Feature story:
SARSCENE
2003
Synopsis



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Sault SAR and the 2003 Eco-Challenge

Gander SAREX

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Deep Survival: Who Lives, Who Dies and Why

Lori MacKay

Steve Callahan was shipwrecked for 76 days before being rescued. He had journeyed across the Atlantic Ocean alone in a six-person life raft. Why was he able to survive and others do not?

There are many compelling stories and forays into other people's lives, throughout Laurence Gonzales' book *Deep Survival: Who Lives, Who Dies and Why.* The 278-page book presents an interesting look into the human condition as seen through the survival tales of sailors, pilots, mountain climbers and outdoor enthusiasts.

With examples from his own life, other peoples' lives and studies, Gonzales explains that even the most unprepared person with no survival skills can become a survivor under the utmost adverse conditions, while a seasoned survivalist with all the survival equipment and knowledge can become a casualty. What may seem like a minor decision can mean the difference between life and death.

This book is not a survival guide by any means, although it does include an appendix of survival strategies. This book is about how a person's reaction in a threatening situation can mean the difference between survival and death, regardless of survival equipment. The author describes numerous stories where a person's emotions can be their greatest asset – or greatest weakness. During times of stress, emotions are what drive a person to act and react – not cognitive thought. A person who can <u>use</u> his or her emotions instead of succumbing to them may have a better chance at survival.

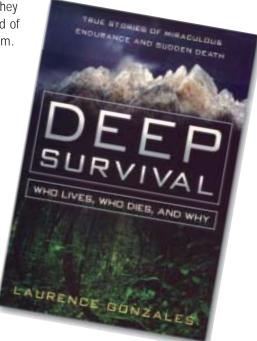
For example, Gonzales describes how just having a goal can take the focus away from the negative thoughts of "we're never getting out of here." The goal can be caring for the injured, reaching a distant target or guarding the survival area from predators – anything to forget despairing thoughts and concentrate on surviving.

Gonzales describes how each person develops his or her own "mental model" from short-term memory that shapes their behaviour and reactions. People

who are lost rely on their short-term memory to make decision on what they think should be the outcome, instead of adapting to the world in front of them. Gonzales says good survivors aren't immune to fear, but can manage it better and are able to adapt to the new situation.

There isn't a dull chapter in the book, and once it's picked up it will be hard to put down. The reader is driven to find out how a man who broke his leg on a 20,000 foot peak was able to crawl six days without food and water to make it out alive. And why someone else with extensive survival training ends up dying from hypothermia. There are many more examples and each one is as compelling as the last.

From beginning to end, this book is a keeper.



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SARSCENE 2003

Working together to save lives

his year's SAR. SCENE featured a record number of presentations, 70 in all, covering search and rescue from every angle. The Ontario Provincial Police were this year's local host with outstanding support from the Ontario Search and Rescue Volunteer Association, Joint Rescue Coordination Centre Trenton, Kingston Police and Toronto Fire Services.

SARSCENE Games 2003 The Monsoon Challenge

Carole Smith, Games Coordination Team

High winds and driving rain provided a realistic setting for the $7^{\rm th}$ annual SAR. SCENE Games and Canine Competition, held Oct. $15^{\rm th}$ at the Lemoine Point Conservation Area in Kingston, Ontario. The cold and stormy weather reminded competitors and observers alike that few SAR missions happen in ideal conditions.

Eight 4-person teams competed in the traditional games, tackling a long course that challenged physical conditioning and tested skills in search operations, low-angle rescue, emergency scene management, clue and evidence search, survival, and water rescue. The six canine teams competed in detection, obedience, article search, agility, fitness, and canine First Aid.



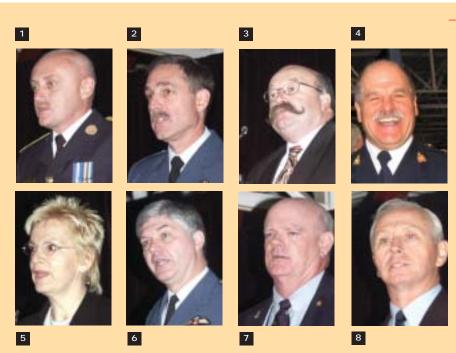
The Toronto Heavy Urban SAR team, Centre of the Universe, poses with the Slaughter Cup. Also pictured are Toronto Fire Chief William Stewart, (left), and Al Thomas, team co-ordinator.

Competition was fierce, with a strong and spirited performance by all. Toronto's Heavy Urban Search and Rescue team took the gold medal, Parks Canada Bruce Peninsula won the silver and Fire Rescue 424 captured the bronze. The canine competition produced a first-place tie, shared by Cliff Neumann and his dog, Nanook, and Caroline Maisonneuve and her dog, Morgan. François Lefebvre and his dog, Rick, took silver, while Mario Lavigne and his dog, Jazz, won the bronze. The longest-distance-travelled distinction goes to the volunteer air rescue team from Iceland.

The O.P.P. and the Ottawa Valley Search and Rescue Dog Association organized the event in conjunction with the NSS.

Dignitaries highlight national strategies

The opening ceremonies and plenary were held at Portsmouth Olympic Harbour, and included breakfast sponsored by EMS Technologies. Those who spoke at the opening ceremony included Chief Superintendent Chris Lewis (1) of the Ontario Provincial Police, SAR Region Commander, Major-General M.J. Dumais (2) and Julian Goodyear (3), Regional Director, Canadian Coast Guard, Central and Arctic Region, A/Commissioner Darrell LaFosse, RCMP (4), and Jean Murray, Executive Director of the National Search and Rescue Secretariat (5). Major-General Richard Bastien (6), Department of National Defence, Chris Long (7), State of Washington, Emergency Management Division and John Adams (8), Canadian Coast Guard Commissioner, were just three of the dignitaries who spoke at the workshop's plenary session. This year's plenary focused on seamless search and rescue and the national SAR program, and Jean Murray, spoke of seven main issues in her presentation. National program strategies include: partnerships, multi-jurisdictional exercises, volunteers, technology and innovation, interoperability and data and information.



by Ivan Hanser

The Games brought together a diverse group of SAR providers representing air, ground, and marine aspects to compete and to learn from each other, even on a day of intense winds and rain.

Our first event was clue and evidence search. The scenario was that a 10-year-old boy was missing, and our task was to find a number of items in a given area, which related to the case.

