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The Canadian Forces and Canada's Northern Strategy

JULY 2011



National Défense Defence nationale



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Canada's Northern Strategy

A number of articles in this issue of *The Sentinel* reference Canada's Northern Strategy. Read the complete document at: www.northernstrategy.ca

On the cover

Canadian Ranger Davidee Kooneeliusue was the main ice guide for 1 Patrol of the 1st Canadian Ranger Patrol Group performing patrols on Ellesmere Island, Nunavut, during Operation NUNALIVUT 2009.

Visit our website!

Be sure to visit the Canada Command website at www.canadacom.forces.gc.ca. New stories are regularly posted to the site, featuring what the men and women of the Canadian Forces are doing to protect Canadians and to defend North America.

THE SENTINEL

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COMMANDER'S MESSAGE

Our commitment to the North

Some call it juggling, others call it multi-tasking. At Canada Command, we just call it another day at the office as we conduct operations throughout North America while, at the same time, improve the Canadian Forces' capability to meet the safety, security and defence needs of Canadians here at home and across the continent.

As the cover of this issue of *The Sentinel* suggests, one area in which we are focusing is the North, where there are some important developments of note (read on!). But Spring 2011 was also punctuated with more immediate concerns of another focus area — our most important one: Canada First – Safeguarding the Nation.

No Canadian could have escaped the news of what $\overline{9}$ was occurring in Canada this spring, and the fact that $\overline{8}$ natural disasters frequently straddle our common border with the United States.

In Quebec, a high level of winter snow in the northeast United States melted which, coupled with seasonally high rainfall, pushed the water levels in Lake Champlain to a new record.

Lake Champlain drains to the North, across the Canadian border into Missisquoi Bay and the Richelieu River. Shorelines on the Richelieu River from the border to more than 60 miles to the north, experienced water levels not seen in more than 150 years.

In the space of 72 hours, more than 3,000 homes were flooded and evacuation orders were issued to 1,000 people. Within days, local authorities struggling to protect homes and lives against a rising river that surpassed their ability to contain it, requested assistance from the Canadian Forces (CF). Within 8 hours of receiving the provincial request, we had personnel and equipment arriving in Montérégie. Within 24 hours, more than 500 soldiers were assisting in evacuating people and erecting flood defences.

In the West, both the Red River flowing north to Canada and particularly the Assiniboine River, which flows west to east, experienced record flood levels, in places more than seven metres higher than the summertime normal. About 1,600 homes were evacuated because of flooding and the closure of more than 700 roads, compromising safe road access to dwellings. Some 500 square kilometres of land were affected and by May 8, the province called for assistance from us. More than 1,500 Regular and Reserve soldiers deployed from as far away as Edmonton and Halifax to provide much needed assistance.

Compounding the challenges, communities in Saskatchewan were threatened by significant wildfires, one of which required CF assistance to evacuate by air.

Whether juggling or not, these were balls that Canada Command could not afford to drop. While most Canadians were aware of these events, what they didn't see was the 24/7 leadership, planning, guidance and operational direction



LGen Walter Semianiw (left), Commander of Canada Command surveys the impact of flooding during an overflight of the area near Portage la Prairie, Manitoba, on May 11, 2011, with BGen Paul Wynnyk, Commander of Joint Task Force West, during Operation LUSTRE.

provided by Canada Command through its subordinate Joint Task Forces in Quebec and the West.

Meanwhile, as much of this issue of *The Sentinel* reveals, we continue to work closely with our security partners in Canada, not only in response to these incidents, but also in paving the way forward to improving how we work together in the North. This reflects the Government's renewed emphasis there and our own efforts to visibly shape, guide and direct CF activities in the North, including preparing for and conducting Operations NUNALIVUT, NUNAKPUT, and NANOOK.

Of note, an initiative that impacts all National Defence and CF organizations that operate in the North, is the joint directive to guide CF activities there, issued in April 2011 by General Walter Natynczyk, Chief of the Defence Staff and Mr. Robert Fonberg, Deputy Minister of National Defence. The directive details general responsibilities and tasks to Defence organizations and agencies, all the while acknowledging that while other federal departments have lead responsibilities in many areas, even they will often draw upon the capabilities of the CF. This new strategic document will guide us in developing the plan to enhance the way the CF operates in the North.

We should expect to see many new initiatives in the months and years ahead about our work in the North, and this issue is designed to give some insight to what is in store.

Protegimus et Defendimus "Protect and Defend"

Walter Semianiw

Lieutenant-General Commander, Canada Command

RECENT EVENTS

A busy spring

Throughout the Spring of 2011, Canada Command and its Regional Joint Task Forces were involved in numerous operations and activities aligned with the Command's four focus areas: Canada First — Safeguarding the Nation; the North; enhancing relations with our United States partners; and Western Hemisphere security, with an emphasis on Mexico.

Whether it was conducting counternarcotics operations off the coasts of Central America as part of an international Joint Inter-Agency Task Force; filling sandbags in the fight against floods in Manitoba and Quebec; evacuating the citizens of homes threatened by wildfires in Saskatchewan; keeping the highways of British Columbia free of avalanches; conducting search and rescue missions throughout the country; or conducting patrols in the high Arctic, the Canadian Forces employed by Canada Command have been busy helping Canadians all across the country this Spring.



CF air-evacuates fire-threatened areas in Saskatchewan

The Canadian Forces completed a major search and rescue (SAR) operation in northern Saskatchewan in early June 2011. Canada Command deployed four CC-130 Hercules aircraft and four CH-146 Griffon helicopters to assist in the evacuation of residents of Wollaston Lake and Hatchet Lake. The Commander of Canada Command initiated the major SAR mission when it became apparent that an immediate response to the crisis was needed. This was part of a Government of Canada response to a request for assistance from the Province of Saskatchewan after wildfires threatened the region.

OPERATION LOTUS CF assists Montérégie during spring floods

On June 17, 2011, Canada Command and the Canadian Forces (CF) completed Operation LOTUS, a 45-day flood relief operation in support of the people of Montérégie, Quebec, which began May 4. At its peak, Op LOTUS involved more than 840 Regular and Reserve Force personnel from the Navy, Army and Air Force, who assisted some 15 communities affected by the flooding of the Richelieu River. CF tasks included: repairs to the Baie-des-Anglais and Ste-Annede-Sabrevois dikes; assistance to civil authorities with the voluntary evacuation of affected residents;



and providing more than 224,000 sandbags, which were used to protect essential municipal infrastructure and access roads. More than 835 private residences were also protected from further flooding as a result of these efforts.

LGen Walter Semianiw (left), Commander of Canada Command, Defence Minister Peter MacKay (front centre), and Jean-Yves Perras (right), assistant fire chief of Saint-Paul-de-l'Île-aux-Noix inspect flood damage in Saint-Blaisesur-Richelieu during Operation LOTUS.

Prime Minister Stephen Harper (centre) and the Premier of Manitoba, Greg Selinger (right) are briefed on Operation LUSTRE, the CF response to the flooding in Manitoba, on May 11, 2011 at Southport Aerospace Centre, Portage la Prairie, Man. Also seated are LGen Walter Semianiw, the Commander of Canada Command (left) and Mr. Wayne Wouters, the Federal Clerk of the Privy Council. Standing, is Mr. Don Norquay, Deputy Minister of Water Stewardship for Manitoba.



A historic bilateral meeting between Canadian Forces and Mexican Armed Forces leaders in Ottawa on May 26-27, 2011. From the left: Capitán de Navío Jaime Herrera Romo (SEMAR), Contraalmirante Luis Gerardo Alcala Ferraez (SEMAR), Major-General John Collin (Canada Command), General Brigadier Guillermo Almazan Berttoto (SEDENA) and Coronel Omar Diaz Alcaraz (SEDENA).

Canada Command hosts historic Canada-Mexico military staff talks

The first formal bilateral staff talks between Canadian Forces leaders and leaders of the Secretaría de la Defensa Nacional (SEDENA) and Armada de México (SEMAR) of the Mexican Armed Forces took place in Ottawa, on May 26-27, 2011. The event was hosted by Canada Command, which continuously monitors threats and hazards with its North American security partners across the Western Hemisphere, to defend Canada and protect Canadians. The meeting focused on identifying areas that the militaries of Canada and Mexico could best work together in a bilateral relationship.

OPERATION LUSTRE Flood relief in Manitoba

On May 9, 2011, Canada Command deployed Canadian Forces (CF) personnel and equipment on Operation LUSTRE, a joint CF response to a request by the Province of Manitoba for assistance in controlling flooding on the Assiniboine River between Brandon and Winnipeg. The humanitarian relief mission incorporated CF Navy, Army and Air Force assets, and more than 1,600 Regular and Reserve Force CF

members were tasked to the affected areas at the operation's peak. CF equipment on Op LUSTRE included heavy-lift trucks, inflatable Zodiac boats, rubber-tracked utility vehicles, and fixed and rotary wing aircraft.



