*While escorting the HMCS HAIDA in late August this past year, the Hamilton Beach Rescue, District 2, unit 161, was called to action when a distress call came over the radio. A boat was on fire in the Hamilton Harbour. The Canadian Coast Guard Auxiliary and Hamilton Police Marine Unit also responded to the call. No one was injured but damage to the vessel was extensive. Photo by Peter Bax*



# Upcoming Events

## International Boating and Water Safety Summit

April 18-21, 2004, Panama City, Florida

[www.safeboatingcouncil.org/summit/summitmain.htm](http://www.safeboatingcouncil.org/summit/summitmain.htm)

## Transport Canada's 16th Annual Canadian Aviation Safety Seminar

April 19-21, 2004, Toronto, Ontario

[www.tc.gc.ca/CivilAviation/SystemSafety/CASS/2004/menu.htm](http://www.tc.gc.ca/CivilAviation/SystemSafety/CASS/2004/menu.htm)

## Alberta's SAR Day

May 1, 2004

[www.saralberta.org](http://www.saralberta.org)

## Emergency Preparedness Week

May 2-8, 2004, across Canada

[www.emergencypreparednessweek.ca/about\\_e.shtml](http://www.emergencypreparednessweek.ca/about_e.shtml)

## Washington State SAR Conference

May 21-23, 2004, Cascade Peaks Resort and Campground in Randle, Washington

[www.co.lewis.wa.us/Sheriff/sarconference.htm](http://www.co.lewis.wa.us/Sheriff/sarconference.htm)

## National Safe Boating Week

May 22-28, 2004

[www.safeboatingcampaign.com/](http://www.safeboatingcampaign.com/)

## Canadian Hydrographic Conference

May 24-27, 2004, Ottawa, Ontario

[www.chc2004.com/index\\_x.php?lang=en](http://www.chc2004.com/index_x.php?lang=en)

## National Association for Search and Rescue (NASAR) SAR 04 Conference

June 2-5, 2004, Lansdowne, Virginia

[www.nasar.org/?s=news&id=66&c=2](http://www.nasar.org/?s=news&id=66&c=2)

## Mountain Rescue Association 2004 conference

June 18-20, 2004, Anchorage, Alaska

[www.amrg.org/MRA\\_04/default.htm](http://www.amrg.org/MRA_04/default.htm)

## 14th World Conference on Disaster Management

June 20-23, 2004, Toronto, Ontario

[www.wcdm.org/wcdm\\_home.html](http://www.wcdm.org/wcdm_home.html)

## International Conference on Storms:

"Storms Science to Disaster Mitigation"

July 5-9, 2004, Brisbane, Australia

[www.stormsconf.org.au/](http://www.stormsconf.org.au/)

## United States Coast Guard Auxiliary's 2004 National Conference (NACON)

September 2-4, 2004, Costa Mesa, California

E-mail: [kbauxin@aug.com](mailto:kbauxin@aug.com)

## International Snow Science Workshop 2004

September 19-24, 2004, Jackson Hole, Wyoming

[www.issworkshop.org/](http://www.issworkshop.org/)

## National SAREX 2004

September 20-25, 2004, Comox, B.C.

## Canadian Safe Boating Council Annual Symposium

September 23-26 2004, Whistler, B.C.

[www.csbc.ca/html/AnnualConference.html](http://www.csbc.ca/html/AnnualConference.html)

## SARSCENE 2004

October 13-16, 2004, Calgary, Alberta

[www.nss.gc.ca](http://www.nss.gc.ca) or call 1-800-727-9414

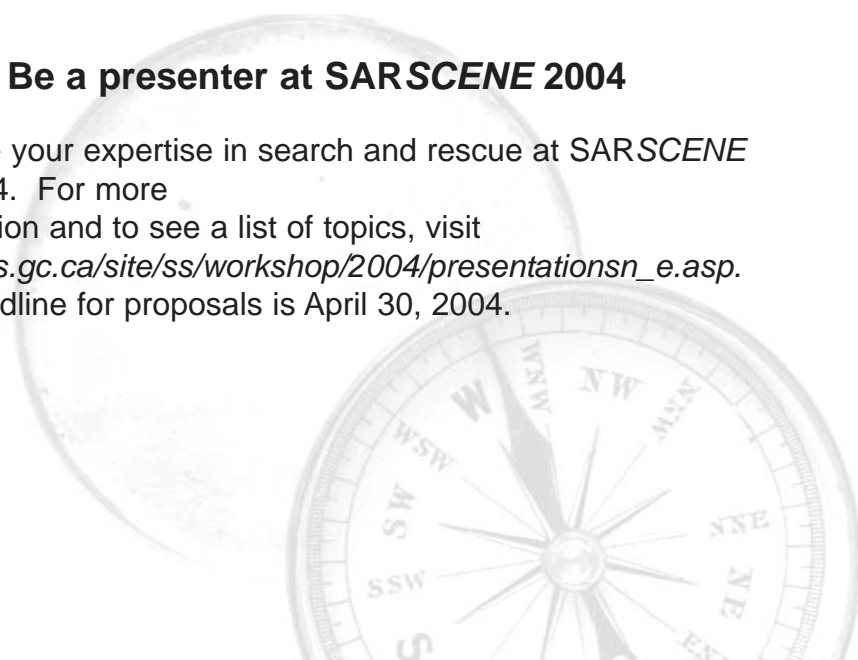
## International Search and Rescue Competition

