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SARSCENE

The Canadian Search and Rescue Magazine Online

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Training for an air disaster at Arctic SAREX 2007

Government of Canada
National Search and Rescue Secretariat

Gouvernement du Canada
Secrétariat national Recherche et sauvetage

Canada

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Toddler saved from crashed Cessna

Three-year-old Kate Williams' story of survival made national headlines when she was rescued from a crashed Cessna outside of Golden, British Columbia on Sunday October 28. The Cessna 172 she was traveling in crashed about an hour after take off, killing her grandfather, Allen D. Williams and a friend Steven T. Sutton.

A chopper from Alpine Helicopters Ltd. was tasked by the Joint Rescue Coordination Centre to assist in the search, piloted by Don McTighe. Sgt Scott Elliston and MCpl Bruno Lapointe, search and rescue (SAR) technicians from the Canadian Forces, as well as Ian Foss, a ground searcher from Golden Search and Rescue, boarded the helicopter and were able to get down to the crash site before dark.

From left to right: Sgt Scott Elliston, Don McTighe base manager for Alpine Helicopters, Ian Foss from Golden Search and Rescue and MCpl Bruno Lapointe

Photo Credit: *Department of National Defence*

SAR professionals found Kate Williams in the upside-down plane on the edge of an icy riverbank with only minor injuries. She had been hanging upside-down by the seat straps in which her grandfather had put her, for five hours. When speaking with the toddler, SAR personnel reported that she asked for her stuffed bear, which comforted Kate until she was reunited with her parents. ■

Canadian search and rescue coming to prime-time television

Production is underway on The Guard, a Canadian television show on search and rescue which is slated to air on Global Television in early 2008. A joint production with Vancouver-based Brightlight Pictures and DHX Media's Halifax Film, The Guard comprises of 13, one hour episodes.

The Guard is a character-driven ensemble drama delving into the lives of four members of a Canadian Coast Guard Search and Rescue team serving in the Pacific Northwest. The series explores the stories of these four heroes in the region where the Pacific Ocean collides with Canada's mountainous coastline. ■

Ontario government continues to invest in urban search and rescue

The Ontario provincial government announced that they will continue to invest in Toronto's Heavy Urban Search and Rescue (HUSAR). Community Safety and Correctional Services Minister, Rick Bartolucci, made the announcement on the eve of a national exercise conducted in Toronto that brought Canada's five HUSAR teams together. National exercises such as this one help to increase coordination between responders and assist in training.

The Ontario provincial government is providing $300,000 in annual funding to help support the training, administration and operation of Toronto's HUSAR team. The team is made up of fire, police and emergency medical staff, as well as physicians, specialists in structural engineering, hazardous materials, heavy rigging, search and logistics. ■

SAR team purchases hovercraft in remembrance

Family of Corporal Randy Herman, Tammy and Tyler Herman at the launch of the Hermanator

Photo Credit: *Ridge Meadows SAR*

Ridge Meadows Search and Rescue (RMSAR) has purchased its long sought after hovercraft and officially launched it during their Annual Safety Boating Day on July 14, 2007. Dubbed the Hermanator, the hovercraft will enable RMSAR and others to make direct contact with subjects during searches on Pitt Lake and the Fraser River which have proven to be problematic in the past.

"As a result of the tidal influence, boaters on Pitt Lake are often stranded on the sandbars. These sandbars have also caused several accidents when a boat impacts them at high speed. The hovercraft will enable us to access the scene and make direct contact with the subjects." says Richard Laing, Team Leader at RMSAR.

The Hermanator also serves the legacy of the community member and police officer which it is named after, Corporal Randy Herman. When Corporal Herman passed away in 2006, his family requested that donations be made towards the purchase of a hovercraft.

"It's very unfortunate how it came about but the purchase of the hovercraft is a much needed tool for us", says Mr. Laing. RMSAR already has three operators that are trained to operate the hovercraft.

RMSAR had been raising funds for the purchase of the Hermanator for quite some time but the possibility of large scale flooding in the province accelerated the process. The Province of British Columbia and the City of Pitt Meadows contributed to purchase the hovercraft and a trailer because of its utility in flood response. ■

Edmonton raises awareness during Emergency Preparedness Week

The city of Edmonton marked National Emergency Preparedness Week by showcasing their response capabilities during *Get Ready in the Park*, an event aimed at raising awareness and teaching the public how to cope during emergency situations. Participants included Edmonton Regional Search and Rescue and the Search and Rescue Dog Association of Alberta along with 16 other organizations.

SAR Dog Association of Alberta was present at Get Ready in the Park

Photo Credit: *Office of Emergency Preparedness, City of Edmonton*

The theme for this year's event was *We're ready – are you?* which included demonstrations and information kits for the public. Those who attended were able to learn how to prepare themselves and their families for such things as search and rescue scenarios in the outdoors and severe floods.

Mike Cook from the Office of Emergency Preparedness in Edmonton notes that the event was a great success: "Close to 7, 500 people came out for the event. Plans are already underway for next year and I hope to have a bigger and better showcase for the public." ■

BC announces funding for SAR teams

In April 2007, British Columbia's Solicitor General, The Honourable John Less, announced additional government support for emergency response and search and rescue (SAR) teams in the province. The threat of flooding in the province was the catalyst to the allocation of funds, valued at three-quarters of a million dollars.

The support will come in form of swift water and helicopter rescue training courses, equipment for SAR volunteer teams, specialized radio equipment for air SAR volunteers as well as the delivery of mobile radio kits. As part of the BC Flood Plan, this support will help teams better prepare for a major flood disaster and will increase the effectiveness of response strategies in the province. ■

Video on 406 MHz ELTs available

The Next Generation ELT is a video produced by Transport Canada on the upgrade of 121.5 MHz Emergency Locating Transmitters (ELTs) to 406 MHz. The video is available in French or English and in CD-ROM or VHS (NTSC/ SECAM/ PAL) format.

This video shows the benefits of the 406 MHz beacons. Given that the International Cospas-Sarsat system will stop satellite processing of 121.5/ 243 MHz signals as of February 1st, 2009, it is important that this information be communicated broadly.

For more information and to view a clip of the video, visit the Transport Canada Shop at http://shop.tc.gc.ca. ■

Newfoundland fishermen rescued from burning vessel

The fishing vessel Nautical Legacy was consumed by flames

Photo Credit: *DFO/ Provincial Airlines*

On Wednesday May 30, six fishermen were rescued north east of St. John's Newfoundland from their burning longliner. The *Nautical Legacy* had been fishing for crab when it caught fire and burned down to the waterline. The six men aboard were able to send out a distress call at 12:22 pm before abandoning their vessel.

The story made national headlines when the six crew members, including one without an immersion suit, survived one hour and 40 minutes in the icy Atlantic waters. Most people who are submerged in icy waters only survive for 30 minutes without a survival suit. The men stayed alive by attaching themselves to a fishing hoist and surrounding the person without a survival suit to keep him warm.

CBC News reported that Sergeant Dave Payne, who dropped into the water from the Cormorant, credited a fixed-wing charter aircraft with providing the crew valuable information about what awaited the search and rescue technicians. The crew of the Cormorant helicopter from Gander 103 Search and Rescue Squadron rescued the six men and airlifted them to safety. ■

People

After 31 years of service with la Sûreté du Québec (SQ), **Captain René Marchand** has retired. Capt. Marchand had been involved with search and rescue (SAR) for the past decade through his role with the SQ and the Ground Search and Rescue Council of Canada. His leadership led to numerous improvements and forged strong relations among SAR agencies and volunteers. Capt. Marchand attended many SAR*SCENE* conferences and was instrumental in the organization of the 2006 conference which was co-hosted by the SQ and held in Gatineau, Québec.