OPLOSTRE

Prime Minister Stephen Harper walks to a CF Griffon helicopter from 408 Squadron before surveying Manitoba floods during Op LUSTRE.

Canada Command increases focus on counter narcotics activity in the Americas

Lieutenant-General Walter Semianiw, Commander of Canada Command, represented Canada at the 2011 Central American Security Conference in San Pedro, Belize on May 4-5, 2011. The conference focused on strategies, objectives and cooperative solutions to counter the illicit trafficking of drugs, humans and weapons in the Americas. It was co-hosted by United States Southern Command and the Belize Defence Force. Leaders and defence officials from Colombia, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, Mexico and Panama were also in attendance. Canada Command's participation was part of its ongoing strategy to counter the spectrum of defence and security threats in the Western Hemisphere.

THE ARCTIC INTEGRATING CONCEPT

Identifying the Canadian Forces' Future Arctic Capabilities

chalhe lenges and issues facing Canada in the North are well known. The opening of the Northwest Passage to navigation, increased transpolar commercial airline flights, economically viable and economically necessary access to a host of natural resources, hazards related to environmental concerns. unregulated development and illegal activity are all areas that need attention.

To address these issues, the Government of Canada is moving forward with an integrated Northern Strategy that seeks to help Northerners achieve their full potential within a strong and prosperous Canada.

To help meet the Canadian Forces (CF) responsibilities under the Northern Strategy, National Defence's Chief of Force Development published the "Arctic Integrating Concept", a docugrating Concept", a docutegic framework to guide force development activities for CF Arctic capabilities during the next 10 to 15 years.



cise of Arctic sovereignty; providing a response capability to an emergency or crisis; providing support to organizations charged with enhancing stewardship; enforcing laws and providing key services in the North; and contributing to the development of international collaboration in the Arctic.

To carry out these activities within the intent and scope of the Northern Strategy, the Arctic Integrating Concept suggests the CF should focus its development activities for Arctic capabilities in five areas. These include: improved situational awareness; rapid deployment of forces to specific locations in the North: sustainment of larger forces in the North; generating forces that can effectively operate in the Arctic; and enhancing the CF's ability to integrate and work with other government departments and stakeholders within the context of a whole-ofgovernment, comprehensive approach. The whole-of-govern-

Master Seaman Marie Martel, a member of the Port Inspection Dive Team, adjusts the hot water intake hose as she operates the hot water saw, a device designed to cut though ice, during Operation NUNALIVUT 10.

Within the Arctic Integrating Concept, CF activities are captured under six broad but interrelated "ideas" to include: defending Canadian Arctic Territory; providing situational awareness for the government; contributing to a visible presence in the exerapproach are hallmarks of the Canadian approach to Northern challenges, and the Arctic Integrating Concept enables the CF to better align its future capabilities for the Arctic with those of other government departments and other stakehold-

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ment and comprehensive

ers to achieve a common approach to dealing with issues. The whole-of-government approach implies the mobilization of the government's resources across its breadth and depth, and to the scale necessary to achieve success. A broader application of this concept, which reaches beyond government, is being referred to as a comprehensive approach. This idea includes important advisors and non-government actors supplementing the inner groupings within government.

Canada Command is responsible for the conduct of all CF operations in the North. In support of the Northern Strategy, and in response to direction from the Chief of the Defence Staff, the Commander of Canada Command has identified improving CF northern response capability as a high priority.

Accordingly, Canada Command developed a concept to serve as a framework for employing and supporting CF operations in the North. The employment and support concept identifies objectives and focus areas to be examined in order to guide deliberate action and supporting plans, stressing the importance of readiness, persistent presence, enhanced maritime, land, air and space-based surveillance and timely intervention for search and rescue. The need to anticipate and prepare for requests for CF support to other government departments in the areas of humanitarian assistance and disaster relief, assistance to law enforcement agencies, and consequence management are of equal importance.

Derived from the employment and support concept, a plan will be developed to focus all related military plans for the North into a combined, joint, and integrated approach. The cornerstone is, of course, a whole-of-government approach, but the plan will also work towards a more wideranging engagement with military partners, particularly the United States. The comprehensive nature of this plan will also provide for cooperation with aboriginal governing bodies, non-government organizations, the private sector, and scientific and technological communities.

Although it is essential that the CF retain the capability to meet defence tasks, including those resulting from asymmetric threats, there will be increased emphasis on the capabilities required to meet safety and security tasks, where the CF will normally be in a supporting role to other government departments. Success will depend on being aware of what is going on, which demands extensive use of local knowledge through the maintenance and development of strong relationships with indigenous populations, and, in particular, ongoing reliance on the Canadian Rangers.

Whilst Canada was much heralded in the international community for its whole-of-government approach to its mission in Afghanistan, the Arctic Integrating Concept will ensure that those vital lessons learned will be applied to Canada's domestic theatre of operations, which has always been the number one priority for the CF and for Canadians as well.

From "Towards a Canadian Forces Arctic Operating Concept", published in the Spring 2011 issue of The Canadian Military Journal by Major Tony Balasevicius, a Canadian Forces officer who was a member of the team working on the Arctic Integrating Concept at National Defence Headquarters in Ottawa.



Within the Arctic Integrating Concept, CF activities are captured under six broad but interrelated "ideas": defending Canadian Arctic Territory; providing situational awareness for the Government; contributing to a visible presence in the exercise of Arctic sovereignty; providing a response capability to an emergency or crisis; providing support to organizations charged with enhancing stewardship, enforcing laws and providing key services in the North; and, contributing to the development of international collaboration in the Arctic.

> A Canadian Forces CC-177 flies over the Canadian Arctic. Since 2010, the CF has been able to operate this strategic aircraft from airfields across Canada's North, enhancing the Canadian Forces' capabilities.

THE SENTINEL

Operationalizing Canada's Northern Strategy

hile the CF has been active in the North for decades, a new directive issued jointly in April 2011 by Chief of Defence Staff (CDS) General Walter Natynczyk and Department of National Defence Deputy Minister (DM) Robert Fonberg has refocused the department's and the Canadian Forces' (CF) efforts in the North.

This focus on the North has been increasing since the 2007 Speech from the Throne gave renewed focus and prominence to the North, and this intent was made more explicit with the release of a Northern Strategy in July 2009. Subsequent budgets and Throne Speeches affirmed the government's commitment to the North and provided direction on priorities under the thematic areas of exercising Canada's sovereignty, protecting our environmental heritage, promoting economic and social development, and improving and devolving governance.

Aboriginal Affairs and Northern Development Canada, in partnership with other federal

partnership with other federal departments and stakeholders, is the government lead for implementation of the Northern Strategy. National Defence contributes to all the objectives, but primarily to the sovereignty pillar, through the implementation of

the Canada First Defence Strategy (May 2008).

The CDS/DM Directive for the DND/CF in Canada's North takes government-wide objectives and details explicit responsibilities and tasks to Defence organizations and agencies. The Directive acknowledges that other federal departments will very likely be the first responders in dealing with developing situations, incidents or Northern security issues, though they will often draw upon the capabilities of the CF to help fulfill their mandates.

A number of developments and new tasks are identified. Significantly, the directive designates the Commander of Canada Command as the Supported Commander. This means that while many other organizations within Defence will continue to have responsibility for activities in the North, this work, including its prioritization, will be increasingly coordinated, and departmental-wide activities will be shaped and guided by Canada Command.

The CDS/DM directive also notes that as the CF withdraws from its current commitment in Afghanistan, and as new capabilities announced in the *Canada First* Defence Strategy come on line, "the capabilities dedicated to operations in support of Canada Command's campaign plan for the region will increase from year to year."

In some respects, the document confirms a number of objectives that have long been the remit of Defence, including providing surveillance of land, air and maritime approaches in the Arctic; helping to exercise sovereignty; demonstrating a

The CDS/DM Directive for the DND/CF in Canada's North takes government-wide objectives and details explicit responsibilities and tasks to defence organizations and agencies.

That said, employing joint

capabilities in Canada's North to support the Government of Canada in achieving its national objectives for the region – in light of the increased level of activity there now and expected in the future – requires a significant departure from "business as usual". In this respect, the CDS/DM directive prescribes a number of tasks for various DND/CF organizations that will lead to the enhancement of certain military capabilities to operate in the North, some of the most notable of those improvements being to:





Corporal Tim Giles installs skis on a snowmobile in Fort Eureka, Nunavut, after unloading it from a CC-130 Hercules during Operation NUNALIVUT 09, which was conducted out of the remote installation on Ellesmere Island, Nunavut, in March and April 2009.

- heighten land, maritime and air domain awareness, in order that the CF can anticipate potential incidents, safety and security challenges, and improve its ability to rapidly and effectively react to a major air disaster, SAR and other contingencies;
- increase the frequency and size of routine deployments into the North;
- create the capability and capacity to surge and sustain forces into the region during contingency or crisis operations;
- increase the range of CF capabilities for potential use for defence tasks and whole-of-government security and safety tasks;
- plan to develop and field space capabilities in support of Arctic operations; and
- develop cultural awareness training for all planners developing operations for the North, and for commanders and forces employed in the North.