November 4-7, 2004, Portsmouth, Virginia

<http://teamcoastguard.org/2003/ISAR/A031001i/isar2004.htm>

## Be a presenter at SARSCENE 2004

Share your expertise in search and rescue at SARSCENE 2004. For more information and to see a list of topics, visit [www.nss.gc.ca/site/ss/workshop/2004/presentationsn\\_e.asp](http://www.nss.gc.ca/site/ss/workshop/2004/presentationsn_e.asp). The deadline for proposals is April 30, 2004.



# Improving search and rescue in Canada's national parks

**The search for a reindeer herder in late December 2003 in Inuvik, Northwest Territories, mirrored a recent simulated search and showed the importance of a coordinated approach to search and rescue.**

**A**fter initiating the search, the RCMP contacted Ron Larsen, Operations Manager for Parks Canada's Western Arctic Field Unit, to manage the search on their behalf.

For four days Mr. Larsen used a variety of regional resources, including the rangers, park wardens, family members, local hunters and trappers committees, a representative from Fisheries and Oceans Canada,



*Participants at a similar Parks Canada table top held in Smiths Falls, Ontario, discussed the implications of a dam bursting in the Tay River.*

and the RCMP.

Mr. Larsen and his group eventually found the missing herder's snowmobile, but with blizzard-like conditions, were forced to suspend the search to ensure the safety of those searching.

## Well-managed search

A debriefing session was held after the incident to discuss what had happened during the search. Mr. Larsen explained that "despite the fact that we have not been able to recover the missing person, everyone involved in the search feels that we did everything that could be done given the circumstances."

The participants felt this search was well-managed and cooperative, and

Mr. Larsen attributes this to a Parks Canada table top exercise held in Inuvik last September.

The Inuvik table top exercise was part of a Parks Canada series bringing together different groups and agencies who work together in an emergency, including search and rescue.

## Local representatives brought together

This scenario began in Ivvavik National Park where a group of kayakers was 48 hours overdue from a 500 km trip.

The participants worked through the search scenario and discussed how they would each handle their role.

Mr. Larsen said the exercise was valuable because it brought together local representatives of various groups and agencies to learn about each other.

"Bringing this group together for a face-to-face meeting allowed us to discuss each other's resources, call-out procedures, expectations and concerns," he added.

These table tops are an important opportunity for groups to learn about each other and discuss possible



*Inuvik, located just above the Arctic Circle, has 56 days of 24-hour daylight in the summer, and 30 days of zero daylight in the winter.*



scenarios. But how many groups have the opportunity to put what they've learned into practice so soon after the exercise?

**Integrated approach**

Regarding the well-run search for the missing herder, Mr. Larsen credits the table top meeting for its success.

"With respect to the recent search, the table top allowed us to use a more integrated approach in conducting the search because we were more familiar with each other and our respective capabilities," he explained.

**Open lines of communication**

Throughout the table top exercises, it was apparent that one meeting is not enough. The groups involved need regular meetings to keep open the lines of communication and to continue the training because no two search and rescue incidents are alike.

Mr. Larsen also emphasized the importance of having a scenario that fits the particular environment.

"We had to revise the initial scenario quite a bit to make it more applicable to our Northern environment," he explained.

"I think it's safe to say that searches, and training exercises for that matter, have a different character in the north than in the south. The number and type of resources available for searching can be very different than in the south. As well, search areas can also be vast given the methods of travel and the sparse population."

**Working together**

Mr. Larsen thanked Claude Auger, Parks Canada organizer of the table top series, for his efforts in making the exercise happen.

Mr. Larsen also credited the RCMP and their willingness to work together, saying their professionalism made managing the search a much easier task.