William J.S. Elliott, Q.C. has been appointed the new Commissioner of the Royal Canadian Mounted Police. Mr. Elliott was the Associate Deputy Minister of Public Safety and also served as Deputy Commissioner of the Canadian Coast Guard from 1998 to 2000.

Captain Liz Allard has been appointed Chief Operator at the Canadian Mission Control Centre, replacing Captain Jennifer Kennedy.

Newly promoted **Lieutenant-General Angus Watt** has been appointed Chief of Air Staff at Canadian Forces. LGen Watt most recently occupied the position of Deputy Commander for the NATO International Security Assistance Force in Afghanistan.

Musician **Tom Cochrane** has been invested the Honorary Colonel (HCol) of 409 Tactical Fighter Squadron, the first since the squadron's re-activation in July 2006. HCol Cochrane took over the appointment from HCol Mark Little.

From left to right: LCol Todd "Norm" Balfe, Col Pierre "Stammer" St-Amand, (behind) Hcol Mark Little and Tom Cochrane

Photo Credit: *Sgt Michel Gilbert*

Canadian Forces search and rescue technician, **Chief Warrant Officer Arnie Macauley**, has retired. A distinguished member of the search and rescue community in Canada, CWO Arnie Macauley has participated in over 300 rescues and is a member of the Order of Military Merit.

Scott Pepper has replaced Brad Andres as the Emergency Management Officer with the Government of Alberta.

Awards

Cormorant crew receives international award

A Canadian Forces Cormorant crew has been awarded with the Prince Philip Helicopter Rescue Award from Britain's Guild of Air Pilots and Air Navigators. They are the first Canadians to receive the award in its 29-year history.

Capt Sean Morris and fellow crewmen from 19 Wing's 442 Transport and Rescue Squadron received the award for the rescue of three victims of a helicopter crash on October 25, 2006. Crewmen included Cpl Derek Agnew, Sgt Yves St. Denis, MCpl Kent Guilliford, Capt Sean Morris and Capt Rob Mulholland.

The mission which should have been a relatively easy rescue, turned into an eleven hour ordeal for the crew. Bad weather and painstaking visibility saw the crew landing with the victims at a logging camp with only 15 minutes of fuel remaining. All victims recovered from their injuries.

The Cormorant crew from left to right: Cpl Derek Agnew, Capt Sean Morris, Sgt Yves St. Denis, MCpl Kent Guilliford and Capt Rob Mulholland.

Photo Credit: *442 Transport and Rescue Squadron*

CASARA Member of the Year Award

Keith Bennett was awarded the Civil Air Search and Rescue Association's (CASARA) member of the year award for 2007 on May 25 in Winnipeg, Manitoba. Mr. Bennett has worked in helping to refine and implement the - program which is being used by all the CASARA units across Canada. He currently lives in Salmon Arm where he over sees the Central Zone as the Zone Commander for CASARA.

SAR awards presented at SAR*SCENE* 2007

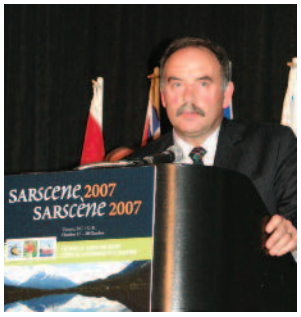
The National Search and Rescue Secretariat presented their annual Outstanding Search and Rescue Achievement Award as well as four Certificates of Achievement in SAR on October 20 in Victoria, British Columbia. The presentations were made at an awards banquet which closed SAR*SCENE* 2007, the annual SAR conference.

The Outstanding SAR Achievement Award for 2007 was awarded to the Canadian Coast Guard Rescue Specialist Coordinators Working Group.

The Canadian Coast Guard (CCG) Rescue Specialist Coordinators Working Group's unwavering commitment to service delivery resulted in the implementation of the CCG Rescue Specialist Program. Within the Rescue Specialist Program, medical care has progressed from basic First Aid to enhanced skill sets such as casualty management. Rescue Specialists now have the ability to perform advanced levels of emergency medical care in addition to their mariner duties and standard SAR skills training. As a result of the working group's efforts, nearly 500 highly skilled personnel are ready to react and provide care wherever and whenever they are called upon.

Certificates of Achievement in SAR were presented to the **Canadian Avalanche Association, Sergeant Patrick J. Egan, Jim McAllister and Phil Whitfield**.

Founded in 1981, the **Canadian Avalanche Association (CAA)** promotes avalanche safety nationally, and established Canada's international reputation as a leader in avalanche accident prevention and search and rescue response. More then 800 CAA members work daily to promote avalanche safety, with activities ranging from research to hazard control and management.



Sergeant Patrick Egan has been a true leader in Yukon SAR for more then 17 years. He was instrumental in starting the Yukon's first search and rescue team at Carcross in 1990 and has since served as Incident Commander on several dozen successful SAR operations. His dedication to SAR has been unwavering, developing and conducting numerous training exercises for Yukon SAR volunteers and participating in Yukon Emergency Measures Organization planning sessions.

Jim McAllister has always been an ardent supporter and tireless worker in British Columbia's SAR system. From his decades as a SAR volunteer, to leading the Ground and Inland Water SAR program in various capacities with the British Columbia Provincial Emergency Program, his vision has helped to shape BC's SAR system into an integrated, coordinated and layered response network.

Passionate and dedicated, **Phil Whitfield** has been a champion of the rescue community throughout his 20-plus years of service in British Columbia. His active participation, both as a ground SAR volunteer and as the president of the BC Cave Rescue Society, is well known, making him a respected ambassador for cave rescue across all of North America.

Founder of Sauvetage Canada Rescue receives Caring Canadian Award

In April, Carol Namur was presented with the Governor General's Caring Canadian Award for her volunteer work in the community. In 1975, Ms. Namur and her husband founded the volunteer organization Sauvetage Canada Rescue, which plays a vital role in ground search and rescue (SAR) in Québec through the education, training and coordination of volunteers.

Ms. Namur's contribution to SAR in Canada can also be seen through her involvement in the creation and ongoing work of the SAR Volunteer Association of Canada (SARVAC) and her role in the development of National Criteria for Volunteer Ground SAR.

Created in 1996 by the Right Honourable Roméo LeBlanc, the Governor General's Caring Canadian Award is presented to individuals and groups whose voluntary contributions provide extraordinary help or care to people in the community.

Captain receives Marine Safety Award

On April 30th, Captain Zak Farid was presented with Transport Canada's 2007 Marine Safety Award. The Award was established in 1997 to recognize persons, groups, companies, organizations, agencies or departments that have contributed to raising awareness of marine safety in Canada.

Captain Farid is a fellow of the Nautical Institute of British Columbia (BC) and has been a long stranding contributor to the work of the Canadian Marine Advisory Council. Currently, he is lead auditor conducting International Safety Management Audits for BC Ferries and is one of the safety inspectors for Vanuatu Flag vessels arriving in Canada.

CASARA renames National SAR Excellence Award

From left to right: Jon Smith, Barry Goreman, Jay Frye, Cliff Gavel and Major General Duval.

Photo Credit: *BC Provincial Emergency Program*

The Civil Air Search and Rescue Association's (CASARA) annual National Search and Rescue (SAR) Excellence Award is awarded to the winning CASARA team in the annual search event that is held at SAREX. The Award was recently renamed for the late Lieutenant Colonel Colin Goodman, one of the pillars in Canada's SAR program for many years.