Subsequently, Canada Command developed a concept for the employment and support of the CF in the North that provides a framework for operations and support activities and is meant to guide ongoing and future planning, resource allocation, force generation, and capability development.



THE POLAR EPSILON PROJECT A new constellation in the skies

anada's Arctic region, which represents 40 percent of Canada's landmass, is experiencing increased traffic due, in part, to greater access to valuable natural resources and environmental changes. In this expansive, harsh, rugged and cold climate, the use of ground- or seabased sensors is sometimes limited, often difficult and frequently cost-prohibitive. With the all-seeing RADARSAT-2 eye in the sky, the CF is benefiting from all weather, full-year, day and night surveillance of its Northern frontier.

In keeping with the Government of Canada's Northern Strategy commitment to demonstrate our sovereignty in the North, the Canadian Forces Polar Epsilon Project is sharpening the CF's surveillance capability and wide-area maritime domain awareness over Canada's Arctic, ocean approaches and global areas of interest.

The Polar Epsilon Project is designed to obtain wide-area surveillance imagery from the Canadian Space Agency's RADARSAT-2 satellite, primarily for northern security purposes. Using dedicated CF ground stations, located on each coast, at Masstown, N.S., and Aldergrove, B.C., data from the RADARSAT-2 can be used to survey oil and water pollution, highlight suspicious presence, contribute to maritime domain awareness and precisely locate activities of interest.

RADARSAT-2 provides up-to-date information and near real-time imagery of huge areas. It's the world's leading, commercially available, earth observation satellite using synthetic aperture radar that generates surveillance of vast swaths of landmass at amazing speeds, from which data can be formatted and available in minutes. It can do this year round, which is of great interest to Canada because of the restrictions that the Arctic winter imposes on sea navigation. This exceptional situational awareness complements intelligence, surveillance and reconnaissance (ISR) gained through other military assets such as patrol aircraft, ships and unmanned aerial vehicles, and it improves the CF's ability to respond quickly to almost any imaginable situation.

The next phase of the Polar Epsilon Project will deploy a constellation of three RADARSAT-2 satellites in a polar orbit to provide near continuous coverage of Canada's North.

The Canadian Rangers A CF TOUCHSTONE IN CANADA'S REMOTE REGIONS

Sentinel Staff, with information from Joint Task Force North and the Canadian Ranger National Authority

all come from hev walks of life. Some are mayors, chiefs, teachers or businessmen, and some earn their keep off the land by hunting and fishing. They are of all ages and both genders; most are First Nations people - but many are not. But they all share some invaluable traits. An extraordinary knowledge and sense of the vast and rugged spaces of our land, primarily in the North but not exclusively so, as they are also found almost everywhere Canada has a coast line, from the West Coast, to the shores of Hudson Bay to the St. Lawrence Estuary to the shores of Newfoundland and Labrador. They operate in conditions that no reality show could emulate, where the weather is often cold, cruel and unpredictable, and where the land is often covered with snow and a cloaked in darkness, and inhabited places are few and far between. These are our Canadian Rangers whose over 4,000 members, scattered in patrol groups at over C 170 locations throughout Canada, provide a strategic resource to the Canadian Forces (CF) out of



Prime Minister Harper talks with a Canadian Ranger in Resolute Bay during Operation NANOOK 10.

all proportion to the investment in them, and who work on behalf of Canada and the CF but above all for love of country.

The Canadian Rangers were founded on May 23, 1947 to provide a permanent presence throughout the North and to assert Canadian sovereignty through surveillance, most often by means of sovereignty patrols. With 40 percent of our landmass in the territories, 162,000 kilometres of Arctic coastline and 25 percent of the global Arctic, Canada is undeniably an Arctic nation. Sovereignty across this vast expanse is not limited to air patrols or missions by Canadian Coast Guard and Navy ships, or periodic exercises by the Canadian Army, but also by Canadians patrolling on the land year round — often on snowmobiles, whose knowledge of the land can quickly discern if something is amiss. Aariak, Premier of Nunavut, delivered these praising words to the Canadian Rangers: "Each of you serves as the military's eyes and ears in the North, helping the Canadian Forces to defend our country and protect our national security. It is your knowledge of ways of the land, hunting, weather conditions and your endurance and strong surveillance instincts that make it all possible."

Operating as the eyes and ears of the Canadian Forces, Canadian Rangers can be counted on to provide military support in times of community crisis, to act as the advanced guard in the remote areas of the North, and to participate in several capability-sharpening operations and exercises conducted by Canada Command every year in the North.

"There are large parts of this country where we don't have a permanent Regular Force or Primary Reserve presence,"

Identified by their signature red sweatshirt and red baseball cap with a Ranger crest, Rangers help to advance the four pillars of Canada's Northern Strategy by enhancing sovereignty, protecting the environment, encouraging economic and social development and building confidence for the residents of the North to take on provincial-type responsibilities for land and resource management.

They achieve this by receiving important CF training, support and responsibility, and by demonstrating sovereignty through their presence and support in the North. They also work with other CF members across Canada, showing them the skills and ways of life that are unique to Northern environments and resources. This collaboration and knowledge-sharing by the Canadian Rangers enables the CF to ensure the safety, security and defence, as well as the environmental, social, economic and cultural protection of this isolated, exceptional landmass and its communities.

At a recent awards ceremony presided over by the Chief of the Defence Staff, General Walter Natyncyzk, the Honourable Eva



Canadian Rangers prepare for a patrol during Operation NUNALIVUT 11, which was held n the extreme environment of the high Arctic in and around Resolute Bay, Nunavut in April, 2011. A CC-138 Twin Otter aircraft $\frac{1}{20}$ from 440 Squadron, Yellowknife is in the background.

said Dr. Whitney Lackenbauer, associate professor and chair of the department of history at St. Jerome's University in the University of Waterloo. "The Canadian Rangers ensure that the Canadian Forces are well represented all across this country in all of its geographical and cultural diversity."

This is a mutually supportive relationship where the presence of the Canadian Rangers greatly helps the people of these communities and it also helps Canada Command to meet its objective to "Protect and Defend" all of Canada.

These important members of the Canadian Forces are not employed in combat or overseas operations. However, they have played key roles in the evacuation of several Aboriginal communities threatened by forest fires, tainted drinking water, spring flooding, avalanches and other domestic emergencies. The honed search and rescue skills of these Canadian Rangers have made the difference between life and death for the many people who go missing in this vast landscape.

Canadian Rangers take pride in serving their people as well, and their skills are supported and encouraged by the CF. "They're serving their country at the same time as they're serving their community," said Dr. Lackenbauer.

Canadian Rangers are provided with patrol-specific training that includes first aid, in-service weapons use, guiding or scouting, navigation using maps, compasses and global positioning systems, traditional and modern survival skills, operations in support of Regular Force units, basic military drills, surveillance, search and rescue, North warning system patrolling and patrol leadership, and administration.

Canadian Rangers are organized into Patrol Groups throughout the Land Force (Army) areas across Canadian Provinces and in Canada Command's Joint Task Force North. The patrol groups tend to be provincially oriented,

apart from 1 Canadian Ranger Patrol Group, which covers the whole of northern Canada above the 60th parallel. The patrols tend to be centred on remote communities and are frequently named after the town or village they are from.

Located mostly on the coast and in the north, the Canadian Rangers form 173 Ranger patrols in Canada, divided into five geographical areas defined as Canadian Ranger Patrol Groups (CRPGs). Each CPRG has a headquarters and a staff that is responsible for overseeing the Canadian Rangers and Junior Canadian Rangers in their respective area as follows:

1 CRPG is headquartered in Yellowknife, NWT, reports to Joint Task Force North (JTFN) and operates throughout Nunavut, Yukon Territory and the Northwest Territories;

2 CRPG reports to Land Forces Quebec Area (LFQA) and covers the entire province of Quebec;

3 CRPG reports to Land Forces Central Area (LFCA) and is responsible for Ontario;

4 CRPG reports to Land Forces Western Area (LFWA) and covers British Columbia, Alberta, Saskatchewan and Manitoba; and,

5 CRPG reports to Land Forces Atlantic Area (LFAA) and operates in Newfoundland and Labrador.

The Government of Canada has increased its emphasis on Northern sovereignty, placing a greater emphasis on the contributions of the Canadian Rangers. This recognition of the tremendous contributions the Canadian Rangers has resulted in a commitment to increase the size of this extraordinary force to 5,000 Canadian Rangers in 178 patrols by the end of 2012.