Our next event was survival skills. Given a tarp, twine, wet wood, birch bark, matches, and an axe we built a fire and shelter.

The on-the-water rescue line toss had been moved on shore due to high winds. Working in teams of two, we tossed a throw bag to a target (simulated person in the water).

After lunch, our next event was search planning. The scenario was that a hunter was lost. Given some background information, a topographical map, and resources, we planned the search.

For the next event, low angle rescue, we carried a mannequin up a hill using rope and a litter.

The final challenge of the day, emergency scene management, was a mock plane crash. There were three victims; two live victims in casualty make-up lying amongst aircraft debris, and a mannequin (deceased victim). Given a time limit, we treated the live casualties, and packaged and carried one across a yellow line towards the simulated incoming helicopter.

Our team would like to thank our sponsors for outfitting us: R. Nicholls Distributors Inc., Fiskars Canada Inc., Wal-Mart (Oakville), Excel Advertising, Mark's Work Wearhouse, Home Depot (Oakville), Shoppers Home Health Care (Mississauga) and Mountain Equipment Co-op.

Ivan Hansen is Acting Captain of the Oakville Fire Department and member of the Town of Oakville Water-Air Rescue Force.



Firefighters Ivan Hansen and Steve Marcellus teamed up with SAR Techs Marc Lessard and Dino Simone to win the bronze medal at the 7^{th} annual SARSCENE Games.



Looking back

HERE WERE MORE THAN 70 DIFFERENT PRESENTATIONS FOR DELEGATES TO CHOOSE FROM AT THIS YEAR'S SARSCENE WORKSHOP, HELD IN KINGSTON, ONTARIO.

SAR in the North

Search and rescue in the North was a hot topic at this year's conference, as seen through presentations by WO Mike Rarog, who discussed 440 Squadron's response to a search and body recovery mission for a missing Inuit hunter in Kugluktuk, Nunavut; and Bert Rose's presentation "SAR Pitseolak: The CASARA Role," examined search and rescue from a Northern perspective and how the Civil Air Search and Rescue Association (CASARA) participated in the search for a missing Inuit artist and pilot.

While these two presentations examined two cases from a searcher's perspective, the session on Arctic Survival by Mario Aubin, Brian Min and Paulusi Novalinga considered the role of Arctic survival training for search and rescue teams and other safety professionals.

A fourth presentation, by David Northmore, considered the importance of relationships and cooperation when conducting SAR with Aboriginal and Inuit People of Canada. This presentation looked at aspects such as funding concerns, training and standards, language barriers, cultural influences and equipment, among others.

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TOP: Air Inuit sponsored the Nunavik Arctic Survival Training Centre's very popular presentation on Arctic Survival given by Mario Aubin, Paulusi Novalinga and Brian Min. Also pictured are an officer from the Kativik Police Force and Sandy Gordon, Kativik Government.

LEFT: The Toronto Heavy Urban SAR team, along with Emergency Services and the Ontario Provincial Emergency Response Team, work together in a simulated rescue of a collapsed building. Team members worked together to rescue two adults and one child.

at SARSCENE

Volunteer Relationships

Another stream of presentations examined the role of the volunteer as well as the importance of relationships between SAR organizations. Sgt. Don Bindon's presentation looked at the relationship between law enforcement and volunteer groups and how to make an effective and lasting one. Sgt. Bindon's session looked at a program in British Columbia, as well as best practices in other jurisdictions.

To give a different perspective, Dr. Anthony Jones discussed the SAR Structure in the United Kingdom, and the role of volunteer organizations. Dr. Jones examined the air, sea and ground aspects of SAR in the United Kingdom, as well as the many different organizations that come together to save lives.



Air SAR

There were many presentations that focused on air SAR and the role of technology. For example, Dr. George Isaac's presentation on aircraft icing examined standards and safety requirements for aircraft flying in icing conditions. Paul Newcomb's session on satellite-based flight following and two-way messaging looked at a data messaging system for fixed and rotor-wing aircraft.

Marine SAR

With the boating season drawing to a close, many topics focused on water safety programs, including the presentation about the power of partnerships in boating safety, by Peter Garapick and John Gullick; the session about a Canadian Coast Guard PFD study, by Brian Avery; a presentation by Caroline Gagnon of the Canadian Red Cross, on drowning and other water-related injuries; a session on simulation in SAR presented by Tony Patterson; two presentations on the Royal National Lifeboat Institution by Ian Ventham, and many more.

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Oceanid Ltd. presented its first annual award for rescue involving the use of its Rapid Deployment Craft. The award went to the Ottawa Fire Department for a rescue in June 2002 of a 15 year old boy from the sewer system.

Sgt. Don Webster of the O.P.P. is interviewed by Kingston's CKWS television about the day's demonstrations.

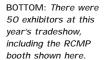
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Interoperability

A special session at this year's workshop was the two-hour Interoperability Summit that brought together representatives from the Canadian Coast Guard, the Joint Rescue Coordination Centre, the United States Coast Guard, the Nova Scotia Emergency Measures Organization and other organizations, to develop an action plan so all search and rescue agencies are able to interact effectively and efficiently when responding to SAR incidents. The summit examined methods to improve interoperability, including table-top and multi-jurisdictional exercises. There was a lot of interest in having a similar summit at SAR SCENE 2004, both to follow up on discussions initiated, and to continue the positive momentum that has been generated.

Claude Auger's session on the Canadian table-top exercise program discussed the Parks Canada role and importance of the program. It was developed in response to an identified need to coordinate all the resources available for emergencies in the regions surrounding Canada's National Parks.

LEFT: The O.P.P.
Tactical unit, in
conjunction with
Kingston Police
Services, simulated
a high-angle search
and rescue scenario
for an injured victim
atop the Ambassador
Hotel, Kingston.





Ted Rankine, host of the Powerboat Television series *Boats* and *Places*, filmed an episode of his show in Kingston about search and rescue and SARSCENE 2003. For more information, visit his website at http://resolutionhost.com/BoatsandPlaces/OurTVShows/PowerboatTV/PBTV.htm

Special thanks to François Vézina, Canadian Coast Guard Auxiliary, for most of the SARSCENE 2003 photos.