CASARA presented its first Lieutenant Colonel Colin Goodman National SAR Excellence Award during SAREX 2007 in Goose Bay, Labrador. The winning team was comprised of Jay Frye, Cliff Gavel, Barry Goreman and Jon Smith from CASARA Nova Scotia, Yarmouth Zone.

Six volunteers honoured in BC

Five public safety lifeline volunteers and a lifetime award recipient were recognized at the Provincial Emergency Program's (PEP) annual Volunteer Awards Recognition dinner on April 28th in Victoria, British Columbia (BC).

"BC has one of Canada's best and well-trained emergency management programs in the country because of people like you", proclaimed Solicitor General, The Honourable John Less. "The five disciplines that make up the Public Safety Lifeline; Search and Rescue, Emergency Social Services, Emergency Radio, PEP Air and Road Rescue, provide vital services to the citizens of British Columbia."

The six recognized individuals are among the 13,000 emergency volunteers throughout the province of BC who dedicate their time to help others.

THE 2007 AWARD RECIPIENTS ARE:

Norm Barton,
Radio Communications

Alvina Berggren,
Emergency Social Services

Neil Brewer,
Search and Rescue

Jim Dezall,
Road Rescue

Ken Hruschak,
PEP Air

Linda West,
Lifetime *Achievement Award*

From left to right: Cam Filmer (Executive Director), Linda West, Norm Barton, Ken Hruschak, Neil Brewer, Jim Dezall, and Wes Shoemaker (Associate Deputy Minister, Emergency Management BC)

Photo Credit: *BC Provincial Emergency Program*

Canadian and American SAR Techs exit from an American HC-130 Hercules over 19 Wing Comox

Photo Credit: *MCpl Robert Bottrill, CF Combat Camera*

Confronting an Arctic Nightmare

CANADIAN, U.S., RUSSIAN SAR EXPERTS TRAIN FOR ARCTIC AIR DISASTER

By Captain Jeff Manney

Billowing smoke and desperate cries for help turned a tranquil farmer's field into a scene of carnage this April as the Canadian Forces staged a mammoth, multinational air disaster exercise on Vancouver Island.

Arctic SAREX 2007 marked the twelfth time military search and rescue experts from Canada and the United States, along with their civilian counterparts from Russia, joined forces to train in the mass casualty exercise. All three countries share Arctic geography and a common understanding of what an air disaster in the region would entail.

"The Arctic environment is probably the harshest for search and rescue and holds the highest penalty for mistakes, lack of commitment or lack of will," said Commodore David Gagliardi, deputy commander of Canada Command, kicking off the four-day event held in and around 19 Wing Comox.

The action began 24 hours later as Canadian Forces search and rescue technicians and U.S. Air Force pararescuemen parachuted into a group of 50 mock casualties. This was a major air disaster, or MAJAID, an incident well beyond the capacity of the normal search and rescue system and one likely to last at least 72 hours.

Picking their way amongst the dead and injured, the rescuers found themselves confronted with the unique challenges of a northern mission: severe injuries, limited supplies, tremendous distances, and, were this for real, unbearable cold.

It was a scenario that played out for real just 16 years ago, when in 1991 a Canadian Forces Hercules aircraft went down near Alert, the world's most northerly permanently inhabited settlement. Five died in the crash, but 13 others endured a 32-hour wait for rescue while a blizzard raged around them. Only the cooperation of Canadian and U.S. authorities, and the heroism of military rescuers, who pulled off a daring air and ground operation in the face of the storm, ensured their survival.

"The loss of the Hercules was a very sobering experience for our nation," Gagliardi said. "It showed

SAR Tech Master Corporal Rod Smith attends to a casualty from a simulated air crash at a collection point

Photo Credit: *MCpl Robert Bottrill, CF Combat Camera*

the practical challenges of search and rescue in the north."

The first Arctic SAREX occurred just two years later, in Tiksi, Siberia. The three countries have shared hosting responsibilities ever since, continuing to demonstrate their methods, sharing their expertise and learning to integrate their operations.

A sharp worldwide rise in air travel – including a significant increase in transpolar traffic, has underlined the need for a common proficiency in Arctic rescue. International overflights of Canada alone jumped by more than 50 per cent between 2001 and 2005, reaching almost 150,000 annually. That number is six times higher in Russia.

Fortunately for travelers, that increase has been met by improvements in the skills of rescuers, advances in equipment design and a greater facility at employing the two. This edition of Arctic SAREX, for instance, marked the first time a Canadian Aurora dropped its 20-person Arctic rescue kit outside of a trial environment.

Not to be outdone, a Hercules aircraft followed with a drop of its 5,000kg MAJAID kit. The kit contains enough supplies for 60 people, its own dedicated support crew of 12 Army paratroopers and can include an Argo all-terrain vehicle.

The realism in the air added to the realism on the ground. Given the projected length of a real MAJAID, rescuers camped out overnight next to their patients, tending them as they would real casualties. In the morning they awoke to the steady beat of rotor blades, as a shuttle of Cormorant helicopters, a Griffon and a U.S. HH-60G Pavehawk landed to transfer the casualties to a forward base hastily established 40 kilometers north.

Here the final stages of any northern rescue played out as Canadian Forces Medical Officers and Physician's Assistants took over from the rescuers. Dividing survivors according to the severity of their injuries, they prepared them for what would, in reality, be a much longer journey to hospitals in the south.

Since the Canadian Force's responsibility in a MAJAID ends when survivors are delivered to a competent medical authority, these final transfers heralded the end of Arctic SAREX 2007. As the casualties regained the use of broken limbs and wiped away their grisly makeup, observing staff from 1 Canadian Air Division predicted the exercise's effects on rescuers would be a little more permanent.

"They'll all be a little wiser as to how it should work," said 1 CAD Director of Plans Col. Grant Smith. "They're going to realize these are hugely complicated affairs, where information management is extremely important."

The skills learned here, he added, need not apply just to a major air disaster. "It could be a forest fire, a flood, a cruise ship accident. What we've proved here is that we can get somewhere in a hurry, treat mass casualties and get them somewhere for treatment. It's a validation of our ability to respond." ■

A former navigator on the CP-140 Aurora and electronic warfare officer on the CT-133 Silver Star, Captain Jeff Manney is currently the Air Reserve Public Affairs Officer for Canada's western region. He writes extensively on military matters from his home in Lantzville on Vancouver Island.

CFAWC and the SAR Community: Working Together to Save Lives

CANADIAN FORCES AEROSPACE WARFARE CENTRE: IMPROVING CF SAR CAPABILITIES

By Major Gilles Bourgoin, CFAWC

In the past few years, Canadian Air Force leadership has identified the need to transform and modernize the Air Force to meet the demands of today's changing environment. Many initiatives have since taken place, including the consolidation of a number of operational squadrons to support the creation of the Canadian Forces Aerospace Warfare Centre (CFAWC).

Stood up in 2005, CFAWC, the engine of change for Air Force transformation, aims at providing the Air Force with the knowledge to acquire the right capabilities it needs to do its job and to develop doctrine to help ensure the successful conduct of aerospace operations as we move into the future.

The Canadian Joint-Precision Aerial Delivery Stand-Off System (CJPADSS) landing in the Cold lake range during its initial test run. The system as initiated to research alternative aerial delivery methods.

Photo credit: *Maj. Gilles Bourgoin*

Armed with these goals, the unit leadership has identified the need to review how the Canadian Forces (CF) Search and Rescue (SAR) community operates and how to improve its already impressive performance.