"The table top exercise brought us together to begin developing a closer working relationship but it was the commitment of the individual participants to work together that moved us from the theoretical into a real life application," explained Mr. Larsen.

He also extends credit to Staff Sergeant Sid Gray of the Inuvik detachment and Jack Kruger, the RCMP Search and Rescue Coordinator, who worked behind the scenes to ensure that resources were available for the search.

Regarding the search for the missing reindeer herder, Mr. Larsen said, "there is no doubt in my mind that the pooling of resources in this case came about as a by-product of the table top exercise."

For more information about Parks Canada's table top exercise series, contact Claude Auger at (819) 997-0201, or at [claudio.auger@pc.gc.ca](mailto:claudio.auger@pc.gc.ca) ■

Photo courtesy of Parks Canada



**FUNDING YOUR SEARCH AND RESCUE INITIATIVE**

**D**o you or your organization have great ideas to improve search and rescue (SAR) across Canada? Are you interested in preventing or responding to search and rescue incidents? Do you need resources to further your search and rescue capabilities or finance your projects?

The New Search and Rescue Initiatives Fund (NIF) is dedicated to improving search and rescue in Canada. Managed by the National Search and Rescue Secretariat, all levels of government (federal and provincial/territorial), private sector, industry, academia and the volunteer community can participate.

To submit a project you will need to be sponsored by either a federal search and rescue department/agency or by a provincial/territorial authority. The Fund supports projects that address at least one or more of the six established categories. Submitted proposals are reviewed, put in priority order and approved based on available funds.

New proposals must be submitted to sponsors by July 1, 2004 for funding starting in April 2005. For complete details about the Fund, sponsors, criteria and the application process, consult the New Search and Rescue Initiatives Fund Program Guide at [www.nss.gc.ca/site/newSAR/initiatives/NIFGuide\\_e.asp](http://www.nss.gc.ca/site/newSAR/initiatives/NIFGuide_e.asp) or call 1-800-727-9414. ■







## Peel Regional Police Marine Rescue Unit breaks the ice

**T**he Peel Regional Police Marine and Underwater Search and Recovery unit works around the clock and is now equipped to handle everything from ice rescue to towing.

Located in the City of Mississauga at the Lakefront Promenade marina. The marina sits adjacent to the coal fired Lakeview Generating station. The station releases warm water into the marina basin as part of the electricity production process, and as a result the basin never freezes. In short, the Marine and Underwater SAR unit possesses the ability to quickly respond to winter and summer marine emergencies in Western Lake Ontario seven days a week, 365 days a year. In 2003, the unit responded to 125 SAR calls ranging from mechanical problems to real SAR events.

The unit was formed in 1974 and operated a 14 foot aluminium boat. Patrols were restricted to the confines of the Credit River. Back then, limited training and equipment prohibited officers from safely responding to calls on Lake Ontario.

The unit has grown throughout the years, acquiring improved vessels and more advanced equipment and training. There are currently four crews staffed by eight marine officers, one sergeant and supplemented by six

auxiliary officers. Marine 1 is a 33 foot, twin diesel powered, twin propeller, aluminum-hulled motor vessel. Marine 2 is a 26 foot rigid hull inflatable vessel powered by twin 150 horsepower outboard motors. Both of these vessels are equipped with the latest navigational, communication and search and rescue gear available.

Training is intense, says Sergeant Mark Stafford, head of the unit. There are 80 different training categories, including Basic Trauma Life Support, Ice Rescue, Fast Rescue Craft, Coxswain and many other search and rescue related courses. Many are in-house and are reviewed on a regular basis. During the winter months when operational requirements slow a bit, more emphasis is placed on training.

The unit is responsible for approximately 146 sq. km. of Lake Ontario. With so much area to cover the Peel Regional Police Marine Unit knows the importance of inter-agency co-operation. Sergeant Stafford, who became head of the unit in August, 2003 said it's important to be ready for any disaster. The Peel Regional Police Marine unit works closely with other marine units on the Western end of Lake Ontario including Toronto, York, Durham, Hamilton, Halton and Niagara along with the United States Coast Guard as well as Canadian Forces and the Canadian Coast Guard in Trenton.