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Pre-incident mental conditioning:

the firefighter experience

by Steve Cooke

hey may be a florist, an electrician, a grocer, a mechanic or any one of the thousands of occupations in the world, but when the pager goes, they leap into action. They leave family gatherings, a busy work schedule or a deep sleep to rush into dangerous life-and-death situations. And when it is over, they go back to their normal routine.

These are Canada's volunteer firefighters. How do they cope with a 24/7 on-call basis and handle these stressful situations well enough to maintain a normal lifestyle at the same time? The frank answer is that they are pretty much on their own. Until now.

Enter Norm Barlow.

Norm Barlow, a Psychotherapist and trainer and myself, a Deputy Fire Chief of a volunteer fire department, have been friends for many years. One day Norm approached me with an idea that both intrigued and excited me.

"I've got a concept," Norm said, "This can make your firefighters more efficient

by focusing on the task at hand and letting their training take over while dealing with the emotional aspect of the situation in a manner that will help them. It will enable them to handle the situation better before, during and after it happens. It also gives me a chance to do something really significant by helping a lot of people. Are you interested?"

Of course I was, so we started to discuss the when, where and how of accomplishing it.

In the meantime, while attending the 13th World Conference on Disaster Management, I sat in on a session presented by Debbie Hassel, Deputy Chief of the Fairbanks, Alaska Fire Department. Debbie spoke on techniques that initial responders can use to control the feeling of being overwhelmed at an escalating scene. She explained how we pre-plan for almost every event except emotional turmoil, and that is traditionally dealt with by post-incident consultation. She also admitted that research had turned up little information regarding pre-incident control.

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Fluid levels in brain linked to post-traumatic stress syndrome

Norm Barlow (Ph.D., C.H.T.), a certified Neurolinguistic Practitioner, professional speaker, trainer and consultant, feels that "if PMC training can contribute to the saving of just one life – first responder or victim – it makes all the work I have done worthwhile."

Norm also pointed out that the U.S. military has been engaged in some extensive studies relating to stress situations. One landmark study involved doing MRI scans on soldiers before they embarked on the Gulf War, and then did a second scan and study upon their return. They discovered that hippocarpal fluid production had fallen off in the brain in those people who had undergone traumatic experiences, and fluid levels, especially in the right side of the brain in people suffering from Post Traumatic Stress Syndrome, were significantly lower than normal. This response is suspected to be linked to a neurological process that occurs faster than the normal thinking process can counteract. Norm feels the PMC program may act as a 'blocker' preventing the altering process from happening. For more information, contact Norm at norman.barlow

SAR Awards

Paul Olmstead wins 2003 Outstanding SAR Achievement Award

Constable Paul Olmstead of the Edmonton Police Service was awarded the 2003 award for Outstanding Search and Rescue Achievement at the SAR*SCENE* 2003 Awards banquet, in Kingston, Ontario. Const. Olmstead was chosen because of his lifetime of dedication and leadership in ground SAR throughout his professional and personal life.

Certificates of Achievement were awarded to seven recipients to recognize their significant contributions in the field of search and rescue. \blacksquare



Paul Olmstead and Jean Murray.

Certificate recipients

From left to right, top to bottom: David Henry Brewer, John Chaffey, O.P.P. S/Sgt. Tim Charlebois, Stuart Alan Meeks (posthumous award accepted by his daughter, Ginger White), Maj. Graham Newbold, Cpl. John Rotheisler, Daniel Tremblay. For more information, visit www.nss.gc.ca/site/awards/2003/ 2003Award_e.asp















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Norm's Pre-incident Mental Conditioning (PMC) program was about to fill that need.

The Central Huron Fire Area volunteers were organized into two groups to undertake PMC training in a test and development role.

The first group was introduced to the TAP plan. "T" – Talk to yourself: is the first part of the program. Norm pointed out that 70 per cent of an individual's 'self-talk' during the course of a day is negative, and that percentage dramatically increases in a stressful situation. Talking yourself into a positive mode is the first step and is accomplished by using the CAT principle. The responder affirms they are in Control, Aware of the situation and Thinking clearly.

The "A" in TAP stands for "Act as if" and it conditions and prepares the responder to perform their duties in the

most efficient manner, almost as if they are playing a role in a movie that is actually real life.

The "P" represents the responder's powerful positive state.

During the course of Norm's presentation, TAP the CAT principles are reinforced through clinical visualization exercises. These are proven techniques, which become triggers that can be used to reinforce the training on the way to the scene.

Does it work?

Although it is still in the developmental stages, from our point of view it is definitely going to be an asset for all first responders, and can be applied to personal crises as well. The acid test came for the Central Huron Fire Area volunteers just one day before the second group was scheduled to take the PMC training.

We responded to a call that was originally paged out as a vehicle fire, and then changed to an extrication of trapped occupants. When we arrived at the scene we were confronted with every firefighter's nightmare: a double fatality with one of the victims located inside a fully engulfed vehicle.

Our post-incident debriefing and evaluation demonstrated a distinct higher level of preparation upon arrival at the scene, and a better handling of the situation afterwards by those responding firefighters who had already taken the PMC training.

It will prove to be a valuable tool if used correctly. ■

Steve Cooke is currently the Deputy Chief of the Central Huron Fire Area, and will assume the duties of Fire Chief in January 2004.

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Sault Ste. Marie SAR provides non-stop support for Eco-Challenge

since 1992 teams have been competing in Eco-Challenges around the world, to see who can complete the course first as a team. But as Sault SAR can attest, working as a team does not apply only to competitors, but to volunteers as well.

In July 2003, Eco-Challenge was held between Sault Ste. Marie and Wawa, Ontario and Sault SAR provided support for the grueling seven-day challenge that lasted 24 hours each day.

Jerry Jones, Coordinator for Sault SAR, described his team's role during the Eco-Challenge and the logistics of providing support for the challenge that spanned 500 km.

Eco-Challenge varies from country to country, but the general premise is a seven-day challenge lasting 24 hours each day. The rules state that teams are not allowed outside assistance if they want to place in the rankings. If a team loses a member due to fatigue, hypothermia or injury, they are disqualified from winning but can still complete the course.

Located at the first checkpoint, Halfway Haven, the Sault SAR team provided bearing and distance information to three teams, and sent an ATV to a fourth team who needed to be taken out.