About the Canadian Rangers

Canadian Ranger Motto: Vigilans (The Watchers) **Canadian Ranger Mission:** The mission of the Canadian Rangers is "to provide lightly equipped, self sufficient, mobile forces in support of the CF's sovereignty and domestic operation tasks in Canada". **Canadian Ranger Tasks:** The National Canadian Ranger Task List is as follows:

- Conduct and provide support to sovereignty operations:
- Conduct, participate in and provide support to sovereignty and surveillance patrols and training in Canada;
- Conduct North Warning Site patrols
- Report suspicious and unusual activities;
- Collect local data of military significance;
- Conduct and provide assistance to CF domestic operations in Canada;
- Conduct coastal and inland water surveillance;
- Provide local knowledge and CR expertise (guides and advice);
- Participate in Search and Rescue (SAR) operations;
- Provide support in response to

CANADIAN RANGERS CANADIENS

natural or man-made disasters and humanitarian operations;

- Provide assistance to federal, provincial/territorial or municipal authorities;
- Maintain CF presence in the local community;
- Instruct, mentor and supervise the Junior Canadian Rangers; their work with the Junior Canadian Rangers Program, while not an "operational" task, does assist in achieving national goals through nation building and significantly improving the quality of life of young people in the most isolated areas of Canada; and
- Support or participate in events in the local community.

Their original focus on sovereignty and surveillance is still a priority; however, having proven time and time again their resourcefulness and capabilities the Canadian Rangers have easily grown into other domestic operations. Some significant examples of Ranger activities include routine SAR operations and significant contributions in disasters such as the avalanche at Kangiqsualujjuaq in northern Québec or the drinking water crisis in Kashechewan, Northern Ontario.

NORTHERN OPERATIONS

Joint Task Force North conducts three recurring operations every year to assist the Canadian Forces in continuing to demonstrate and develop capabilities to operate in the Arctic.

he Canadian Forces (CF) is doing much more than just showing the flag in Canada's North. In addition to maintaining a permanent presence and conducting numerous activities throughout the region at all times of the year, the CF conducts three major annual operations that are expanding the whole-of-government capability in the North.

The Canadian military has operated in the North since the days of the Yukon Field Force, which helped the Northwest Mounted Police maintain law and order during the Gold Rush of 1898. In the 1930s, the Royal Canadian Air Force began photo-mapping the North and expanded this aerial surveillance considerably in the 1940s as the Cold War started. Aerial surveillance continues to this day. In the late 1950s, Canadian Forces Station Alert was established on the northern tip of Ellesmere Island to collect signals intelligence. For 50 years, it has been the most northern permanently inhabited settlement in the world. In 1970, to more effectively

coordinate operations, Canada established a permanent military command in Yellowknife, N.W.T., with a view to treating the North as a single theatre of operations. This headquarters now has detachments permanently established in territorial capitals Whitehorse, in Yukon, and Iqaluit, in Nunavut.

With the *Canada First* Defence Strategy, calling for the CF to have the capacity to conduct daily domestic and continental operations in the Arctic, the Navy, Army and Air Force are each expanding their capabilities to better prepare for Northern operations under the command of Canada Command.

The Canadian Navy has been sailing further north, working with the Canadian and U.S. Coast Guards and allied navies, and recently visited Grise Fiord, Canada's northernmost community, during Operation NANOOK in 2010. The planned acquisition of six to eight ice-capable Arctic/Offshore Patrol Vessels will further enhance the navy's ability to conduct sea-borne surveillance operations in the Arctic during the navigable season, and on the east and west coasts

Canadian Forces Operation NUNALIVUT 11 included snowmobile patrols by the Canadian Rangers in support of Joint Task Force North operations in the extreme environment of the high Arctic in and around Resolute Bay, Nunavut.

Sgt Norm McLear



throughout the year. In addition, the Department of National Defence berthing and refuelling facility at Nanisivik, Nunavut, will help Canada maintain a sustained naval presence in Arctic waters during the navigable season.

While Canada's Air Force has been flying into the North for decades, in recent years it has been expanding its ability to operate most of its fleets of aircraft throughout the expanse of the North. The Forward Operating Locations (FOLs) at Inuvik, Iqaluit, Yellowknife and Rankin Inlet, permit strategic placement of aircraft and support personnel to ensure a ready and rapid response to any potential airspace threat. With an air-to-air refueling capability tested last summer during Operation NANOOK 2010, and the proven ability to land the strategic CC-177 Globemaster transport aircraft in the North, the Canadian Forces has more capability to operate in the North than ever before. During Operation NANOOK 2011, CP-140 Aurora sovereignty patrols will be augmented with satellite-based systems and unmanned aerial vehicles.

The Canadian Army has been active for decades in the Arctic, primarily through the Canadian Rangers program. Established in 1947, the the "eyes and ears" of the Canadian Forces in the North, provide a military presence in remote regions throughout Canada, including 58 Canadian Ranger Patrols in Canada's North. In 2007 four Arctic Response Company Groups based on the Primary Reserve and located in each of the southern land force areas were inaugurated and have been increasingly employed on Operation NANOOK.

Finally, NORAD also maintains the North Warning System, a series of 11 long-range and 36 short-range radars along the Arctic coast of North America. Tied in with other NORAD radars, the system forms a radar buffer zone 4,800 kilometres long and 320 kilometres wide that stretches from Alaska, across Canada, to Greenland, allowing NORAD to detect all approaching airborne activity.

Today, military responsibility for the North falls under Canada Command, which is responsible for the defence of Canada and North America. Headquartered in the nation's capital city, Ottawa, the Command oversees six Regional Joint Task Forces, which include Joint Task Force North (JTFN). Canada Command is also responsible for the overall effective operation of the federal coordinated maritime and aeronautical search and rescue (SAR) system and the provision of air resources in response to aeronautical and maritime SAR incidents thoughout Canada, including the North. Additionally, Canada Command is responsible for the Canadian Forces response to a major air disaster in the North, which will be exercised in Operation NANOOK 2011, and responds to other disasters or humanitarian crises as requested.

Reporting to Canada Command, JTFN, headquartered in Yellowknife, is responsible for CF operations in the North, Canada Command's single largest region. JTFN's role is to exercise Canadian sovereignty north of the 60th parallel, to coordinate and support CF activities in the North, and to provide liaison with the territorial governments and peoples of the three northern territories-Northwest, Yukon, and Nunavut. JTFN employs a wide variety of Canadian Forces resources throughout the North, including the Canadian Rangers of 1 Canadian Ranger Patrol Group, in a wide range of tasks and missions conducted at all times of the year. In addition, on behalf of Canada Command, JTFN conducts three recurring major sovereignty operations every year. While the precise objectives of each operation differ, they all share the same overarching purpose: to assist the CF in continuing to demonstrate and develop capabilities to operate in the Arctic.

OPERATION NUNALIVUT

Op NUNALIVUT, which means "land that is ours" in Inuktitut, is a joint operation that primarily employs the unique capabilities of the Canadian Rangers and 440 "Vampire" Transport Squadron.

In 2010 Canadian Rangers established an ice camp 90 kilometres north of Canadian Forces Station (CFS) Alert, Nunavut, the furthest north that the Canadian Rangers have ever conducted patrols.

In 2010 Op NUNALIVUT 10 demonstrated the ability of the Canadian Forces to operate in the most challenging and austere conditions in Canada. The operation was conducted along the most northern tip of Ellesmere Island, in the vicinity of CFS Alert, Ward Hunt Island, Alert Point, and out onto the Arctic Ocean. It featured an opportunity to conduct combined training with the Danish military's SIRIUS Dog Sledge patrol. It also assisted Defence Research and Development Canada (DRDC) scientists who were conducting research on the effects on human performance when operating in the high Arctic.

Op NUNALIVUT 10 also marked a number of firsts for the Canadian Forces. These included the first landing and takeoff of an Air Force CC-177 Globemaster III aircraft at CFS Alert, from a gravel and ice covered airfield and the first Combined Dive Team dive in the high Arctic, which was its longest sustained ice dive operation in CF history. In addition, the Arctic Response Company Group conducted concurrent training with the Canadian Rangers for the first time in the Arctic, while a team of nine Regular and Reserve Force signallers tested a new series of Iridium high frequency and satellite communication systems.

This Spring, as part of OP NUNALIVUT 2011, a 50-member force was deployed to Resolute Bay, Nunavut, to prove the concept of employing a light, scalable, mobile response team to provide emergency assistance, incident containment and command presence during a safety and security event in the North.

OP NUNAKPUT

Operation NUNAKPUT is an annual operation conducted in conjunction with the RCMP and other federal departments and agencies, with an emphasis on assistance to law enforcement agencies in the North, refining procedures for joint and integrated patrolling. This operation consists of two complementary elements: an exercise held in conjunction with the RCMP and an enhanced JTFN surveillance and patrol presence in the Western Arctic, specifically the Beaufort Sea from the Alaska border to Tuktoyaktuk and north to include the western portion of the McClure Strait and the Canada Basin; the Mackenzie River from Fort Providence to Inuvik, including the Mackenzie Delta; and, the Northwest Passage from Gjoa Haven to Sachs Harbour.