The section tasked to do so is called Air Mobility and SAR and resides within the Concepts and Doctrine Development (C&DD) branch of CFAWC, located in Trenton, Ontario. This section is staffed by three regular force officers and one reservist. The staff analyzes the Air Force's current capabilities and makes recommendations based on thorough research to provide the SAR community with the knowledge to acquire the right equipment and to find ways to train and conduct operations more efficiently. Lieutenant-Colonel David MacKinnon, C&DD Branch Head, says that the work of this team has the potential to greatly improve the CF SAR capabilities in the future.

"For example," he says, "the team is currently working on Project Yukon, a project that aims to determine the best fleet mix for Air Mobility (including SAR) in order to accomplish the many tasks the Canadian Air Force has been given." "This team," he adds, "addresses real issues with real solutions. It is a great asset to the SAR community."

Maj. Gilles Bourgoin at CFAWC in Trenton, Ontario

Photo Credit: *CFAWC*

In fact, the team has been working on several other projects, such as the CFAWC-sponsored study on precision aerial delivery systems. The Canadian Joint-Precision Aerial Delivery Stand-Off System (CJ-PADSS) project was initiated to research alternative aerial delivery methods. This automated technology uses GPS to accurately guide aerial delivery loads to their respective targets using electrical motors to control the parachutes. Initial research demonstrated that even while this technology is young, these systems should be considered when thinking about the aerial delivery systems and procedures of the future.

CFAWC is also sponsoring research to develop a Hercules Observer Trainer (HOT). This mission trainer, still at the prototype level, has already received positive comments from the Air Mobility community, giving the project enough support to see it through the initial experimental phase. Initially, the HOT will be developed to respond to a pressing need from the Tactical Air Transport (TAT) community but further spirals of the project will explore the possibilities of using this simulator for spotter training.

Another important ongoing project of the Air Mobility and SAR team is

the development of the B-GA-460 SAR Operational Doctrine, a document that will be aligned with the recently published Canadian Forces Aerospace Doctrine. This document will help ensure that the procedures used throughout the CF SAR community are of the highest standard, using the latest techniques and technology, and will also ensure that interoperability with our allies is maintained.

With CFAWC sponsored projects such as Yukon, CJ-PADSS and HOT, also with the publication of pertinent aerospace doctrine, the future of the SAR community has never been brighter. There is no doubt that we will soon see great changes that will only make the SAR community even more efficient and effective than it already is. ■

Major Gilles Bourgoin is a member of the Concepts and Doctrine Development Branch – Air Mobility and SAR at the Canadian Forces Aerospace Warfare Centre in Trenton, Ontario. He joined the Forces in 1988 as an Air Navigator. His positions include several years as controller at both JRCC Victoria and JRCC Trenton.

Amateur Radio:

From hobby to helping those in need

By Robert Cherry, VE2AGE

In 1901 Marconi received the letter "S" in Morse code in St. John's, Newfoundland, sent by one of his associates in Poldhu in the UK. This was the first transatlantic signal, a precursor of practical wireless communication. Marconi and others soon built transmitters and receivers. In 1913, Parliament passed the Radiotelegraph Act to minimize interference to marine costal stations. The next year, the federal government issued Radiotelegraph Regulations specifying the first operating and technical proficiency examinations for radio amateurs in Canada.

In emergencies or disasters, cell phones and the Internet may not work. Across Canada, there are groups of amateurs who are trained to establish and maintain emergency communications. Collectively, they are known as the Amateur Radio Emergency Service (ARES). ARES operates under the administrative umbrella of the Radio Amateurs of Canada (RAC).

Radio amateurs in Canada volunteer as pilots, navigators, spotters or ground crew with the Civil Air Search and Rescue Association (CASARA) and most are members of ground search and rescue teams. To enable different groups of searchers to keep track of one another, the Automatic Position Reporting System (APRS) uses packet radio. Position information is provided by a GPS satellite receiver connected to one of the serial ports of the computer running the APRS software.

Amateur radio does not have to cost a fortune. Equipment can last a long time and there are no charges per minute or per month. Even a radio is not absolutely necessary; a Voice Over Internet Protocol (VOIP) can be used.Many astronauts are radio amateurs. On January 24, 2007, students from the elementary school *Le Prélude* in Ottawa spent nine minutes and 22 seconds talking with Flight Engineer Sunita Williams on the International Space Station. The communication took place at the Museum of Science and Technology in Ottawa, home of amateur radio station VE3JW of the Ottawa Valley Mobile Radio Club.

For more information on amateur radio in Canada, go to the Web site of the Radio Amateurs of Canada at www.rac.ca. ■

Robert Cherry is a Program Officer at the National Search and Rescue Secretariat. He is a licensed amateur radio operator and belongs to the Ottawa Valley Mobile Radio Club. The author would like to thank Ken Halcrow of CASARA Ottawa for a background article on the CASARA High Frequency Communication Demonstration which took place in North Bay as part of the National SAREX in September 2006.

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Maiden flight of Canada's first student unmanned aerial vehicle competition

Rolf Brandt, SERCO and Lt Col Mark LeGresley briefs Team VAMUdeS on the UAV operating area

Photo Credit: *L&S Photo*

By Stephane Bachand

Students from the Universities of Calgary, Edmonton and Sherbrooke competed in the second phase of the Student Unmanned Aerial Vehicle (UAV) Competition from May 4th to 6th in Goose Bay, Labrador. In the first phase, student teams were required to submit a technical report outlining how their UAV designs met the challenges posed by a search and rescue (SAR) mission.

Students and UAV experts from across Canada descended on 5 Wing Goose Bay for phase two of the competition which was supported by members of 444 Combat Support Squadron, 5 Wing Goose Bay, the local Civil Air Search and Rescue Association (CASARA) team, residents and businesses from Happy Valley-Goose Bay and many corporate sponsors.

This final competition was the culmination of two years worth of work developing a mini-UAV with the specific task of conducting a 2 km square search of a simulated crash site area. Major Graham Newbold of the National Search and Rescue Secretariat assisted the organizers in developing a SAR scenario for the competition and enlisted the help of the local CASARA team to set up targets within the area.

In addition to the flying portion of the competition, participants received a briefing and a demonstration by the SAR Tech shop of 444 Combat Support Squadron to familiarize them with the equipment and techniques used by SAR professionals. The action packed weekend also included presentations by each student team on the development of their UAVs and safety briefings on the operation of UAVs.

Team VAMUdeS from the Université de Sherbrooke were the winners of both phases of the competition. Many lessons were learned about the development of UAVs and their operation in an active airspace. The competition also gave those involved the opportunity to learn more about SAR innovation and the challenges the SAR community must surmount in search operations. ■

Stephane Bachand is a Communications Officer at the National Search and Rescue Secretariat who attended the Student UAV Competition in Labrador.

Charles Vidal from Team VAMUdeS getting ready to launch the UAV

Photo Credit: *L&S Photo*

COSPAS-SARSAT celebrates 25 years of aiding Search and Rescue around the world

By A/SLt David Lavallee, 1 Canadian Air Division Public Affairs

As people go about their business around the world, travelling to and from in boats, planes, trains and cars, they do so in the quiet confidence that they will reach their destinations safe and sound.

What most of them don't realize is that they are being watched—rather, listened to—from high above their heads, on the remote chance that something goes wrong and they need help.

For a quarter century, the Cospas-Sarsat satellite system has been monitoring the Earth, "listening" for emergency beacons activated by planes, ships or individuals in distress. Today, it has evolved into a global search and rescue (SAR) network used by a partnership of 38 countries.