A member of another team suffered knee injuries, and one member of another team had to be airlifted 130 km after getting a stick in the eye. Not all disqualifications resulted from injury; there were mechanical failures as well, such as a bike breaking down.

The competitors were not the only ones put to the test. Because most rescue incidents occurred at night, it was harder for Sault SAR to locate teams in the dense woods. Not only that, but the trails were not well marked and bringing an ATV down some of them could prove challenging.

This wasn't a casual effort for Sault SAR, as some of the Eco-Challenge volunteers switched shifts at work or took vacation time in order to volunteer for the event. There were approximately 20 members present at any given time, with approximately 45 members volunteering over the course of the week.



Sault SAR volunteers responded to 25 ground, seven marine and one air SAR call, 23 community service events and 73 training activities during 2002, fulfilling their motto: To Faithfully Serve. Here they practice the procedures they would follow during a plane crash.

Photo by Hugh Wyatt

The week-long event was a great learning opportunity for Sault SAR, Mr. Jones said.

Not only was it important to see how a major incident could evolve from the challenge, but figuring out the logistics was a lesson in itself. With 500 km to cover, Mr. Jones had to make sure his team was providing support for all necessary areas, but he also had to ensure the high-risk areas received extra coverage.

Of the 41 teams who competed, the top five teams to finish were Canadian. For information on Eco-Challenge visit

www.ecochallengenac.com/inside.html

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SARSCENE

Mélisandre, a model of determination

by Katy Tiernan

Por four seasons now, we have had the privilege of watching Mélisandre Shanks carry out patrols in the territory covered by Coast Guard 1204. In those four years she has acquired much experience, not only through training sessions held in Québec City, but also by performing a number of missions in the territory for which the Longueuil base is responsible. The territory of CG-1204 extends from the Champlain Bridge in Montreal to the town of Contrecoeur, a distance of over 28 nautical miles, not counting secondary channels. She was asked to perform a

number of towing and refloating operations, as well as search for people who had fallen into the water. These operations were carried out both in the daytime and at night. She participated in two lifesaving missions in which the victims' lives were at considerable risk. This may not seem exceptional to you, given that search and rescue is our mandate, but for students in the Inshore Rescue Boat (IRB) Program, it is quite unusual to be called upon to deal with that sort of situation.

Let us speak first about the IRB Program. Within the province of Québec, there are six bases on the Saint Lawrence River: Valleyfield, Oka, Beaconsfield, Longueuil, Sorel and Trois-Rivières. Mélisandre Shanks, middle, has been working with the IRB Program for four years. Photo by M. Vidricaire, le journal de Montréal.

Each of these has two teams of three students, comprised of one captain and two crew members. Our primary mandate, of course, is to save lives; it is a search and rescue program. The IRB Program also plays a major role with the Office of Boating Safety (OBS) by provid-

ing preventive measures to recreational boaters and performing courtesy checks. Mélisandre started out as a crew member at the Longueuil base. In her third season, Mélisandre was moved up to the position of captain. Through her motivation, dynamic personality and professional attitude, she has developed a great deal of confidence in herself, while also showing confidence in her colleagues.

In addition to her work with the Coast Guard, Mélisandre is completing a degree in nutrition at the Université de Montréal. She also has a passion for first aid. She has been giving first aid and cardiopulmonary resuscitation courses since she was eighteen years old, and is constantly pursuing professional development through courses such as First Response, among others. She developed this interest very early in her life; at the age of twelve she was already taking first aid and lifesaving courses. That is undoubtedly when she developed a wish to become an emergency physician.

When she is teaching, Mélisandre often talks about her experiences conducting missions on CG-1204. The first incident in which Mélisandre needed to call upon her wide range of knowledge occurred during her second year in the program, when she was a crew member. She still did not know how she would react in a pressure situation, when people's lives were at stake, but any doubts were quickly erased. On August 16, 2001, the crew of CG-1204 arrived at the Longueuil base at 2:00 p.m. and began their one-week shift (our weeks start on Thursday and end on Wednesday evening). Barely 15 minutes later, the Rescue Centre called the CG-1204 crew; a rowboat had capsized in the south channel close to the Jacques-Cartier Bridge and two people were in the water. The crew took action immediately and, five minutes later, Mélisandre saw the two men in the water, bleeding profusely from the head. For this rescue mission, the crew of CG-1204 B received official recognition for a commendable operation. Thanks to their quick response and Mélisandre's care, the two men are still alive today. One of them travelled to meet her the following year. After that mission, Mélisandre not only knew that she had completely assimilated the

knowledge that she had acquired over the years, but also that she would remain cool and calm in stressful situations.

The following year, in her first season as captain, Mélisandre had a very eventful summer. Our most important mission (I was a member of her crew at the time) occurred on July 1, 2002. There were a lot of pleasure craft in the Port of Montréal and the Rescue Centre called us regarding a man with injuries in the south channel. When we arrived at the site, a man was in the water and appeared to be unconscious. Beside him was a deflated inner tube. The captain of the speedboat informed us that the man had been on the inner tube and had hit the rocks. The man was in cardiorespiratory arrest. After taking the victim aboard, Mélisandre performed cardiorespiratory resuscitation with the help of ambulance attendants. Unfortunately, the man did not recover. He suffered from a number of cranial traumas and was undoubtedly killed on impact. The media was very interested in this story, and Mélisandre gave a number of interviews. Of course we all questioned ourselves after this mission, but there was no doubt that we had done a good job in carrying out our work.

In her fourth season, Mélisandre is completing her work with the Canadian Coast Guard. She gave us four great years full of memorable moments, and it is not over yet. Indeed, if she begins her PhD in medicine, as she wants to do, she will remain with the IRB Program for a few more years. ■

Katy Tiernan is a crew member of CG-1204B

Student programs perfect recruiting grounds

Peter Garapick, Superintendent of the Canadian Coast Guard's Office of Boating Safety (OBS) in Central and Arctic Region, began his career as a student in the Coast Guard's Inshore Rescue Boat (IRB) Program in Mahone Bay, Nova Scotia.

Growing up in Halifax, Peter has always spent time on the water, first with his grandfather and then at the age of 12 when he took sailing lessons. He then taught sailing for four years, raced yachts and was a deckhand on the Bluenose II.



With all that nautical experience, Peter won a job as crew with the IRB Program based in Mahone Bay where he worked as a coxswain while completing both Bachelor's and Masters' Degrees.