The warm weather and another boating season are fast approaching and the Peel Regional Police Marine unit is prepared so that the public can continue to enjoy boating, fishing and other water activities safely. ■

# Common questions about registering beacons

*It seems like a perfect day for flying in isolated northern Ontario, the weather is cooperating and so far everything has been going as per the flight plan. But suddenly something goes wrong. You've lost engine power and nothing you do will fix the problem. The closest landing strip is too far away, so you try to land in the next open area. All this happens in a matter of seconds as you battle for control of the plane.*

*The plane crashes and the impact has knocked you unconscious. Although you've filed a flight plan, you won't be considered overdue for another few hours. Your saving grace? The emergency locator transmitter (ELT) in your airplane began to transmit its emergency signal upon impact. The beacon signal will be picked up by orbiting satellites part of the COSPAS-SARSAT system that will relay your coordinates to rescue authorities.*

*Since its inception in 1982, the COSPAS-SARSAT satellite system formed by Canada, France, the United States and the former USSR, has helped save over 15,000 lives world wide.*



**Question:** I have just purchased a beacon from a manufacturer. Doesn't that mean it is already registered?

**Answer:** No. Think of a beacon as a car. When you purchase a car, you still must register it in the new owner's name. A beacon follows the same principle.

**Question:** I have just purchased a beacon from a previous owner that had registered it with the NSS. Why do I have to re-register it?

**Answer:** When a used car is sold, the new owner must re-register it under his or her own name therefore, it is still a new registration. We will, however, require the following information: a signed letter from

the previous owner giving us permission to delete the beacon information from the file. Also, the pertinent information, such as emergency contact, will change from one owner to the next.

**Question:** I have just purchased my first beacon. Why won't your database allow me to register it?

**Answer:** In our database you see one or two red asterisks beside each mandatory field in each tab (owner, beacon, vessel, and emergency contact information). The system will not allow you to go any further if you have not filled in these fields. You do not have to fill out the company name field under the owner information and emergency contact tabs. Once you have entered all tabs and fields, you must click on *Finish* to receive your

*Chantal Pétrin is the National Search and Rescue Secretariat's Beacon Registrar*



by Chantal Pétrin

**T**he National Search and Rescue Secretariat (NSS) manages the national beacon registry and receives many inquiries about beacon registration. Here are some answers to common questions.

**Question:** How do I know if my beacon is Canadian coded?

**Answer:** All beacons have a 15 digit hexadecimal code; Canadian beacons will start with the following 3 digits: A78, A79, 278 or 279.

**Question:** I have a U.S. coded beacon but I am a Canadian-flagged vessel and would like to register it with Canada. What do I do?

**Answer:** Canada does not register beacons that are not Canadian coded. We recommend you have it recoded.



User ID and Password. If you are still experiencing difficulties, we suggest the following options: call us at 1-800-727-9414 for assistance, or submit a registration form to the NSS by fax at (613) 996-3746.

After we create your file, you will receive a registration confirmation form that must be reviewed, signed and sent back as our confirmation.

If you need to make changes to the registration information, go online and use the ID and Password provided to make the necessary changes. The system will automatically generate an e-mail to us with all the modifications or information you have added.

**Question:** I am a Canadian citizen and I will be visiting the United States. Do I have to register my beacon with the American Beacon Registry?

**Answer:** No. If you have registered your beacon with the NSS Beacon Registry, you have already taken measures to ensure your safety no matter where you go throughout the world. Should your beacon be activated during an emergency while in the U.S., or anywhere else in the world, your beacon signal will be picked up via satellite by rescue units. It will also inform them with which country it is registered, who is in distress and who to contact. This applies to all 406 MHz beacons — emergency position indicating radio beacons (EPIRBs), personal locator beacons (PLBs) and emergency locator transmitters (ELTs).

**Please note:** Most people forget to provide emergency contacts when registering their beacon, so there is no one to call during an emergency. Please remember to provide this information, because it could mean the difference between life and death.

For more information, call 1-800-727-9414, or log onto <http://beacons.nss.gc.ca/Logon.asp?lang=e> ■



# SARSCENE 2004

## Don't miss the boat!

13<sup>e</sup> annual  
SARSCENE workshop  
Calgary, Alberta  
October 13-16

Don't miss the Games, demonstrations, training sessions, tradeshow, the SAR Awards banquet and various presentations, including:

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# Search and rescue breaking ground and

The following five projects are supported by the New Search and Rescue Initiatives Fund.

## Trunk Mobile Radios for primary maritime search and rescue resources in Nova Scotia

by Peter Stow

Beginning in 2000, the Nova Scotia government instituted its 800 MHz trunked mobile radio (TMR) system. This system replaced the old VHF radio network and is now the communication medium for the RCMP, Emergency Measures Organization, Department of Natural Resources, Emergency Health Services (ambulance) and most local police and fire agencies in Nova Scotia.