Cospas-Sarsat is a Russian and English acronym, COSPAS meaning "Cosmicheskaya Sistyema Poiska Avariynich Sudov" (Russian for "Space System for the Search of Vessels in Distress"), while SARSAT means "Search And Rescue Satellite-Aided Tracking."

Since the system became operational in 1982, Cospas-Sarsat has provided information that aided in the rescue of over 20,531 persons in 5,752 distress situations.

Original graphic by NOAA-SARSAT

"The system really sees the whole world," says Major Alain Tanguay of the Canadian Mission Control Centre (CMCC) at 8 Wing Trenton. CMCC monitors the SAR satellites and the computer network that receives and distributes all data relating to SAR beacons in Canada.

The Cospas-Sarsat system was the result of an agreement between Canada, the United States, France and the former Soviet Union. Coming online in 1982, the system's first operational use happened on September 10 of that year, when a light aircraft crashed in Canada. Thanks to the system's detection and relaying of the plane's distress beacon, three people were rescued.

Basically, how the system works is that a person, plane or ship in distress activates an emergency beacon on one of three set frequencies—121.5 MHz, 243 MHz or 406 MHz. One of the Cospas-Sarsat satellites orbiting the earth picks up the beacon, and relays it to a Local User Terminal (LUT), which processes the signal and passes it along to a Mission Control Centre, like CMCC.

Based on the information received and location of the emergency, the MCC then forwards the message onto a Rescue Coordination Centre (RCC), which dispatches a SAR team to the site. Here in Canada, there is the CMCC in Trenton, three Joint Rescue Coordination Centres (JRCCs) and two Marine Rescue Sub-Centres (MRSCs) to respond to SAR situations, which are handled by the Air Force and/or the Coast Guard, which have SAR teams standing by 24 hours a day, seven days a week all year round.

Although the process may seem complicated, in reality, it happens very quickly. "When it comes to SAR operations, the name of the game is speed," says Major Tanguay. "When an emergency situation happens, such as a plane crashing or a boat getting caught in rough seas, people are in distress, they are in danger. We need to get a team out there as soon as we possibly can. The information and direction we get from the Cospas-Sarsat system allows us to do that."

There are two different types of satellite used in the Cospas-Sarsat system: Geostationary Search and Rescue (GEOSAR), which orbit Earth in a fixed position relative to the surface, and Low-Earth Orbit Search and Rescue (LEOSAR) satellites, which circle around the globe.

The LEOSAR satellites are used to locate where an emergency site is based on where the beacon is transmitting from, something their stationary GEOSAR satellites cannot do. This can present a challenge when a signal is received.

"When we receive a signal from a GEOSAR satellite, the system cannot provide a precise location of the beacon's source," says Major Tanguay. "As a result, we

have to wait for a LEOSAR satellite to pass overhead and locate it. Unfortunately, that adds precious time to our ability to respond quickly to the emergency."

There is a solution, however. The key lies in the three set frequencies used by distress beacons. The 121.5 MHz and 243 MHz signals are able to communicate with the satellites, but because they are analog frequencies, they cannot transmit much information.

However, beacons that employ the 406 MHz frequency are using a digital signal, which means that they can embed a vast amount of data in their signal. This can include coordinates from a global positioning system (GPS), which gives the MCC a more precise location for an emergency, as well as a beacon identification number. Once registered into the national database, this number can tell the MCC the type of aircraft or boat involved in the emergency, and how many people might be aboard.

It is for that reason that, as of February 1, 2009, the Cospas-Sarsat system will begin monitoring the 406 MHz frequency alone.

"The 406 MHz signal can provide us with much more information about the emergency, such as the location of the site with GPS and the type of plane or boat involved, which can also indicate how many people may be involved," says Major Tanguay. "That translates into a quicker, better-prepared response to emergency situations."

While the transition to 406 MHz poses some challenges, especially when beacon identification numbers are not registered in the database, in the end, it will better enable the system to help save lives.

"The more information we have going into an emergency situation, the better," says Major Tanguay. "I think the Cospas-Sarsat system will continue to help us in that regard for a long time to come." ■

Acting Sub-Lieutenant David Lavallee is an aspiring Public Affairs Officer working with the Public Affairs section at 1 Canadian Air Division/Canadian NORAD Region headquarters in Winnipeg, Manitoba.

The **Spirit of Search and Rescue** in full swing at SAR*SCENE* 2007

Photo Credit: *Ivan Hansen, courtesy Technical Rescue magazine, www.t-rescue.com*

Held in beautiful Victoria, British Columbia, this year's SAR*SCENE* conference brought together a host of search and rescue (SAR) experts and professionals from across Canada and around the world. Along with the British Columbia Provincial Emergency Program (BC PEP) and the British Columbia Search and Rescue Association (BCSARA), we hosted over 600 delegates who came to share knowledge and showcase skills around this year's theme: *The Spirit of Search and Rescue*. This theme was highlighted through many different events including the opening plenary and the Volunteer Appreciation night which was held at the Royal BC Museum, a truly unique and magnificent setting.

Team members from Avalon North Wolverines, Newfoundland and Labrador, tending to a casualty during the SARSCENE Games.

SAR*SCENE* 2007 featured over 50 presentations from Canadian as well as international experts. Speakers from Ireland, New Zealand, Poland, the United Kingdom, and the United States brought an international perspective to the conference and showed how countries differ in their management of SAR.

The trade show included over 60 exhibitors who brought their products and services to the conference. With numerous first-time exhibitors, this year's trade show was a great success and offered information on various products such as satellite communications technologies, all-terrain vehicles, hover-crafts, emergency shelters and waterproof gear.

SAR*SCENE* GAMES

The 16th annual conference kicked off on Wednesday October 17 with the SAR*SCENE* Games. A beautiful autumn morning greeted competitors, judges, and volunteers supporting the 2007 games. Beacon Hill Park, the jewel of Victoria's southern waterfront steeped in history and natural beauty, offered a backdrop for the day's event.

Eight teams from across Canada and two international teams competed in the event. The teams were assessed through six different SAR stations based on survival skills, navigation, emergency scene management / medical, skills relay, search management and detection.

At day's end, the Gulf Islands National Park Reserve "Tsunami" team picked up the gold medal at the awards ceremony held at the Victoria Conference Centre. The Sûreté du Québec team finished second followed by the Irish Coast Guard in third. Fourth place went to Coquitlam SAR Two who was awarded four land mobile transceivers from ICOM Canada for the best over-all performance by an all-volunteer team.

Games gold metal winners, the Gulf Islands National Park Reserve "Tsunami". (From left to right: Leila Sumi, Nathan Cardinal, Rundi Anderson and Dave Pemberton

Photo Credit: *Ivan Hansen, courtesy Technical Rescue magazine, www.t-rescue.com*

OPENING PLENARY

The plenary session was one of the most memorable events of the conference. It included a tribute to Cospas-Sarsat and the Canadian Avalanche Association who each celebrated their 25th anniversary this year. The tribute was followed by guest speakers who shared heart warming stories of their experiences with SAR.

Pilot Jon Ziegelheim told the story of his dramatic rescue when the small aircraft he was flying crashed 25 years ago in British Columbia. The incident has the distinction of being the first search that was alerted using the Cospas-Sarsat system.

Susan Miller relayed the story of her four children who were rescued when their boat capsized near Nanoose, British Columbia. Mr. Miller, who watched the incident as it unfolded from the shore, described the rescue in which all of her children were saved.

Brad Sills, a Search Manager with Whistler Search and Rescue, introduced a video which told the first-person account of Sam Black, a hiker who was stranded for six days in Whistler's Brandywine Mountain region.