After having spent virtually all his life on the water, and four years with the IRB Program, he couldn't see himself in an office, so Peter delayed taking a job after graduation. As luck would have it, he soon found himself part of the Federal Government's Management Trainee Program (MTP).

Although his first position out of the program wasn't with Coast Guard, two years later it happened and now he is OBS Superintendent for Central and Arctic Region.

While the MTP helped Peter in his career aspirations, he says "the IRB Program is the perfect recruiting ground for exceptional people for the Canadian Coast Guard."

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103 SAR Squadron wins the first Cormorant Helicopter Rescue Trophy

by Lt. Jennifer Faubert

five-member crew from 103
Search and Rescue Squadron in
Gander, Nfld. is the first to be
awarded the *Cormorant Helicopter*Rescue Trophy. The award was given for
their courageous efforts in successfully
rescuing 16 crew members from a stricken marine vessel off the coast of
Newfoundland on a stormy winter night
last January.

The rescue occurred Jan. 23, 2003 when the 133-metre Finnish freighter *Camilla* lost engine power and steerage capacity and was adrift in stormy seas with evening rapidly approaching. With winds gusting up to 70 km/h and 10-metre waves crashing over the deck, the vessel was in danger of capsizing.

Due to the distance of the rescue, the Cormorant required a lot of fuel and had to be stripped of all non-essential equipment so it could pick up the 16 *Camilla* crew members, making it the largest rescue ever with the Cormorant aircraft. Complicating an already daring rescue was the fact that the crew temporarily experienced a communication failure while refuelling on the Henry Goodrich oil platform en-route to the scene.

Once the crew reached the *Camilla*, the continuous violent rolling and pitching of the vessel made the positioning of the aircraft to the vessel extremely difficult. The pilot could only hold a constant position for seconds at a time. Maj. Thibault said they calculated that they only had one hour and 15 minutes to perform the extraction, which was completed with five minutes to spare before making the one-hour flight to St. John's, Nfld.

The trophy was commissioned and given to the Canadian Forces last year by Agusta-Westland / EHI, makers of the Cormorant helicopter. The award, which recognizes the heroic efforts of search and rescue professionals, will be presented annually to the helicopter crew who performs the most demanding rescue operation within Canada's area of responsibility. The honour can be awarded to either civilian government or military helicopter crews and they do not have to be flying the Cormorant EH101.

The selection committee is comprised of 1 CAD HQ, Transport Canada, the National Search and Rescue Secretariat, the Helicopter Association of Canada and Agusta-Westland / EHI Industries.

The crew of Maj. Gilbert Thibault, Aircraft Commander, Capt. Andrew Mercer, First Officer, Master Cpl. Rob Vidito, Flight Engineer, SAR Techs Sgt. Emilio Dechantal, Master Cpl. Dave Cooper and Cpl. Scott Elliston were presented the award during the National Search and Rescue Exercise (SAREX O3) held in Gander, Nfld. from Oct. 1-4, 2003. Photo by Cpl. Bill Parrott

"We gave (the trophy) to the Chief of the Air Staff as his gift because Canada had no award to recognize the efforts of a crew," said Jeremy Tracy, Chief test pilot and Director of operations in Canada for Team Cormorant. "Canada has a tremendous background in search and rescue and they have set themselves up as world leaders."

"This rescue demonstrated an outstanding piece of airmanship for all five crew members, required extraordinary leadership skills, tremendous crew coordination, judgment and courage," said Lt. Col. Smith, A3 SAR, 1 CAD.

The award is greatly appreciated by the search and rescue community. "This recognition goes a long way," said Master Cpl. Vidito. "It is nice to get recognized. If Canada really knew what search and rescue did, they would be amazed."

Lt. Faubert is with 1 Canadian Air Division Public Affairs.

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he goal of 'Seamless Search and Rescue' moved another step closer with the completion of a multi-jurisdictional exercise in Toronto Harbour, October, 2003. Ten agencies took part in a simulated incident involving a crash of a commuter plane on descent to Toronto Island Airport.

The event was co-ordinated by the Canadian Coast Guard, Central and Arctic Region, the Metro Toronto Police Marine Unit and the National Search and Rescue Secretariat. Planning began over two years ago but was delayed, giving the team the advantage of being able to increase the number of agencies, add to the complexity of the incident and broaden the objectives.

THE EXERCISE

On the morning of September 20, four packages are placed on a commercial flight to Toronto Island Airport. The packages contain a small amount of explosives with an altimeter detonation device set to explode when the aircraft descends through 500 feet on its final approach to the airport. The flight crashes into Humber Bay in Lake Ontario at 10:10 Eastern Time, with 20 people and 1,000 pounds of fuel on board. The Toronto Island Airport is the first to hear about it and they make immediate calls to both the Joint Rescue Co-Ordination Centre (JRCC) in Trenton, Ontario and to the Toronto Police Marine Unit.

The exercise tested SAR interoperability in a number of key areas: medical and triage capabilities; interaction between federal, provincial and municipal agencies; communications capabilities; and emergency preparedness plans for the various agencies within the Greater Toronto Area.

Preparations began early Saturday morning at HMCS York, on the Toronto waterfront, with casualty simulation and briefings on their injuries. Volunteers, paramedic students from Humber College, were transported to a life raft at the crash site. While this was taking place, exercise protocols and the timeline were being finalized with participating agencies. Vessels not taking part were marked as observers, and equipment and weather conditions were checked.

About two kilometres away, the Canadian Coast Guard vessel, CRG 100, was engaged in a towing exercise with the Canadian Coast Guard Auxiliary vessels, the GAMRU, TINKER, TOWARF and SARAH ASHBRIDGE. The auxiliary vessels were unaware that they would be taking part in the SAREX, although they suspected that

Agencies involved in the exercise

- Canadian Coast Guard, Central and Arctic Region
- · Canadian Coast Guard Auxiliary
- · Department of National Defence HMCS York
- Global News
- JRCC Trenton
- Metro Toronto Emergency Medical Services
- Metro Toronto Fire Rescue Marine Unit
- · Metro Toronto Police Marine Unit
- · National Search and Rescue Secretariat
- Peel Regional Police Marine Unit

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Getting ready for the mock plane crash: dummies are loaded into vessels to be taken to the scene.

some larger scenario was about to unfold. While the towing exercise was in progress, a call was made to JRCC Trenton that a plane had crashed into Humber Bay. The CRG 100 was tasked to head to the scene with the Coast Guard Auxiliary vessels following close behind. Metro Toronto and Peel Regional marine unit vessels were also deployed and a command post was simulated at HMCS York, staffed by the Canadian Forces Naval Reserve.