In June 2003, TMR units were placed aboard all shore-based primary maritime search and rescue (SAR) resources in Nova Scotia thanks to funding provided by the National SAR Secretariat's New SAR Initiatives Fund. These radios provide direct, on-scene communications between Canadian Coast Guard lifeboats and inshore rescue boats and other agencies participating in a SAR incident. The radios have proved to be a great success and have been used in several multi-agency search



*The Trunked Mobile Radio system (TMR) has improved communications and interoperability between agencies.*

and rescue operations.

On Christmas Eve 2003, the Halifax Joint Rescue Co-ordination Centre (JRCC) was asked to assist the RCMP in a missing person case just outside of Halifax, Nova Scotia. The 52-foot Coast Guard Vessel SAMBRO was tasked to proceed to the coastal area and work with the RCMP. The TMR system enabled the SAMBRO and RCMP ashore to have continuous direct communication which greatly enhanced the coordinated effort of the two different agencies.

Prior to the installation of TMR technology, communications would have been via cellular telephone or through third parties on separate radio networks, both of which have operational limitation during a SAR incident.

Interoperability is a key issue for all

search and rescue agencies.

Thanks to the Nova Scotia Trunk Mobile Radio system and the National Search and Rescue Secretariat, SAR communications between Canadian Coast Guard lifeboats and Inshore Rescue Boats, and other agencies is now much more efficient.

**Project Number: CCG 1/02 ■**

## Weatheradio soon to be broadcasting in the Inuktitut language

Weatheradio, a Meteorological Service of Canada (MSC) project funded by the New SAR Initiatives Fund, has entered a new phase: broadcasting in Inuktitut.

When the first Weatheradios were installed in Cape Dorset, Rankin Inlet and Arviat regions in June 2002, it was known the next challenge would be to find common weather terminology that could be understood by many of the Inuktitut dialects.

Programming tests were conducted in November 2003 to make sure the broadcasts in Inuktitut will run smoothly and Environment Canada officials are hoping more in-depth testing can be done soon.

Weatheradio is a broadcast service located on the VHF-FM radio band and operates 24 hours a day, seven days a week.

The automated system



# diving in to new projects, causing waves

broadcasts the latest weather observations, public and marine forecasts, and warnings for specific areas of the country.

By broadcasting in Inuktitut, the MSC hopes weather-related injuries and deaths will be reduced because a greater percentage of the Northern population will now have access to up-to-date weather forecasts.

**Project Number: EC 1/00 ■**

## New training improves inter-agency co-operation

Newfoundland and Labrador is improving interoperability within the province by a new training initiative project sponsored by the RCMP and funded by the New SAR Initiatives Fund.

Called the Joint Police/Volunteer Training Initiative, the project was developed to bring people together from various search and rescue agencies across the province for a two-week intensive training course.

Intended for RCMP officers, Royal Newfoundland Constabulary officers, volunteer search and rescue groups, Canadian Coast Guard officers, Parks Canada wardens, provincial wildlife authorities and aboriginal group leaders, the course encompasses search management, search manager technology and the incident command system.

Not only will this build a common training platform for all groups, but it will build stronger relationships among different SAR groups across the province.

**Project number: RCMP 1/03 ■**

## SAR COP project trains volunteers for new role in search and rescue

The RCMP in Alberta has found a novel way to handle the increase in the number of search and rescue incidents, coupled with a decrease in resources: train qualified volunteers to act as a volunteer search and rescue air crew.

The RCMP has a provincial mandate for search and rescue involving missing persons, and this project will deal with decreased resources and increase in SAR incidents by integrating civilian volunteers into an RCMP mandate.

Course participants will take part in a combination of classroom theory, aircrew role-playing, demonstrations, hands-on practice sessions, and day

and night time flight orientation.

A new Forward Looking Infrared component was added to this project to allow for the expansion of capabilities across Canada utilizing police resources.

With funding from the New SAR Initiatives Fund, this project will promote effective partnerships and inter-agency cooperation.

The RCMP helicopter tasked with SAR responsibilities for Alberta, Saskatchewan and Manitoba is

Photos courtesy of RCMP Constable Rick Tyefisher



*Through a combination of classroom theory and hands-on practice, participants will be trained as qualified as a volunteer SAR air crew.*

located in Edmonton, meaning the distance travelled to an incident is often great, and response time is slower. With trained and accredited spotters across the provinces, response times and resources will be improved.