The primary focus of this operation is to conduct intelligence, surveillance and reconnaissance activities using CP-140 Aurora strategic long range patrol aircraft and CC-138 Twin Otter aircraft, as well as Canadian Rangers on the ground. Additional JTFN Command and Control and Intelligence resources support the RCMP and Department of Fisheries and Oceans (DFO) operations, which are an integral part of Operation NUNAKPUT. This operation allows the Canadian Forces and other government partners to gain detailed awareness of the landscape, environmental issues and resources available in the area as future pipelines, mining and oil and gas exploration activities are forecast for this section of the Western Arctic.

OPERATION NANOOK

Of the three major exercises, Operation NANOOK is Canada's premier whole-of-government Arctic Operation. OP NANOOK exercises sovereignty of Canada's North and provides a full spectrum, multi-dimensional response to challenging scenarios.

Operation NANOOK is planned by Canada Command and executed by JTFN. Operation NANOOK highlights interoperability, command and control, and cooperation with interdepartmental and intergovernmental partners in the North, including combined interoperability with international partners. In recent years personnel and equipment from the United States and Denmark have participated in portions of Operation NANOOK. This operation is used to refine joint capability, develop and test new capabilities, identify areas for improvement, and enhance CF joint doctrine to conduct Northern operations. It also serves to enhance relationships among partners (whole-of-government and other nations) to better enable them to effectively respond to emerging safety, environmental, security and defence issues.

Traditionally conducted in the Eastern and High Arctic, Operation NANOOK is a combined, joint and integrated operation that will be conducted this year primarily in the eastern Arctic in the vicinity of Resolute Bay, Nunavut including the Davis Strait, Baffin Bay and Lancaster Sound area.

In addition to sovereignty patrols and other military tasks, Op NANOOK 2011 will feature two scenarios for the wholeof-government exercise portion of the operation. A simulated major air disaster in the vicinity of Resolute Bay will involve representatives from approximately 17 federal, territorial and municipal departments and agencies, as well as private sector partners. The second scenario, based on a maritime incident near Strathcona Sound, will be led by the Canadian Coast Guard and supported by two Canadian Navy ships.

The Arctic is an essential part of Canada. With a commitment to maintaining a presence in the region and enhancing our capabilities to routinely operate in this often-inhospitable expanse, JTFN, in conjunction with the Canadian Rangers and the people of the North, continues to exercise sovereignty in the North.

Editor's note: DND and the CF define the North as beginning at 55 degrees North latitude. JTFN's area of responsibility begins at 60 degrees North latitude. Canada Command's other five Regional Joint Task Forces are responsible for the area of the North between 55 degrees and 60 degrees North latitude, in their respective regions.

Alliances Key to Search and Rescue in the North

By David Elias

A search and rescue technician comes in for a landing at Alert, Canada's most Northern permanently inhabited location, after a jump from 10,000 feet during Operation NUNALIVUT 10.

n May 2011, a crew member aboard a vessel in the icy waters of the Labrador Sea suffered severe head injuries. which required immediate medical attention. With a vast distance separating the crew from land, much less an emergency room, the ship placed a distress call to the Joint Rescue Coordination Centre (JRCC) in Halifax, which manages sea and air search and rescue operations in the region. The JRCC advised the ship's captain to steam towards the nearest medical facility in Greenland while air evacuation crews were mobilized. Greenland's status in the Kingdom of Denmark meant a Danish Navy ship, equipped with a helicopter, was in the region and JRCC Halifax contacted the Maritime Rescue Coordination Centre in Greenland to request support. This was approved without delay and in less than three hours of the initial call, the Danish naval helicopter transported the patient to hospital in Nuuk, Greenland, for treatment.

Despite visions of barren tundra and austere landscapes, the North isn't always a lonely place. In fact, a variety of allies and partners weave together their threads of goodwill and collaboration to create a strong Northern Search and Rescue (SAR) lifeline.

For decades, two sentinels of these barren reaches, the Canadian Coast Guard and the Canadian Air Force, have worked jointly in the North to monitor and coordinate responses to vessel and aircraft operators in need. Now, SAR coverage upwards of the 60th parallel may see further enhancement through continued collaborations with other partners.

For example, Canadian SAR personnel have been working to reinforce long-standing ties with counterparts in Alaska. A major rescue exercise involving a stranded cruise ship took place in spring of 2009 with representatives from Canada's Air Force and Coast Guard traveling to Alaska to observe how the United States planned its response to the scenario, and conducted casualty evacuation and tracking procedures.

"We spoke extensively with the U.S. commander and senior SAR officers on how they operate in the northern environment," said Major Don Paul, the Air Force officer-in-charge of JRCC Trenton, Ontario. "We also had the opportunity to visit the U.S. Air Force's 11th Rescue Coordination Centre in Anchorage to learn about their surveillance and rescue resources." Alaskan representatives from the U.S. Coast Guard and Air Force went to Halifax to attend an Arctic SAR conference later in 2009. This allowed further liaising between the two countries on Northern strategies and best practices with input from Canadian emergency measures organizations (EMOs) and volunteer groups.

"We're working more than ever to build our northern alliances," said Major Paul. "In addition to our efforts to strengthen ties with Canadian partners, our office is in regular contact with the U.S. Coast Guard District headquarters in Juneau, Alaska, on various northern issues."

This was exemplified when the rescue centres from Canada and the United States were in continual telephone contact regarding rescue and salvage operations for the cruise ship *The Clipper Adventurer* that ran aground near Kugluktuk, Nunavut, in August 2010. There is also regular joint coordination on searches for small aircraft that go missing between Alaska and Yukon Territory.

U.S. Air Force and Coast Guard personnel shared the skies with Canadian SAR crews at the Canadian Forces' National Search and Rescue Exercise (SAREX) in Whitehorse, Yukon, in September 2010. The annual event brought together military and civilian search and rescue units to engage in friendly skills competitions and to enhance the proficiency of participants in their SAR responses.

Around the same time, Canadian and U.S. coordinators with responsibility for SAR in the North made a continued commitment to cooperation during a visit by Rear-Admiral Christopher Colvin of the 17th U.S. Coast Guard District to Trenton's JRCC.

Although no major operations in recent years have required a bilateral SAR response, exercises involving the United States and Canada, as well as other countries such as Greenland and Russia, have been held over the past decade to enhance preparedness in the event of a major air or marine incident.

A Wealth of Allies

Canada is an active member of the Arctic Council, which has seen a surge of attention recently. Receding ice levels in the Arctic are allowing access to untapped resources and travel routes, resulting in increased international pressure to promote



cooperation and coordination among the Arctic nations.

On May 12, 2011, the Council signed an agreement on search and rescue in the Arctic which is historic insofar as it will be legally binding. The National Search and Rescue Secretariat (NSS), an autonomous arm's length organization within Canada's Department of National Defence, was directly involved with the Arctic Council during the structuring of the international SAR agreement. The NSS is responsible for developing and coordinating Canada's SAR policy in consultation with SAR partners, and will be managing the outputs of the agreement for the country.

International alliances, however, are only part of the northern search and rescue network. Canada's SAR system is linked to a committed complement of organized volunteers.

The Civil Air Search and Rescue Association (CASARA) is an outstanding example of such voluntarism. With thousands of members across Canada, CASARA, through provincial member organizations such as Sauvetage et recherche aériens du Québec, make immense contributions to air SAR, yet these groups are rarely exposed to the public spotlight.

In 2010, 12 CASARA member aircraft, along with dozens of CASARA spotters, assisted in a search out of Penticton, B.C.

The Canadian Forces (CF), along with partners such as CASARA, are continually exploring ways of further improving cooperation in the North. For example, private companies have previously contributed pilots and aircraft to assist in national search operations, but not under any formal arrangement.

"The Canadian Forces works to bring all assets to bear in our SAR efforts, and that means reaching out to non-military resources where necessary and appropriate to assist in responses," said Lieutenant-Colonel Lalande, officer in charge of search and rescue at 1 Canadian Air Division. "Commercial aircraft operators are often already located close to a distress call, and we're exploring ways of enhancing how commercial aircraft operators can respond and be compensated for their assistance in SAR."

In March 2010, representatives from the CF, CASARA and the Northern Air Transportation Association (NATA) – which represents Northern commercial aircraft operators – met in Whitehorse, Yukon, during the annual NATA conference, to advance their collaborative efforts in this regard. CF SAR Tech, MCpl Steph Clavette checks out a simulated casualty during Search and Rescue Exercise (SAREX) 2009 in Gander, Nfld.

CASARA members also regularly participate in the annual national SAREX event, as they did last year at Whitehorse, where they joined Canadian Forces, Canadian Coast Guard, U.S. Air Force and U.S. Coast Guard crews in September to hone their skills and standardize procedures through competitions and practices.

"Events like SAREX are a real coming-together of key players who are pivotal in SAR coordination," said John Davidson, president of CASARA National. "As we celebrate 25 years of volunteer operation, we are happy to train and compete alongside our partners and hope the momentum continues in northern collaborations."