As part of the exercise, the Captain of the CRG 100, who was at this point considered to be the on-scene co-ordinator, was stung by a bee causing a strong allergic reaction. He needed medical attention from a paramedic and had to be evacuated from the scene.

The National Search and Rescue Secretariat, in partnership with the other federal agencies, is preparing a multi-jurisdictional exercise plan for the next three to four years. Anyone with ideas for exercises should contact Bryan Finney at (613) 996-7163 or bfinney@nss.gc.ca. A report of this exercise will available online at www.nss.gc.ca in January 2004.

THE OUTCOME

The exercise identified the need for standard radio equipment and channels, and the assurance that all agencies could communicate with a central command as well as each other. Loss of contact, different frequencies and static interference created inefficiencies and delays. Other recommendations dealt with protocols and procedures such as the need to standardize triage protocols and to have standard training programs in search and rescue for all SAR partners, including provincial and municipal agencies that respond to air and marine incidents.

As for the Captain who was stung by a bee, the Canadian Coast Guard Auxiliary crew member reacted quickly with appropriate procedures and executed a flawless evacuation.

Table-top exercise focuses on cruise ships

ruise ship traffic in the inside passage of the coast of British Columbia has increased over the past few years, increasing the potential for a large scale search and rescue operation. To assess the level of readiness and identify any interoperability deficiencies in the event of such a disaster, Federal SAR Departments, Provincial and Municipal agencies responsible for emergency response including SAR, and representatives from the cruise ship industry, held a table-top exercise in Prince Rupert, British Columbia on October 30, 2003.

Scenario: An explosion takes place in the engine room of a large cruise ship carrying 1900 passengers and crew in clear weather. Smoke is carried throughout the

ship, and the Captain has asked that the ship be evacuated. Passengers and crew have mustered at the lifeboat station and a number of people have suffered injuries.

Resources: Four Coast Guard vessels and one Coast Guard Auxiliary vessel are in the vicinity and tasked to respond, along with two other vessels. A Canadian Forces Cormorant and Buffalo are also tasked as well as USCG aircraft. Agencies located within the town of Prince Rupert are notified and begin preparations for evaluation, treatment, identification and overall well being of the cruise ship passengers and crew.



A report on the exercise will be available on the National Search and Rescue Secretariat's website at www.nss.gc.ca in January 2004.

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Gander SAREX: Farewell to the Lab

by Lt. Jennifer Faubert

his year's National Search and Rescue Exercise (SAREX 03) presented one of the last opportunities to see the CH-113 Labrador flying alongside the CH-149 Cormorant. It was the Cormorant's first such exercise and the Labrador's last.

This year's competition, held Sept. 29 to Oct. 5, was hosted by 9 Wing Gander and 103 Search and Rescue Squadron. Over 200 SAR Techs, military personnel, aircraft crew and members from the Civil Air Search and Rescue Association (CASARA) were on-site taking part in competitions, judging or attending meetings on search and rescue issues throughout the week.

"It was wonderful news when we heard that the folks at 424 Squadron were bringing the mighty Labrador to the competition," said Lieutenant-Colonel Peter McKeage, 9 Wing Commander. "What a treat for all of us who flew her and how appropriate that the last SAREX for the 'old girl' will be here in Gander."

Although weather put a damper on some of the competitions, and the scheduled fixed wing aircraft were unable to participate, the exercise met its objective to provide a venue for the standardization and evaluation of operational search and rescue techniques and procedures utilized by the Canadian Forces.

"Search and rescue is a bad weather job and this seems to be holding true for this competition," said Master Corporal Derek Rogers, 103 Search and Rescue Technician and winner of the SAR Technician of the Year award. "However, there were still a lot of events going on which highlighted various aspects of search and rescue."

National SAREX provides an excellent opportunity for members of CASARA, an integral part in search and rescue to hone their skills.

Next year's SAREX will be held in Comox, B.C. ■

Lt. Faubert is with 1 Canadian Air Division Public Affairs.

103 Squadron of 9 Wing Gander captured with the Diamond Trophy award for the best overall performance at the National SAREX in Gander last October.
Photo by Cpl. Bill Parrot

Arctic SAREX 03:

Simulated search for lost astronauts demonstrates teamwork

by Capt. Dave Muralt

Fifteen members of Canada's Air Force took part in the annual Arctic Search and Rescue Exercise hosted this year by the Russian Federation at Gelendzhik, Russia, from Sept. 10 to 12.

Arctic SAREX 03 is the 10th in a series of Canadian, American and Russian military efforts to improve combined search and rescue (SAR) capabilities to respond to major air disasters and major searches.



Master Cpl. Bill Clouter, a SAR Tech of 444 Squadron in Goose Bay, Labrador tends to a victim. SAREX events included rescue, maintenance, medical and search events. SAR Techs also participated with a parachute jump camp using the new CSAR-7 parachute.

Photo by Cpl. Bill Parrott



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"The Arctic SAREX program is an important series of exercises for us, " said Major-General Marc Dumais, Commander of 1 Canadian Air Division. "Not only does it promote understanding between Russian, American and Canadian Forces, it also provides a venue for each nation to observe the others' SAR procedures and equipment and to demonstrate their own."

In a departure from what has become the normal theme of the Arctic SAREX series, this year's training scenario involved the rescue of three astronauts from the International Space Station who have made an emergency water landing in a Soyuz spacecraft (Russian spacecraft normally make dry-land touch-downs).

The Canadian contribution included members from: 442 Squadron (Sqn) in Comox, B.C., 424 Sqn in Trenton, Ont., 413 Sqn in Greenwood, N.S., 435 Sqn in Winnipeg, Canadian Forces School of Search and Rescue in Comox, 1 Canadian Air

Russian, Canadian, and U.S. team members carry a "victim" to a waiting aircraft for evacuation. Photo by Maj. Mike Haller

Division Headquarters in Winnipeg and two translators from Ottawa for a total of 17 personnel.