**Project number: RCMP 1/01 ■**

## DogSpeak database established for SAR dog teams across Ontario

A new database of search and rescue dog and handler teams, sponsored by Emergency Measures Ontario (EMO), has been created to manage these resources more efficiently.



The DogSpeak database, funded by the New SAR Initiatives Fund, will establish the known availability of SAR dog teams, including skills, qualifications, mobility and location.

Prior to this project, there was no central registry of qualifications and call-out information for dogs and handlers.

According to Staff Sergeant Larry Bigley of the O.P.P. Canine Unit, the database "will provide accurate profiles on search and rescue specialties and certifications of individual canine teams across the province, by both location and skill."

Once established in Ontario, this project will have application across Canada.

Ultimately, this project could help establish consistent national criteria for SAR dog standards, testing, communications strategies, protocols and record keeping.

Project number: ON 3/03 ■

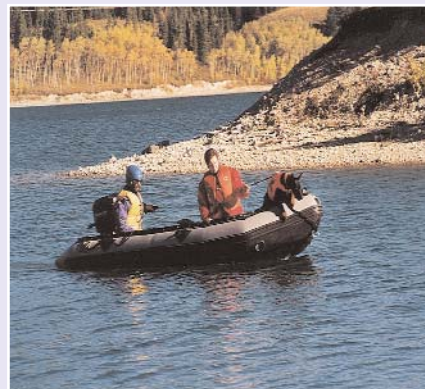



Photo by Sue Hall

Photos courtesy of the Search and Rescue Dog Association of Alberta

For more information about these projects, go to [www.nss.gc.ca/site/newSARInitiatives/NIFreports\\_e.asp](http://www.nss.gc.ca/site/newSARInitiatives/NIFreports_e.asp) to search final reports by fiscal year and project number.

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**Database of SAR dogs**



# NEW SYSTEM MODERNIZES MISSION CO-ORDINATION



Photo by Captain Ray Stockermans

Coast Guard Officer Scott Miller uses SMMS at JRCC Trenton, during a SAR case.

**T**he search and rescue mission management system (SMMS), developed by the Canadian Forces and Canadian Coast Guard, is enhancing the way search and rescue (SAR) co-ordination centres control Canada's SAR services.

Captain Rob Mulholland won the 2003 Agatha Bystram award for his work in this system's development. The annual award recognizes leadership in information management, and is named for Agatha Bystram, a pioneer in the management of federal government information.

As project manager for the past 12 months, Capt. Mulholland and his team, along with the SAR Network Operations Control Centre staff in Trenton, have ensured that all Joint Rescue Co-ordination Centres (JRCCs) and primary SAR resources have the same information necessary to carry out an efficient mission.

The SMMS records, stores and allows quick retrieval of information that enables the appropriate resources to be tasked during an incident. As well, it enables a more efficient method of passing information to rescue crews.

Major Pat McSorley, former Officer in Charge at Joint Rescue Co-ordination Centre (JRCC) Victoria, says this system makes the controller's job easier because all the tools he needs are in one place.

Tools such as electronic case logs, mapping software, SAR unit data, contacts, information on the missing craft, sighting reports are features the coordinator has access to through SMMS. In the past, a variety of paper logs and folders, rolodexes, marine and aeronautical chart cabinets and such were needed.

"These old methods are kept in reserve in case of an emergency, but the reliability of the SMMS and the back-up systems in place make their requirement unlikely," Maj. McSorley noted.

Not only does it improve information management and allow more efficient communications, but the system will be instrumental in evaluating future SAR techniques and procedures.

## Fitting the pieces together

"When you're looking for a lost or downed aircraft, it's very much like putting the pieces of a puzzle together," said Capt. Mulholland. "So by ensuring that everyone is on the same page and has all the information, we're making sure that everyone has all the pieces they need."

Roch Carrier, National Librarian and Chair of the Council of Federal Libraries who presented the award, said "Captain Mulholland should be congratulated for his dedication and commitment to integrating and managing this critical system which will help Canada's search and rescue services save thousands of lives."

The system runs 24 hours a day, seven days a week and is the principal operational tool that controllers use to manage federal SAR operations in Canada.