The final story came from Larry and Jacquie Beveridge who recounted the loss of their nine year old son Jimmy, who got lost during a family camping trip in California's Palomar State Park in 1981. They discussed the Hug-a-tree and survive program which was created out of the outcome of this incident and how it has spread across the United States and Canada. ■

Cyndie Jones, BC PEP, with Larry and Jacquie Beveridge

Photo Credit: *Ivan Hansen, courtesy Technical Rescue magazine, www.t-rescue.com*

THE SIGHTS AND SOUNDS OF SAR

SAR*SCENE* delegates and the public came together on Saturday October 20 for the live SAR demonstrations that took place off Holland Point in Victoria. This year, the outdoor presentation of marine, air and ground SAR included a multi agency response to a simulated vessel in distress, a simulated cliff rescue, and a fly/sail past of SAR resources. The participating agencies comprised of the Canadian Coast Guard (CCG), the Canadian Guard Auxiliary (CCGA), the Royal Canadian Mounted Police (RCMP), Blackcomb Helicopters, Squamish Search and Rescue, Coquitlam Search and Rescue and the Canadian Forces (CF).

Following the live SAR demonstrations, members of the public and conference delegates made their way to the CCG base, where they were treated to static displays of SAR assets including a number of helicopters and vessels. A number of agencies including the RCMP and BCSARA also had booths with information for visitors.

Information on SAR*SCENE* 2008 to be held in St. John's, Newfoundland will soon be available. For more information, consult the National Search and Rescue Secretariat's website at www.nss.gc.ca in the coming months.

HERE IF YOU NEED ME: A STORY ABOUT LOVE AND LOSS

By France Bergeron

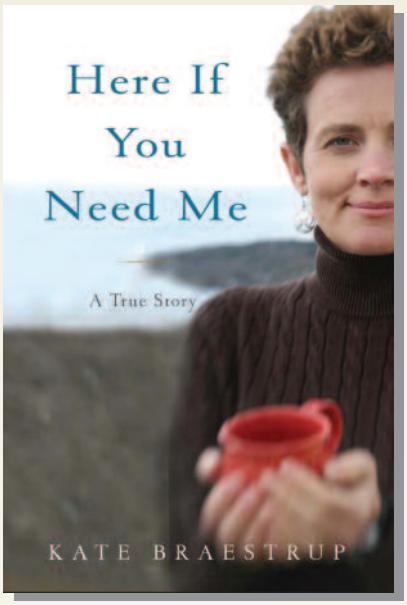


Photo Credit: *Little, Brown & Company*

As a former chaplain in the Canadian Forces, it is with great enthusiasm that I accepted to review Kate Braestrup's book *Here If You Need Me*.

From the loss of her husband, a Maine state trooper, in a tragic car accident grew Braestrup's desire to become a minister and serve side-by-side with Maine wardens on search and rescue missions. Through her personal bereavement and learning of her new role as a widow, mother of four, and chaplain, her emotions are transparent and honest as she brings the reader along for her journey.

Here If You Need Me is a tribute to love and loss. Ultimate love, "the authoritative command of an authentic love" as she describes bathing and dressing the body of her dead husband before the funeral. Ultimate loss: the death of a spouse, parent, child depicted as the stories unfold one after the other.

Braestrup's book is brimming with humor. She laughs at herself admitting that she can barely find her way from the command post to her truck without getting lost, how the warden dispatch could not hear her because she was holding the microphone upside-down, or delightful stories of coping with her children facing what could be one of the most difficult situation in child's life; the death of a loving father.

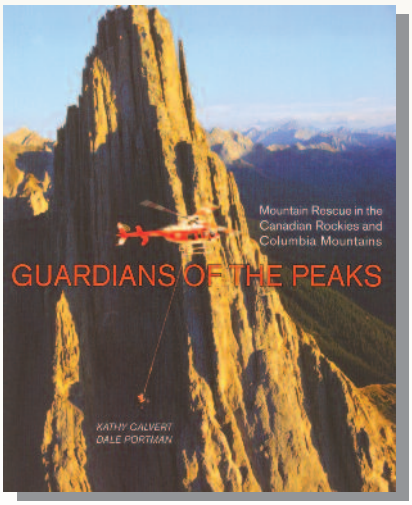
She illustrates well the role of a chaplain in crisis situations: be there, listen, speak with relatives, comfort the grieving spouse or deal with the "un-shaved, beer-bellied backwoods buddies asking hesitant questions about the afterlife". Her book is filled with compassionate situations, all too real for a chaplain, such as announcing to the already apprehensive wife the tragic news of her husband's drowning as she "sags against the front of my uniform and we both descend to the kitchen floor".

Braestrup brings us along on searches for a missing girl at Masquinongy Pond, an ice fisherman on Hobbes Lake, on the trail of a suicidal young mother near Ellsworths, a swimming-accident-turned-possible murder at a waterfall in a state park or a wandering Alzheimer patient. These are familiar stories for search and rescue volunteers and professionals, told with passion and dedication. This is a short, well-written, inspiring book filled with a good dose of spirituality, human kindness and devotion to community and family. ■

France Bergeron has a degree in Theology and was enrolled as a chaplain with the Canadian Forces for five years. She served on the training Base in Borden and on a NATO base in Lahr Germany. A licensed pilot, she is currently the Director of Coordination at the National Search and Rescue Secretariat in Ottawa

AUTHORS DOCUMENT OVER 50 YEARS OF PROFESSIONAL RESCUE

By Lynn Martel



Reprinted with permission from the *Rocky Mountain Outlook*

In July 1954, seven young Mexican women gathered on the shores of Lake Louise and looked up at the towering steep slopes of Mount Victoria. As members of Mexico's first all women's climbing team – a rarity in any country at that time – the women and their guide, Eduardo San Vincente, had come to the Canadian Rockies with several climbing objectives in mind – including heavily glaciated 3464-metre Mount Victoria. Each had earned their spot on the team, and Vincente was considered an outstanding climber, having made ascents of Alaska's Mount McKinley – at 6194 metres North America's highest peak – and 6768-metre Huascaran in Peru's Cordillera Blanca.

Despite being warned about excessively snowy conditions by the Swiss guides who lived at and worked for the Chateau Lake Louise, the team made their way up to Abbot Pass Hut and spent the night, then set out the following morning minus one member who was ill. Travelling in two rope teams, the six women and their guide reached the south summit, but

Slinging with rescue bag

Photo credit: *Kananaskis Rescue*

shortly after they began their descent, one of the women on the first rope, led by their guide, slipped, and all four on the rope were dragged to their deaths. In addition to being the worst mountaineering accident ever to happen in the Canadian Rockies at that time, the tragedy marked a milestone in western Canadian mountaineering, prompting the beginnings of a professional mountain rescue service.

The story of the Mexican team's tragic accident is related in great and thorough detail in the brand new Guardians of the Peaks: Mountain Rescue in the Canadian Rockies and Columbia Mountains, written by Kathy Calvert and Dale Portman and published by Rocky Mountain Books, the Calgary based division of Heritage Group. At over 300 pages, the book is a comprehensive and long overdue volume chronicling the dedication, expertise and continuous evolution of Canada's world-renowned national park rescue service.

The authors' extensive research and devotion to the project makes for captivating reading, with in-depth accounts of some of the mountain parks' most dramatic rescues, worthy of any adventure lover's attention. But more than an action tale, Guardians of the Peaks shares the stories of the people who shaped and built the rescue service, starting with the recognized father of Canadian mountain rescue, Swiss guide Walter Perren, who served as Chief Warden of Mountaineering Services from 1955 until his untimely death in 1967, organizing mountain travel and training for park wardens, most of whom were more comfortable on horseback than scrambling up rock ridges.