In Canada, aerial search and rescue is the mandate of the Canadian Forces. Hundreds of Canadians are rescued by Air Force search and rescue personnel every year from coast to coast.

Capt. Muralt is a Public Affairs officer with 1 Canadian Air Division.



NEW SAR INITIATIVES FUND

PFD loaner program gains momentum

ponsored by the Department of Fisheries and Oceans (Canadian Coast Guard) and funded by the New SAR Initiatives Fund (NIF) in 1997-98, the Northwest Territories personal floatation device (PFD) loaner program was developed to increase the awareness and use of PFDs in Eastern and Western Arctic communities.

This program targeted the Arctic communities where high drowning rates and limited access to PFDs were dominant problems. Through this project, PFDs suited to the Arctic culture and environment were made available to residents free of charge. A sign-out sheet was filled out first, and when the user returned the PFD, they would then fill out a brief questionnaire designed to measure user attitudes toward the borrowed product.

When NIF funding was completed in 1999, it was apparent this project had made an impact on the communities. Not only was there a noticeable increase in the use of PFDs in participating communities, but several wanted to take over the program once NIF funding ended. Canadian Coast Guard's Office

of Boating Safety saw this as a positive step toward changing attitudes related to the use of PFDs.

Not only is this project successful in the Arctic, but it is gaining momentum in Newfoundland and Labrador as well. The PFD loaner program is available to residents in the Northern Labrador communities of Nain, Hopedale, Postville, Makkovik and Rigolet. For more information on the PFD loaner program in these communities, contact the **Department of Fisheries and Oceans** in Newfoundland and Labrador at (709) 772-7633, or visit http://www.nss.gc.ca/site/ newSARInitiatives/NIFReport1999-2000/ fisheriesOceans e.asp#an02.

Project number: DFO 22/97 ■

Ground SAR book translated into French

Wayne Merry's influential book called Basic Ground SAR in Canada: A Home Study Guide is being used all across Canada and is referred to as one of the best basic training reference books for ground search and rescue (GSAR). The book covers basic ground search and rescue topics ranging from map and

compass use, to first aid and evacuation plans and to modern search techniques used in the field.

Until this year, it was only available in English, but the Sureté du Québec, the project sponsor, recognized the need for Mr. Merry's book for French speaking GSAR groups. Sponsored by the New SAR Initiatives Fund (NIF), the translation project was approved in 2000 and the book is available for \$25 to SAR volunteers and \$30 for the public. For more information call (450) 974-1551. Wayne Merry is a ground SAR expert based in Atlin, B.C.

Project number: QC 1/00 ■

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Parks Canada sponsors new tidal atlas for sea kayakers

To reduce the number of sea kayak incidents in the Mingan Archipelago-Gulf of St. Lawrence area, employees of the Department of Fisheries and Oceans, Canadian Hydrographic Service, l'Organisme de prévention et de sécurité and sponsor, Parks Canada, created the Atlas of Tidal Currents on CD. With this atlas, sea kayakers will be able to anticipate and avoid dangerous tides, and hopefully reduce the number of SAR incidents and deaths.

A prevention and response program approved in 2001 and funded by the New SAR Initiatives Fund (NIF), the Atlas covers the Mingan Archipelago, between the islands of Aux Perroquets and La Grande Pointe, QC.

For each section the Atlas covers, there are 12 currents charts that show typical tides that occur every half day, or semi-diurnally. With the existing CD, currents are shown for any day between the years 2003 and 2007. Accompanying the Atlas is a mini-guide telling the user how to use the Atlas correctly and discussing tides typically found in the area.

Available in both French and English, the Atlas will be updated every five years and is available from Parks Canada.

Project number: PC 2/01 ■





Survey control point: Okak Bay, Labrador, July 2003.

Remote Sensing Shoreline for Northern Labrador

by Steve Forbes

Supported by the New SAR Initiatives Fund (NIF), this project addresses the serious lack of up-to-date coastal information on Canadian Hydrographic Service (CHS) charts, particularly from Nain, Labrador north to the Button Islands. The objective is to create shoreline provisional paper charts in Northern Labrador and investigate the production of electronic charts.

Project partners include the CHS
Atlantic Region, Department of Fisheries
and Oceans and the Surveys and Mapping
Division (SMD), Department of
Government Services and Lands,
Newfoundland and Labrador.

The aerial photography was collected with GPS positions for each frame and camera rotation was collected by an inertial measurement system. The photography is currently being scanned and in conjunction with the GPS ground control will be analyzed and processed digitally to produce accurate shoreline for the southern section of the project. An evaluation of the GPS controlled aerial photography will determine if it is possible to reduce the ground control density for next year's data collection.

It is anticipated that the collection of aerial photography in 2004 during the July and August will result in a larger volume of data and a reduced per kilometre cost for data collection.

Project number: DFO 10/03 ■

Multi-sensor imaging system improves aerial SAR



The enhanced low-light visible infrared surveillance system, or ELVISS for short, has been in development since the early 1990s, to help aerial SAR missions, especially at night and in low-visibility conditions. It brings low-light level television, infra-red and night vision goggles technology together in one effective system.

ELVISS is an optical multi-sensor surveillance system that helps SAR Techs locate people, aircraft and boats more efficiently than before. The system has a video tracker, laser range finder and geo-referencing to give accurate geo-positioning on the ground.

Developed by Defence Research and Development Canada (DRDC) and funded in part by the New SAR Initiatives Fund (NIF), the project began with an earlier version called ALBEDOS and has evolved into ELVISS, including the addition of an infra-red component. On its own, infrared is not enough to see or sense people in inclement weather, but with the new technology of the laser illuminator, call numbers on aircraft can be seen quite clearly at night and in bad weather.

DRDC is working on a newer version of ELVISS called SPARTACUS that will improve the mounting unit of this multi-sensor technology on aircraft to increase accuracy and efficiency.

Project number: DND 2/00 ■

For more information about these projects, go to

www.nss.gc.ca/site/newSARInitiatives/index_e.asp with the project number.

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Parks Canada hosts two table-top exercises

Two separate table-top exercises hosted by Parks Canada this past September in Cape Breton Island, allowed different agencies to explore issues of interagency cooperation. Representatives from Nova Scotia Emergency Measures Organization, ground SAR volunteers, the local fire department, RCMP, regional police department, Parks Canada, emergency health services and the National Search and Rescue Secretariat, worked together to improve communications and interoperability during the two different scenarios.