Strength in Numbers

To augment the aeronautical and marine SAR sectors, the Search and Rescue Volunteer Association of Canada (SARVAC) provides ground search and rescue services. SARVAC is represented in every province/territory with more than 12,000 highly-trained volunteers.

Canada's SAR system is further reinforced by the Canadian Rangers, who lend added presence and vigilance to the country's sparsely settled Northern, coastal and isolated areas. With more than 4,000 members spread across the North, this Reserve component of the Canadian Forces has responded to aircraft crashes such as the search for a missing Bell 206 Long Ranger helicopter flying out of Clyde River, Nunavut, in August 2010.

Canada Command is responsible for Canadian Forces routine and contingency operations in Canada and North America, including oversight of air and maritime SAR. As part of the Canadian Forces, the search and rescue professionals in Canada's Air Force have access to a wide range of technology, aircraft and training. But this represents a fraction of the overall SAR system, which ties together the Canadian Coast Guard, emergency measures organizations, volunteer groups such as CASARA, and links with other countries.

With so many groups playing a role in saving lives, collaboration is the essence of Canada's SAR system as it continues to evolve to meet the demands of the North.

David Elias is a Public Affairs Officer with 1 Canadian Air Division Headquarters in Winnipeg.

MISSION PARTNERS

THE CANADIAN FORCES WILL CONTINUE TO WORK WITH STRATEGIC AND OPERATIONAL PARTNERS WHO ARE NECESSARY TO ACHIEVE A COMPREHENSIVE APPROACH TO DEFENCE, SAFETY AND SECURITY IN THE NORTH.



Canada's Chief of Defence Staff (CDS), General Walt Natynczyk (right) and Commander of NORAD and USNORTHCOM, United States Navy Admiral James A. "Sandy " Winnefeld Jr. travelled by snowmobile in the high Arctic during Operation NUNALIVUT 11. hen the residents of Resolute Bay welcomed participants in the Canadian Forces annual sovereignty operation last summer, they welcomed more than the Canadian military. Indeed, when everyone was finally assembled for the two major exercises that made up Operation NANOOK 2010, Resolute Bay was host to the Canadian Coast Guard, Public Safety Canada, Transport Canada, the Royal Canadian Mounted Police, Indian and Northern Affairs Canada, Environment Canada, Natural Resources Canada and Parks Canada.

"Collaboration is a huge part of what we do," says Lieutenant-General Walter Semianiw, Commander of Canada Command. "We work with many federal departments, the provinces, and municipalities. So it's

not only collaboration horizontally, but also vertically with government and nongovernment partners, as well as partners in the private sector, to ensure that Canadians get the support they need when they need it most."

During Operation NANOOK 10, for instance, the Canadian Forces worked closely with a range of other government departments in Exercise TALLURUTITT, which trained Canadian Rangers and community volunteers in fuel spill response skills such as beach cleanup, flushing and booming. The Canadian Coast Guard led the exercise, with participation of the local municipalities, the Government of Nunavut and a half-dozen federal government departments and the Canadian Forces.

In Exercise NATSIQ, the military component of NANOOK 10, the Canadian Forces engaged in sovereignty and presence patrolling with the US Navy, US Coast Guard, the

Commanding Officer, Her Majesty's Canadian Ship (HMCS) Montréal, Commander Real Brisson (right) welcomes aboard Commander Senior Grade, Anders Bloch Soerensen, Commanding Officer, Her Danish Majesty's Ship (HDMS) Vædderen during Operation NANOOK 10.

Canadian Coast Guard and the Royal Danish Navy.

In its concept for the employment and support of the CF in the North developed in 2011, Canada Command notes that the key to operational success in the North is being aware of what is going on and intervening quickly for search and rescue, humanitarian assistance and disaster relief, and assistance to law enforcement agencies.

By working together with its mission partners, the CF has greater situational awareness and improved response times, enhancing its ability to contribute to the Government of Canada's Northern Strategy.

INTERNATIONAL PARTNERS

In keeping with Canada's Arctic foreign policy to work closely with other Arctic nations, Canada Command and the Canadian Forces work with a number of international partners in the North, to protect Canadians and defend North America. The following are some of the partners from other countries who have contributed to successful CF Northern operations.

North American Aerospace Defense Command

The binational Canadian and American command that provides maritime warning, aerospace warning and aerospace control for Canada and the United States. Its mission is to prevent air attacks against North America, safeguard the sovereign airspaces of the United States and Canada by responding to unknown, unwanted and unauthorized air activity approaching and operating within these airspaces, and provide aerospace and maritime warning for North America.

U.S. Northern Command

Provides command and control for U.S. homeland defense efforts and coordinates defence support of civil

authorities. Its area of responsibility includes air, land and sea approaches and encompasses the continental United States, Alaska, Canada, Mexico and the surrounding water out to approximately 500 nautical miles.

Joint Task Force Alaska

Joint Task Force Alaska, a subordinate command of U.S. Northern Command, deters, detects, prevents and defeats threats within the Alaska Joint Operations Area.

United States Coast Guard

The U.S. Coast Guard is one of the five armed forces of the United States and the only military organization within the Department of Homeland Security. The Coast Guard protects the maritime economy and the environment, defends our maritime borders, and saves those in peril.

Island Command Greenland

Responsible directly to the Defence Command of Denmark, Island Command Greenland is responsible for the military defence of Greenland, maritime and sovereignty maintenance and enforcement, as well as search and rescue.

Northern Missions: Whole-of-government partners

Canada Command and the Canadian Forces work in partnership with a wide variety of international, federal, provincial, territorial, municipal and non-government organizations to successfully conduct operations and missions in the North. The following highlights some of our federal government partners that have helped contribute to successful CF northern operations and whose activities help provide for the defence, security, or safety and well-being of Canadians in the North.

Aboriginal Affairs and Northern Development Canada

Supports Aboriginal peoples (First Nations, Inuit and Métis) and Northerners in their efforts to improve social well-being and economic prosperity; develop healthier, more sustainable communities; and participate more fully in Canada's political, social and economic development to the benefit of all Canadians. Is the lead department for the implementation of the government's Northern Strategy.

Environment Canada

Works to protect the environment, conserve the country's natural heritage and provide weather and meteorological information to keep Canadians informed and safe. Environment Canada's presence in the North focuses on enforcement and environmental protection. Works with the governments, communities and organizations of the Aboriginal Peoples of Canada to support Aboriginal environmental stewardship and objectives. Environment Canada's Canadian Ice Service (CIS) provides accurate and timely information about ice in Canada's navigable waters, including in the North.

Public Safety Canada

Protects against a range of risks such as natural disasters, crime and terrorism by coordinating and supporting efforts of federal organizations. Has responsibility for federal emergency management and works closely with emergency management organizations located across Canada including in Northwest Territories, Yukon and Nunavut. Works with other levels of government, first responders, community groups, the private sector and other nations. Also runs the Government Operations Centre, which monitors potential threats to the national interest around the clock.

Royal Canadian Mounted Police

The RCMP is a national, federal, provincial and municipal policing body that provides a total federal policing service to all Canadians and policing services under contract to the three territories, eight provinces (except Ontario and Quebec), more than 190 municipalities, 184 Aboriginal communities and their international airports. Has its origins in the North as the Northwest Mounted Police and maintains a presence throughout northern communities today.

Canada Border Services Agency

Sgt Norm McLean

Provides integrated border services that support national security and public safety priorities and facilitates the free flow of persons and goods, including animals and plants that meet all requirements under the program legislation. Includes oversight of scientific or exploratory expeditions conducted by foreign organizations in the Canadian North above the 60th parallel.

Fisheries and Oceans Canada

Delivers programs and services that support the sustainable use and development of Canada's waterways and aquatic resources. It provides oceans management, Coast Guard and hydrographical services on behalf of the Government of Canada, and manages fisheries, habitat and aquaculture. Fisheries and Oceans Canada (DFO) has well-established partnerships with the legislated northern co-management boards. DFO is currently building a harbour in Pangnirtung, Nunavut and monitors and conducts research on emerging fisheries in Nunavut in support of Canada's Northern Strategy.

Canadian Coast Guard

As a special operating agency of Fisheries and Oceans Canada (DFO), the Canadian Coast Guard helps DFO meet its responsibility to ensure safe and accessible waterways for Canadians. The Canadian Coast Guard's icebreaking program, in partnership with Environment Canada's Canadian Ice Service, helps maritime traffic move safely and quickly through, or around, ice-covered Canadian waters.

A Canadian Forces member flies the

Canadian flag during Operation

NUNALIVUT 2011.

Transport Canada

Responsible for Canada's transportation policies and programs, including the Northern Canada Vessel Traffic Services (NORDREG). Transport Canada ensures that air, marine, road and rail transportation are safe, secure, efficient and environmentally responsible. Transport Canada is an active member of the Arctic Council and works with other Arctic countries to deal with the prevention, preparedness and response to environmental emergencies in the Arctic that are a result of human activities or natural disasters.