"The system has proven itself and has made the complex, busy job of co-ordinating SAR cases — inherently a dynamic and often hectic business — more efficient," said Maj. McSorley. ■

# AUXILIO SEMPER — The Canadian Coast Guard 1962-2002

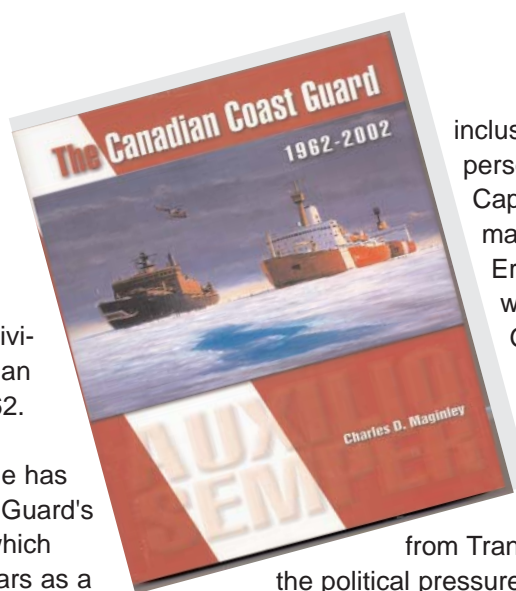
by Derek Smith

It is always difficult in a factual account to strike the correct balance between interesting narrative and repetitive facts. Charles Maginley has done an excellent, seamanlike job of work in *Auxilio Semper*, his account of the activities, structure and ships of the Canadian Coast Guard since its inception in 1962.

Aimed at those with some basic knowledge or interest in the service, he has tried to cover all aspects of the Coast Guard's work, and the many reorganizations which have affected it during its first forty years as a single entity. Two brief chapters cover the growth of maritime trade and fishing in Canadian waters and of the development of government owned, civil marine services required to administer them and keep them safe.

The 1962 decision that all the Department of Transport's vessels would henceforth be administered by one body and would be known as the Canadian Coast Guard, provided the foundations of the large, multi-function organization we have today. Subsequent chapters give a very readable insight into some of the decisions and debates which followed as the service grew and encompassed more, and more varied tasks.

One of the most pleasing aspects of the book is the



inclusion of short biographies of notable personalities such as the redoubtable Captain Joseph E. Bernier, an Arctic mariner with few equals, or Captain Eric Brand and Admiral Anthony Storrs who did so much to get the Coast Guard off to a sound start in the '60s.

Training and the multitude of shore-based branches which have coalesced with the fleet to form the present day service, its move

from Transport to Fisheries and Oceans, and

the political pressures which have affected it are covered succinctly. There are, of course, narratives covering the birth of the Canadian Coast Guard Auxiliary and some of the notable incidents in which it, and its regular 'parent' have been involved, some successful, some sadly not, but all testing to crews and ships.

I enjoyed reading *Auxilio Semper*, and as a newcomer to SAR in Canada, it gave me a better understanding of how the Coast Guard, its Auxiliary partner and its shore infrastructure got to be the way it is. The timing of the book is particularly appropriate as a new reorganization as a Special Operating Agency is afoot and possible involvement in marine security looms on the horizon. I would recommend the book to all those interested in Canada's maritime rescue and safety services. ■

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SARSCENE

**D**EREK SMITH IS AN officer of the United Kingdom Coastguard (HM Coastguard) who is on a two year exchange with the National Search and Rescue Secretariat. Prior to coming to Ottawa, Officer Smith was the Regional Inspector of Coastguards for the South East of England with responsibility for three marine rescue co-ordination centres, the Dover Strait Traffic Separation scheme VTS, 30 coastal rescue teams and a mix of Marine and air SAR units. ■



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# Remembering a hero — Tribute to Al Banky

by Marie Woodruff

In the early 1990s, SARSCENE magazine ran a few articles by Master Corporal (later Sergeant) Al Banky, a SAR Tech with 442 Squadron in Comox.

Four of these were: "When the Bubble Bursts: Critical Incident Stress Management - An Insider's View;" "Blood, Sweat and Imitation Tears;" "An Unchanged Mission — 50 Years of Lifesaving;" and, my favourite, "672 Peg-legged Pirates." The last two appeared in a special issue in 1997, commemorating the 50<sup>th</sup> anniversary of Canadian Forces SAR. Al's work also appeared in other publications, including *Sentinel*, *Airforce* and CFB Comox's base newspaper, *Totem Times*. I enjoyed his articles and he was a good, informative writer.

I met Sgt. Banky in 1998 when I was a Civil Air Search and Rescue Association (CASARA) administration officer and he was posted to the Rescue Co-ordination Centre in Victoria. He retired that year to join the Victoria Police Department, and later became a staff officer at the Sidney Air Cadet squadron. In June 2003, then a Lieutenant, he was awarded the Queen's Golden Jubilee Medal.

Al died on October 11, 2003 of a heart attack at the age of 39. Nearly 1,000 people attended the funeral despite pouring rain.