The first mission was a simulated rocky shore rescue where the participants discussed issues concerning jurisdiction, efficient interagency cooperation, media inquiries and briefings, legal issues, efficient radio communications and more. The second rescue, on an inland, mountainous slippery slope, focused on communications, shared resources, roles and responsibilities of each participating agency.

Participants felt the table-top exercises improve interagency understanding of the responsibilities and knowledge of each agency. These table-tops should be followed by multi-jurisdictional live exercises within the next two years.

Canadian Safe Boating Council recognition awards

At the Canadian Safe Boating Council's (CSBC) annual symposium in Longueuil, Québec last September, eight awards honoured efforts to increase boating safety in Canada.

- Lynda Zkrewski received a Certificate of Service for her time as Director of the CSBC.
- Luba Goy, Loreena McKennitt and members of the Canadian Coast Guard Auxiliary received Certificates of Appreciation for supporting safe boating efforts.
- Certificates of Merit were given to Irwin Doxsee, Michael Vollmer and Ted Rankine for their involvement with the CSBC.

 Catherine Sandiford, past director of the CSBC, received the Distinguished Service citation for her work with the Canadian and National Safe Boating Councils and the Canadian and U.S. Coast Guards.

Provincial support for a national avalanche centre

The British Columbia government announced in its *Public Avalanche Safety Review* in October 2003 that it would commit \$125,000 annually for the next three years to support public avalanche awareness and education in B.C.

The report calls for the Canadian Avalanche Association (CAA) to operate a National Avalanche Centre that would coordinate and deliver avalanche awareness and education across Canada. A federal-provincial-private sector partnership would provide funding for core services. Until now, the CAA has relied on private sector donations and sponsors to pay for public safety programs.

Follow up action is currently being considered by the governments and agencies involved. ■

New SAR Skills Handbook

The new Emergency Response Institute (ERI) Canada's SAR skills handbook has been written to provide details on the latest search techniques, information on tracking, survival, emergency medical care, as well as duties and tasks to new and experienced field responders. The handbook is available through ERI Canada and costs \$24.99 each, with a reduced price of \$21.75 for orders of 10 books or more. For more information, call (403) 721-2121. ■

New portable water safety campaign in Québec

After years of observing boater activities and behaviour, a new campaign has been developed to deliver prevention messages and reduce boating risks, called INFEAU.

The main feature of the INFEAU campaign is its specially built portable and

inflatable dock that can be anchored where boat traffic is dense or hazardous. This floating dock will have information on local boating hazards and safety and will provide bottled water and other amenities supplied by sponsors and supporters.

The point of the floating dock is to inform, educate and train boaters. For more information, contact Vahe T. Vassilian, Project Coordinator, at (514) 288-7622 or info@marcart.ca

New Canadian Directory of Emergency Services

The first National Directory of Emergency Services, now available from

EmergencyServices.ca, offers free services to the emergency services industry such as forums, hosting, e-mail and galleries. The Directory lists contacts for police, fire and EMS service in Canada. A corresponding 36-page spiral bound book also includes resources such as Canadian Forces Bases, Provincial Emergency Measures Organizations and the Office of Critical Infrastructure Protection and Emergency Preparedness offices throughout Canada. The book is available from EmergencyServices.ca, PO Box 2545, Lac La Biche, Alberta TOA 2CO for \$29.13 including GST and postage, and volume discounts are available.

Harry Strong receives Order of Canada

In August 2003, The Right Honourable Adrienne Clarkson, Governor General of Canada, announced the



appointment of Canadian Coast Guard Auxiliary (CCGA) Chief Executive Officer Harry Strong to the Order of Canada. This is the highest honour for lifetime achievement in Canada. Since the creation of the CCGA in 1979, Mr. Strong has dedicated a great deal of time and energy to saving lives and improving boating safety. As Chief Executive Officer, Mr. Strong is responsible for planning, training and 15

establishing programs for search and rescue and boating safety, and has been instrumental in earning for the CCGA an outstanding reputation as one of the best life-saving operations in Canada.

SAR Mission Management System wins award

Capt. Rob Mulholland of 1CAD, Canadian Forces, was presented with the Agatha Bystram award for leadership in information management in November at the Museum of Civilization in Gatineau, QC. Capt. Mulholland is recognized for his dedication and extensive work done to bring the SAR Mission Management System online. Agatha Bystram (1934-1994), past director of library services at Environment Canada, was a pioneer in the management of federal information. This award is intended to encourage continued progress by recognizing other innovators in information management.

Lifesaving Society's 2003 **National Drowning Trends** Report Released

The Lifesaving Society's 2003 National Drowning Trends report profiles drownings and water-related fatalities in Canada from 1996 to 2000, the most recent years for which statistics are available. The report examines the statistics of who, when, where and why of drowning. According to the report, the number of drownings has been decreasing since 1997, attributable to drowning prevention initiatives. For more information or a copy of the report, visit

www.lifesaving.ca and click on *Publications*. Labrador helicopters from 424 Squadron, Trenton, took flight together for the first time this past October.

With the upcoming retirement of the Labrador helicopters, this was also the last time it would be possible to have all six serviceable at the same time, as three are scheduled for permanent storage.

The six Labradors, accompanied by a Cormorant, taxied to the runway, took off to hover and then one-by-one, departed the hover and flew one common circuit around the airfield.

Six Labradors take historic flight

It was a once in a lifetime moment for search and rescue when six



Upcoming Events

Shephard's SAR 2004

March 2-3, 2004, Brighton, United Kingdom www.shephard.co.uk/exhib/sar_04/

International Boating and Water Safety Summit

April 18 -21, 2004, Panama City Beach, Florida 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/ cfp_form.asp

Washington State Search and Rescue Conference

May 21-23, 2004, Cascade Peaks Resort and Campground in Randle, Washington www.co.lewis.wa.us/Sheriff/sarconference.htm

Canadian Hydrographic Conference May 24-27, 2004, Ottawa, Ontario

www.chc2004.com/main.php

National Association for Search and Rescue (NASAR) SAR 04 Conference June 2-5, 2004, Lansdowne, Virgina www.nasar.org/?s=news&id=66&c=2

SARSCENE 2004

October 13-16, 2004, Calgary, Alberta 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

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