Parks Canada

The largest federal landholder and, along with the RCMP, is the face of the federal government in many northern communities. Parks Canada is a positive force in communities, bringing infrastructure, staff, contracts, natural and cultural research, monitoring capacity, search and rescue capability, tourism opportunities and other economic benefits. Parks Canada has worked closely with the Canadian Forces on several operations, including Operation NANOOK, where they have provided an invaluable service by sharing their expertise.

Department of Foreign Affairs and International Trade

Manages Canada's diplomatic and consular relations and encourages the country's international trade. Canada is an Arctic nation and DFAIT is responsible for developing and promulgating Canada's Arctic foreign policy. The policy articulates Canada's priorities with respect to sovereignty, economic and social development, environmental protection, and governance in the Arctic region: the four pillars underpinning Canada's Northern Strategy.

Citizenship and Immigration Canada

Screens and approves for admission, immigrants, foreign students, visitors and temporary workers who help Canada's social and economic growth. Resettles, protects and provides a safe haven for refugees, helps newcomers adapt to Canadian society and become Canadian citizens, and manages access to Canada to protect the security and health of Canadians and the integrity of Canadian laws. Helps Canadians and newcomers to participate fully in the economic, political, social and cultural life of Canada. Developed an Immigration Strategy and Action Plan to support a responsive and sustainable approach to immigration in the Yukon and help provide opportunities for more immigrants to work in this region.

Transportation Safety Board of Canada

The Transportation Safety Board of Canada (TSB) investigates for the purpose of advancing transportation safety in Canada's marine, pipeline, rail and air modes of transportation. Conducts independent investigations, including public inquiries when necessary into selected transportation occurrences to establish the causes and contributing factors and identify safety deficiencies. Reports publicly on the investigations. TSB will participate in the whole-of-government exercise portion of Operation NANOOK 2011, centred on a simulated major air disaster in Resolute, Nunavut.

NAV Canada

Coordinates the safe and efficient movement of aircraft in Canadian domestic airspace and international airspace assigned to Canadian control. Through its coast-to-coastto-coast operations, NAV Canada provides air traffic control, flight information, weather briefings, aeronautical information, airport advisory services, and electronic aids to navigation. In the North, it provides aviation weather and communications services for pilot operations at designated sites in the Yukon, Northwest Territories, Nunavut and Northern Quebec through its Community Aerodrome Radio Stations (CARS).

National SAR Secretariat

Responsible for the management and coordination of the National Search and Rescue (SAR) Program. The NSS brings partners together to encourage collaboration and to ensure that the best use is made of their diverse resources and capabilities. As part of a Northern SAR strategy, the NSS held the first Northern SAR Roundtable in Yellowknife, Northwest Territories on November 26, 2010. The roundtable included representation from federal government departments involved in Search and Rescue, the territorial governments of the Yukon, Northwest Territories, Nunavut and the region of Nunavik.

Health Canada

Responsible for helping Canadians maintain and improve their health, while respecting individual choices and circumstances. Relies on scientific research as the basis for its work, conducts ongoing consultations with Canadians to determine how to best meet their long-term health care needs. Health Canada is working with First Nations people and Inuit to improve their health. Together with First Nations and Inuit organizations and communities, it carries out activities aimed at helping people stay healthy and preventing chronic and contagious diseases.

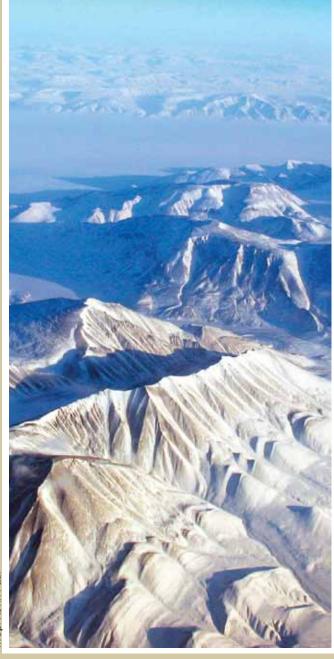
Public Health Agency of Canada

To promote and protect the health of Canadians through leadership, partnership, innovation and action in public health. Works to prevent and control chronic diseases and injuries; prevent and control infectious diseases; prepare for and respond to public health emergencies; and serves as a central point for sharing Canada's expertise with the rest of the world. Provides specific Aboriginal Peoples health information on a variety of topics.

Natural Resources Canada

Seeks to enhance the responsible development and use of Canada's natural resources and the competitiveness of Canada's natural resources products. They are the leader in science and technology in the fields of energy, forests, minerals and metals and their expertise in earth sciences is used to build and maintain an up-to-date knowledge base of Canada's landmass. NRCan recently completed a detailed field study of how permafrost conditions in Iqaluit, Nunavut are changing. The results will help to build climate change planning capacity in the North.





2011 ARCTIC CONFERENCE

CENTRE FOR MILITARY AND STRATEGIC STUDIES



Defence and Security of CANADA'S NORTH

It is a sign of a maturing discourse on national security issues when Canadian universities and non-academic think tanks, such as the Conference of Defence Associations, host conferences and panel discussions on Arctic issues.

These dialogues, which unite eminent academics, policy thinkers and government departments and agencies that have hands-on experience in the North, such as the Canadian Coast Guard, the Canadian Forces, the RCMP, Public Safety and others, can only serve to better inform Canadians and their government about the serious policy choices that will have to be made concerning Canada's strategy in the North.

Earlier this Spring, the University of Calgary's Centre for Military and Strategic Studies hosted a two-day conference on the "Defence and Security of Canada's North: The Role for the Canadian Forces" on March 24-26, 2011, bringing together experts from government, academia, the military and business to discuss Northern issues.

The Centre for Military and Strategic Studies at the University of Calgary is one of 12 Security and Defence Forum Centres of Expertise across Canada. These centres are mandated to develop a domestic competence and national interest in defence issues of current and future relevance to Canadian security. This recent conference fostered a fulsome discussion on issues in the North to further illuminate the holistic approach required to bring about sustainable outcomes for the Canadian North in terms of safety, security and defence.

As the Calgary conference progressed, two viewpoints emerged as to how Canada should approach Northern sovereignty, development and associated security and defence issues. The two sides of the debate centred on theses proposed by two key speakers at the conference, the University of Waterloo's Dr. Whitney Lackenbauer and the University of Calgary's Dr. Rob Heubert.

On the one side, Dr. Lackenbauer held that societal issues are the foremost challenge and that the Canadian Forces must participate in a whole-of-government approach to ensure sustainable protection and defence of our sovereignty. "We need to ensure that military activity in the North does not evolve into a militarization of the North", said Dr. Lackenbauer, a military historian, author and chair of history at St. Jerome University in the University of Waterloo

On the other hand, Dr. Rob Heubert, an associate professor in the Department of Political Science and associate director of the Centre for Military and Strategic Studies at the University of Calgary, pointed to the geopolitical challenges emerging from circumpolar countries vying for a commercial stake in the North. He argued that other nation's policies and the buildup of force capabilities from each of the circumpolar countries signal that geopolitical concerns are on the rise and we are on the cusp of a new era in defence. "We would be very wise to pay close attention to these changes", he said, and the Canadian Forces "should be prepared to defend the Arctic in whatever this new era brings."

In the end, both Drs. Heubert and Lackenbauer concurred that cooperation was the key to success in the emerging Arctic sovereignty – cooperation with Northern communities, with Aboriginal groups, with circumpolar countries, and with the Canadian Forces and their part-



ners seeking to defend and protect this regionally vast environmental symbol of Canadian nationality.

Most of the speakers at the conference similarly leaned toward the management of societal issues or defence as the major issue in Canada's North, yet all agreed with both Drs. Heubert and Lackenbauer that some form whole-ofgovernment and international cooperation would be the most likely and desirable outcome.

Ms. Jody Thomas, Deputy Commissioner, Operations for the Canadian Coast Guard, pointed out that the Coast Guard plays a pivotal role in advancing the key objectives of Canada's Northern Strategy, including sovereignty. Partnership with other organizations, such as the Royal Canadian Mounted Police and the Canadian Forces, are critical in fulfilling this role as the Coast Guard currently has no law enforcement mandate. Ms. Thomas further expounded on the very good relationships that currently exist between the Coast Guard and the Canadian Forces, and also with the



Canadian Rangers from the 1st Canadian Ranger Patrol Group (1 CRPG) meets up with a 440 Squadron CC138 Twin Otter aircraft near Eureka, Ellesmere Island, Nunavut. 440 Squadron supported Canadian Ranger patrols by flying food and fuel to them as the Rangers patroled on Ellesmere Island as part of OP NUNALIVUT 08.

Dr. Whitney Lackenbauer (left), chair of the Department of History at St. Jerrome University, and Dr. Rob Huebert, associate professor in the Department of Political Science and associate director of the Centre for Military and Strategic Studies, listen to presentations at the 2011 Arctic Conference.