The book also recognizes the complicated evolution of rescue techniques and training, detailing the earliest helicopter rescues under the guidance and innovative ideas of retired Banff and Jasper rescue specialists, Peter Fuhrmann and Willie Pfisterer, and their efforts in promoting and ensuring the viability and practical applications of helicopter assisted rescue. Through engaging narratives, the authors portray the continuing dedication of subsequent generations of public safety and rescue experts, including the Bow Valley's Mark Ledwidge, Lloyd 'Kiwi' Gallagher and Tim Auger, Gord Irwin and George Field.

As a former park warden and rescue dog handler, Portman brings intimacy and insights to the 50-year-old rescue profession, as he and Calvert recall stories of bold yet unfortunate climbers and dangerously innocent tourists, including a child fatally wedged into a crevasse on the Athabasca Glacier.

Interspersed with captivating historical photos, this book reveals not just the technical, but also the political and cultural development of the region's professional mountain rescue service, and also the human costs of a stress-laced, demanding, alternately draining and rewarding profession. ■

Specializing in mountain adventure and culture, Lynn Martel is a freelance writer and editor for newspapers and outdoor magazines who lives in Canmore.

Rescue on Snow Patch Bugaboo

Photo Credit: *Brad White, Banff Park Warden*

Disposing of emergency locator beacons

Emergency beacons are part of a system that provides a rapid alert that can trigger a response to emergencies that occur in the air, on the seas or on land. Beacons should be registered with the Canadian Beacon Registry. Whether an Emergency Locator Transmitter (ELT) for aircrafts, a Personal Local Beacon (PLB) for land-based activities, or an Emergency Position Indicating Radio Beacon (EPIRB) for vessels, correct beacon information in the registry assists search and rescue personnel and can improve chances of survival.

A SAR provider carries a 406 MHz PLB while climbing.

Photo Credit: *ACR Electronics, Inc.*

Disposal of beacons

Sooner or later beacons will need to be replaced. Furthermore, as the satellite system stops processing the 121.5/ 243 MHz signals on February 1st, 2009, older beacons will need to be disposed of.

A critical phase in replacing a beacon is the deposal of the old one. Whether an ELT, PLB, or EPIRB, at the end of a beacon's useful life, it is vital that the battery be disconnected from the unit to prevent false alerts.

False beacon alerts can cause expensive disruptions to search and rescue services and could endanger lives as a consequence.

An emergency beacon should never be disposed of as domestic household waste as it could end up being activated or cause adverse effects on the environment. In many cases, the improper disposal of beacons have led to activated beacons in land fills, garbage cans and in people's homes. The Canadian Mission Control Centre, which receives the distress signals, may react to this as an emergency. The battery in an emergency beacon can also contain traces of hazardous materials and should be handled with great care. Beacons need to be treated as hazardous waste and disposed of according to the requirements in each community.

For questions on how to dispose of a beacon, contact the manufacturer or take it to an electronics recycling centre in your community.

After safely disposing of an emergency beacon, the Canadian Beacon Registry should be updated to reflect the fact that this beacon has been decommissioned. This is the responsibility of the beacon owner and not the manufacturer. ■

Beacons such as this damaged 406 MHz EPIRB need to be disposal of safely to prevent false alerts and to ensure that hazardous materials in the batteries are handled with great care. Although this EPIRB was engulfed in fire after being struck by lightning, it still was activated.

Photo Credit: *ACR Electronics, Inc.*

Almost nine out of every 10 ELT distress signals prove to be falsely triggered creating a tremendous burden on the resources of all agencies involved. With some due diligence on behalf of users, most if not all of these false alarms could be eliminated.

Myths about emergency locator beacons

MYTH: If my beacon is accidentally activated and I turn it off right away, no signal will be detected.

FACT: There is a possibility that a signal will be transmitted immediately after the beacon is activated. If a beacon is accidentally activated, no matter for how long, it should be reported to Canadian Mission Control Centre (CMCC) by calling 1-800-211-8107.

MYTH: I will get fined if I accidentally activate a beacon even just for 10 seconds.

FACT: There is no fine or penalty if a beacon is accidentally activated. One signal is all it takes to reach CMCC. In case of accidental activation, CMCC must be advised by calling 1-800-211-8107.

MYTH: If my beacon is not registered, the signal won't be picked up when the beacon is activated.

FACT: A beacon signal will be received by CMCC even if a beacon is not registered. This will be considered an emergency. Call the Beacon Registry to register your beacon at 1-800-727-9414 or 613-996-1616.

MYTH: The beacon wont go off if the beacon battery is expired.

FACT: An expired battery is not the same a dead battery. An expired battery can potentially work as well as a new one and when activated, will transmit signals. In case of accidental activation, the CMCC must be advised by calling 1-800-211-8107.

MYTH: The dealer will register my beacon when I purchase a beacon.

FACT: It is the responsibility of the beacon owner to contact the Beacon Registry and register their beacon. The dealer is not responsible for giving the Beacon Registry information such as vessel information, owner information, emergency contacts, etc.

MYTH: When the Cospas-Sarsat system ceases to process the 121.5/243 MHz signals, CMCC will still receive the alert.

FACT: There will be no automatic alerting of 121.5/243 MHz signals at CMCC as of February 1st, 2009. A 121.5/243 MHz beacon will not be seen on the radars therefore no one will know there is a distress.

MYTH: If I buy a new boat and use the beacon from my old boat, there is no need to register it.

FACT: The Beacon Registry should be advised of any information regarding a change in vessel. If the old vessel was blue and the new one is yellow, searchers will be looking for a blue vessel. This may impede the search. Beacon owners should call and advise the Beacon Registry of a change in vessel information as well as any changes in address or telephone numbers.

MYTH: If I sell by boat with an EPIRB, it's the new owner's responsibility to update the beacon registration.

FACT: In this case, there are two things that must be done. The seller of the vessel must call and notify the registry of the sale. Then, the new owner must contact the registry to update the information relating to the beacon. If these steps are not taken, the former owner may be the one who is reached and/or searched for in the event of a distress signal.

MYTH: If I buy a new beacon for my vessel, I don't have to register it because my former beacon is already registered and my information is in the system.

FACT: The former beacon must be decommissioned and the newly purchased one registered. If there is a distress signal received with the new beacon and it is not registered, searchers will not know what to look for. If the unused beacon isn't decommissioned and it is activated, searchers may start a search for your vessel when it is not needed.

MYTH: If my beacon is not in use, it doesn't matter. I can leave it in a safe place such as storage.

FACT: The Beacon Registry must be notified if there is a change of status for a registered beacon. A beacon that is stored away may still be activated and CMCC may take action in response. It is the sole responsibility of beacon owners to notify the registry if there is a change in status. This can be a beacon that is no longer in use, in storage, stolen, lost, broken, decommissioned, etc.

MYTH: Providing emergency contacts when I register a beacon is optional.

FACT: Emergency contacts are crucial in any emergency situation as it can help piece information together on the whereabouts and activities of those in distress. This information must be given when a beacon is registered.