I attended the funeral and reception where friends, family and colleagues stood before the gathering to tell some of their favourite stories about him.

Quite a few of Al's fellow rescuers were also there and I was impressed to see a Meritorious Service Cross, a Chief of Defence Staff Commendation, a Commander-in-Chief Unit Commendation, a Meritorious Service Medal, and at least three Medals of Bravery on various uniforms.

These are tangible symbols of appreciation from the nation for their heroic acts, but much of their work still goes unrecognized.

One of Al's closest friends is Sgt. Dale Robillard, an instructor at the Canadian Forces School of Search and



Rescue. I showed him a poem I wrote after the loss of Labrador 305, and he urged me to read it out loud to the gathering. I did and it was well received. Talking to Dale later, I said I felt "a bit awkward around all of you 'professional rescuers.' I'm just a volunteer." He disagreed and assured me that volunteers are just as valuable as the "paid professionals." All of us, working as a team, are crucial to the success of search and rescue...that others may live.

## Working as a team

CASARA members receive the same spotter training as the Canadian Forces. Mentally, it's a very demanding task, requiring total concentration; shifts are 20 minutes long. You're flying over a search area, scouring land, sea or coastline for that one sign or signal you need to see. The casualty still has to be rescued and almost certainly needs medical attention.

But half the mission is now complete, and the SAR Techs and other aircrew are much more alert and prepared than if they'd had to do all the searching themselves.

For the last few years, CASARA has been an official part of the Canadian Forces annual SAREX and competition, and I believe this is a reflection of our worth. I'm proud to be part of it, and the words of this SAR Tech made me feel like I really do belong. ■

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*Marie Woodruff is with Aircrew/Search HQ/Administration of the B.C. Provincial Emergency Program (Air), CASARA Vancouver Island Zone, Victoria, B.C.*

# Understanding the dangers of AIRCRAFT ICING

## Freezing rain makes for slick roads and terrible driving conditions, but what happens when you combine freezing precipitation and flying?

It leads to serious problems that Environment Canada's Meteorological Service of Canada (MSC) spent four months researching.

From November 2003 until February 2004, the MSC was one of the agencies leading a major North American study to better understand aircraft icing and hazardous winter weather.

Aircraft icing forms when airplanes encounter freezing precipitation or cloud droplets with temperatures colder than 0°C. Ice can attach to the wings, tail and windshield, making flying dangerous.

Icing has led to an average of 30 deaths and 14 injuries in the United States each year. Statistics for Canada show an average of 50 fatalities each year.

Aircraft encounter potentially dangerous icing conditions when the temperature is below 0°C and there is freezing precipitation or cloud droplets present

### Five research planes

The \$3 million study, with partial funding from the New SAR Initiatives Fund, was conducted near Montreal's Mirabel airport because of the high occurrence of freezing precipitation — approximately 50-75 hours each year — and because this area around the Great Lakes is a high air traffic region. Within North America, only Newfoundland and Labrador has more hours of precipitation, with 150 hours a year.

The study had five research planes set to take off from Ottawa, Ontario; Cleveland, Ohio; and Bangor, Maine during storm conditions to collect storm data from different heights in the atmosphere on flights to Montreal.

The study made use of data collected in-flight as well as on the ground. This information will help researchers better understand weather formations, including places where freezing precipitation is more common, and the reasons for this.

### Ice accumulation

Dr. George Isaac, Senior Cloud Physics Research Scientist with the MSC, gave a presentation on aircraft icing at the SARSCENE 2003 workshop. He talked about the importance of this study and said the majority of accidents occur in private and not commercial aviation.

Aircraft icing is a major problem, but accidents are not necessarily caused by ice accumulation. Even a small amount of ice, he said, can decrease fuel efficiency and affect the pilot's ability to manoeuvre an aircraft, and pilots must be aware of their aircraft's certification for flying in icing conditions.

Further, Dr. Isaac stressed the need to improve current icing forecasts. Because of the difficulty of producing such forecasts, they have been traditionally conservative, forecasting a potential hazard over a larger than necessary

region. Significant improvements have been made in the numerical weather forecast models to help solve this problem.

Ultimately, this study will improve air travel safety through better forecasts and detection of winter weather hazards.

Other Canadian partners in the study include Transport Canada, Department of National Defence, Communications Research Centre, McGill University and Trent University. Major American part-

ners include the National Oceanographic and Atmospheric Association, National Science Foundation and the Federal Aviation Administration. ■



Even a small amount of ice can decrease fuel efficiency and affect a pilot's ability to fly an aircraft.