Contact the Canadian Beacon Registry

Within Canada: 1800-727-9414
International: 613-996-1616
Fax: 613-996-3746

Email: beacons@nss.gc.ca
Website: www.nss.gc.ca

Beacon information can be update online at http://beacons.nss.gc.ca

Innovation Showcase

SAR NIF FUNDING ANNOUNCEMENT

ALZHEIMER SOCIETY AND RCMP WORKING TOGETHER TO HELP SAVE LIVES

The Alzheimer Society, in partnership with the RCMP, has announced a boost in funding thanks to the Search and Rescue New Initiatives Fund (SAR NIF) to build on the success of the current Safely Home™ – Alzheimer Wandering Registry program.

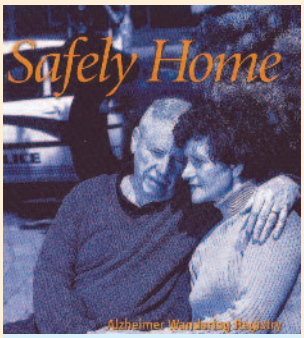


Photo Credit: *Alzheimer Society of Canada*

The Safely Home Registry is a nationwide program that was developed in 1995 to assist police in finding people who become lost. Today, there are approximately 26,000 people with Alzheimer's disease in Canada registered.

The two year – $1.18 million SAR NIF contribution will help support initiatives such as nationwide training workshops for search and rescue personnel and organizations that care for those with Alzheimer's, as well as investigating technical monitoring tools such as GPS tracking devices for evaluation guidelines.

"When a person with Alzheimer's disease becomes lost, finding them quickly is very important," says Assistant Commissioner Darrell LaFosse of the RCMP's Community, Contract and Aboriginal Policing Services. "Statistics have shown that the first 12 hours are crucial. After that time frame the chances are much greater that they may be injured or die if they are not found."

For more information please visit **www.alzheimer.ca**. ■

Casualty makeup for the 2006 summer training exercise

Photo Credit: *Office of the Fire Commissioner*

SAR NIF SHOWCASE

TRAINING EXERCISES STRENGTHEN MANITOBA SAR NETWORK

For the past three years, federal, provincial and volunteer search and rescue (SAR) professionals from across Manitoba have been working together to increase the effectiveness of SAR operations in the province. Through the SAR NIF project entitled *Enhancing search and rescue in Manitoba through Provincial Multi-jurisdictional Exercises*, SAR partners in Manitoba have benefited from hands on training and a course on winter rescue.

Three multi-agency summer training exercises which brought together a host of organizations were held in different locations around the province. The exercise scenario in 2004 involved two missing hunters overdue in unfamiliar territory. Two civilian aircrafts were provided by the Civil Air Search and Rescue Association (CASARA) with volunteer ground SAR teams, the RCMP D-Division and canine teams participating in the search.

In 2005 and 2006, the scenarios involved an overdue airplane carrying a pilot and two passengers. Participating in these events were volunteer ground SAR teams, a Canadian Ranger team, and a Police Team. Air support from CASARA was provided and SAR techs from 435 Squadron parachuted down to assist the victims.

"The delivery of these exercises is no small feat", says SAR NIF project officer David Schafer from the Office of the Fire Commissioner. "Our goal was to organize large scale training exercises for members of the SAR

Trekking through the snow during the winter survival and rescue course

Photo Credit: *Office of the Fire Commissioner*

community to network together so that regional SAR teams would then be able develop their own. We already know of one team who is looking at doing its own one day session."

In addition to hands on training exercises, SAR responders were also able to benefit from a winter rescue and survival course which was developed through the SAR NIF project. The course covered subjects such as night navigation, overnight winter survival and shelter construction. Teams faced a -35C night in the great outdoors during the course's emergency exercise.

"Many participants noted that until you experience spending a night outside in these conditions, you may never realize your true survival potential if suddenly faced with a true winter emergency.", writes SAR Coordinator Scott Kerbis.

This project has had many benefits for the SAR community. Not only were SAR organizations in Manitoba able to network and promote interoperability between groups but they were also able to strengthen the provincial SAR network in Manitoba. ■

MAKING OUTDOOR ACTIVITIES SAFER FOR YOUTH

Extreme sports are promoted to people of all ages as a way to stay active. Responding to the attraction of these outdoor pursuits by youths, organizations are including more edgy activities to their programs. While physical injuries are unintentional, some organizations lack the practical procedures to manage risk and prevent incidents from happening.

YouthSafe Outdoors, a SAR NIF funded project from 2004 to 2007, was created to assist organizations in managing outdoor recreation risk for the youth of Alberta. Through research and consultations with organizations across the province, the *YouthSafe Outdoors* team has created a portfolio of safety and risk management tools to help decision makers, leaders, parents and guardians in planning safe activities.

The project is ongoing and is working to have materials available for widespread use. These include manuals for managers in planning and running recreational activities, stay safe guidelines, an adventure leadership resource, a self-reliance instructional resource, and a manual for parents and guardians.

For more information on *YouthSafe Outdoors*, visit **www.youthsafeoutdoors.ca**. ■

ICE RESCUE EXPERTISE IN THE SAGUENAY-ST. LAWRENCE MARINE PARK: IMPROVING RESCUE CAPABILITIES

By Martin Gaudreault, Park Warden

Photo Credit: *Parks Canada*

BACKGROUND

Winter conditions in the Saguenay fjord can sometimes be rough due to the strong winds created by the Saguenay corridor and low temperatures. Furthermore, these conditions can rapidly fluctuate in only a few hours, moving from cold temperatures to much milder ones. Sharp differences in temperatures over a brief period of time can weaken the ice and therefore greatly increase the risks of accidents on the ice. The flow of tides and the passing by of the Canadian Coast Guard's ice-breakers can also have an impact on the ice cover by creating cracks along the Saguenay.

Activities on the fjord during the winter, combined with the environmental conditions, can sometimes be dangerous, which can increase the risks of accidents that may require rescue interventions on the ice. The Ice Rescue Intervention Network was established in collaboration with the fire brigades of some municipalities as well as volunteers in search and rescue surrounding the Saguenay fjord, in order to ensure rapid and adequate ice rescue response, especially in the Saguenay fjord. With the 911 emergency line, the municipal services spread around the periphery of fishing sites are the best equipped to respond adequately, since these groups are already structured and trained to intervene efficiently in an emergency.

IMPLEMENTATION OF A RESCUE INTERVENTION NETWORK

The Saguenay-St. Lawrence Marine Park, aiming to be a leader in this field, and with a grant from the New Search and Rescue New Initiatives Fund (SAR NIF), made it possible to consolidate a rescue network involving various stakeholders through the acquisition of specialized material on interventions on frozen water surfaces and flowing water. The first contingent of stakeholders was trained from 2001 to 2002 and led to the creation of six teams operating from various bases around the Saguenay fjord. Similarly, mobile units with intervention equipment were given to the trained teams.

Since then, several rescue operations were carried out using the material and experience acquired, and more intervention units were purchased by municipalities that found this need relevant to their emergency services.

Expertise in ice rescue has developed in the Saguenay-St. Lawrence Marine Park. The park wardens are now certified as instructors in rescue techniques and will be appointed to provide intense training to the next contingent of stakeholders during the winter of 2008 and to help maintain competencies. Presently, the agreements to maintain the collaboration between municipalities and volunteers making up the network of ice rescue are being renewed. This initiative is expected to endure in order to increase the level of public safety and ensure better response to emergencies to the advantage of those using the Marine Park. The users may include winter fishermen, snowmobilers, skiers, hikers and others.

For more information, go to **www.pc.gc.ca** or **http://parcmarin.qc.ca**. ■

Photo Credit: *Parks Canada*

Members of a search team on a life raft Fortuna: Marie-Eve Foisy, Roger Gagnon, Hugo Royer and Robert Ouellette

Photo Credit: *Parks Canada*