United States Coast Guard, primarily in terms of Search and Rescue, assistance in humanitarian aid, and maritime security functions. The two

Coast Guards recently exercised together in the North during Operation NANOOK in August 2010.

Ms. Kellie Mitchell, Regional Director for Public Safety Canada in the North, described the establishment of "Team North" — a multi-departmental, multi-sectoral partnershipbased entity, as a way to address the many challenges arising from this vast, remote region. "Partnership equals survival in the North and is part of the northern way of life", she said. "Team North has embraced that philosophy". Events such as Operation NANOOK provide excellent opportunities to test the effectiveness of these synergies, not only with Canadian partners, but with circumpolar partners as well.

The Commander of Canada Command, Lieutenant-General Walt Semianiw, who has the mandate from the Government of Canada for significant elements of the Northern Strategy, opened the conference by explaining how the Canadian Forces

is continuing to build upon its presence in the North, primarily to support our sovereignty and to defend against threats and hazards to Canadians. He emphasized that the Canadian Forces works within a whole-of-government approach in its partnership with Public Safety Canada, the Coast Guard, RCMP and many other organizations. He acknowledged that it is only through solid relationships that operational effectiveness will occur and he said that Canada Command is committed to fostering and leveraging those relationships to ensure the safety, security and defence of our North.

This national-level discussion could not have come together so effectively without the ongoing support offered by the sponsors of this event: Arctic Net, the Centre for Military and Strategic Studies, the Canadian Circumpolar Institute, the Arctic Institute of North America, the Canadian Defence and Foreign Affairs Institute, and the University of Calgary. For more information on current security and defence issues being researched, please contact the Centre for Military and Strategic Studies at www. cmss.ucalgary.ca.



IN FOCUS

CANADIAN COAST GUARD AND CANADA COMMAND

By Sentinel Staff

artnerships are often formed when one partner has something to offer the other so that both partners benefit. In Canada's North and in fact on all of Canada's coasts, the rather unique aspects of Canadian laws and regulations make partnerships among federal departments absolutely critical to maintaining the integrity of our shores. The Canadian Forces (CF) relies on such partnerships to deliver the best total effect for Canada. The Canadian Coast Guard (CCG) is one such important partner.

"The Canadian Coast Guard is an essential partner with Canada Command and the Canadian Forces in maintaining a 24/7 watch over the country" says Lieutenant-General Walter Semianiw, Commander of Canada Command. "We rely on them heavily for their maritime search and rescue capabilities and expertise, off our coasts and throughout the North." The Coast Guard is a civilian-led, special operating agency of the federal government, headed by a commissioner, much like the Royal Canadian Mounted Police (RCMP), which enjoys much autonomy in the accomplishment of its mission, but is ministerially accountable to the Department of Fisheries and Oceans. Unlike some other coast guards around the world, it currently has no military or law enforcement responsibilities, but it does have responsibility for providing maritime search and rescue (SAR), marine pollution response and fisheries enforcement, and it also conducts icebreaking, among other tasks.

The Canadian Coast Guard works alongside Canada Command in safeguarding the nation at Canada's interdepartmental marine security operations centres (MSOC). These centres represent the whole-of-government approach to help detect, assess and support the response to any threat to marine security that could affect the safety, security, environment or economy of Canada. Although, the Department of National Defence (DND) has the lead for MSOC management and project implementation, CCG's Maritime Security Group makes a significant contribution. (Other MSOC partners include Transport Canada, Canada Border Services Agency, and the RCMP).

Responsibility for monitoring marine activity in the Arctic is shared between MSOCs in Halifax, N.S., and Esquimalt, B.C., currently hosted by the Canadian B.C., currently hosted by the Canadian Navy. A third MSOC responsible for the Great Lakes and St. Lawrence Seaway is hosted by the RCMP in Niagara, Ont. The CCG provides vessels to support these centres to monitor for possible maritime threats to Canada's security, deliver onwater enforcement and responsiveness and to safeguard the safety and security of Canadians.



(From the left) Chief of the Defence Staff General Walter Natynczyk, René Grenier, Deputy Commissioner (Ret.) of the Canadian Coast Guard., the Right Honourable Stephen Harper, Prime Minister of Canada, Janet Twining, CCG Environmental Response Training Officer and RCMP Officer Omar Ktabi deploy a fuel spill boom during Op NANOOK 2010.

The Coast Guard also shares the responsibly for SAR delivery with Canada Command and the Canadian Forces as a part of Canada's National Search and Rescue Program. Canada Command's three joint rescue coordination centres, located in Victoria, B.C., Trenton, Ont., and Halifax, N.S., are staffed by both CF and CCG members. Together, they coordinate SAR responses to aeronautical and maritime SAR incidents, bringing all possible assets to bear to save the lives of people lost or injured, often in remote and dangerous locations.

"The Canadian Coast Guard has always had a strong cooperative relationship with DND with regards to marine operations, search and rescue, and the North," said Wade

Spurrell, Assistant Commissioner for the CCG's Central and Arctic region. "It is important for the Coast Guard and other departments to work together in the vast area of the North with its changing demands. This is true for all intergovernmental mandates including search and rescue, environmental response, sovereignty and security."

The Coast Guard's Top construction of the coast Guard's Top construction of the constr



Her Majesty's Canadian Ship (HMCS) Toronto and Canadian Coast Guard Ship (CCGS) Pierre Radisson sail past an iceberg in the Hudson Strait off the coast of Baffin Island, during Operation NANOOK 08.

as supporting other government agencies and organizations. CCG services in the Arctic include providing ice information and ice routing advice to the marine shipping industry, as well as conducting escorts through ice, where needed.

The CCG is currently in the preliminary stages of conceptual design for a new polar icebreaker. It will support the work of several departments and agencies and establish a strong federal presence in the Arctic. Vessel construction is planned to begin in 2013 with completion of trials and final acceptance anticipated for late 2017.

The CCG has worked alongside Canada Command in support of the Government of Canada's Northern Strategy as an ongoing

> participant in the NANOOK series of operations since their inception in 2007. During Operation NANOOK 2011, the CCG will lead in managing a simulated maritime incident in the Northwest Passage that will run concurrently with a simulated major air disaster in the region.

> "The Canadian Coast Guard will be a key participant during Op NANOOK 11, taking part in both the military operation and the whole-of-government exercise," said Lieutenant-General Semianiw. "Their expertise in the North and logistical capability will play a critical role in the overall success of the operation."

Cooperation and Commitment in the North **ARCTIC SAR AGREEMENT REACHED**

By Isabella Mindak

he Arctic Council reached an important milestone on May 12, 2011, in Nuuk, Greenland, when eight Arctic states signed the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue (SAR) in the Arctic.

This represents the first legally binding agreement negotiated under the auspices of the Arctic Council. The new SAR agreement, which involves Canada Command's Search and Rescue Task Force, formalizes a spirit of cooperation to improve collaborative response, when necessary, between all Arctic states, should a major SAR event occur in the North. Under the agreement each Arctic State is responsible for establishing, operating and maintaining search and rescue capability within specified areas in the Arctic.

"While the International Agreement on Aeronautical and Maritime Search and Rescue does not change the mandate for Search and Rescue in Canada, it does provide for a level of mutual support among all Arctic nations in order to prevent the loss of human life due to accidents in the Arctic," said Major-General Tom J. Lawson, head of the delegation for the Arctic Council Canadian Search and Rescue Task Force.

In recent years, there has been a marked increase in maritime and aeronautical traffic in the Arctic. This increase has highlighted the need for a cooperative and coordinated search and rescue response from Arctic States to work together to save lives, while addressing the unique



General Walter Natynczyk, Chief of the Defence Staff (left) and Minister of National Defence, Peter MacKay (centre), meet with CF SAR Tech, Corporal Dennis Van Sickle, after he jumped from 10,000 feet at CFS Alert during Op Nunalivut 10.

challenges of the Arctic environment. The Arctic, home to approximately four million people, including thirty different indigenous peoples, speaking dozens of languages, is a vast and complex region, stretching across one sixth of the earth's landmass, occupying more than 30 million square kilometres and including 24 time zones.

"Through Canada Command, Canada will benefit from this Agreement because it formally acknowledges the need for cooperation and coordination among polar nations when responding to Search and Rescue incidents," said Lieutenant-Colonel Grant D. MacDonald, who serves with Canada's Chief of Air Staff, Director of Air Force Readiness, and contributed to the wording of the SAR agreement. "It also encourages information exchange on SAR activities in the region and it facilitates mutual assistance among polar nations."

As the first step towards operationalizing the new SAR agreement, Canada Command will conduct a SAR Task Force table-top exercise with participants from each of the Arctic Council nations, in Whitehorse, Yukon in October 2011.

About the Arctic Council

The Arctic Council continues to be the leading multilateral forum through which Canada advances its Arctic Foreign Policy and promotes Canadian Northern interests

The Arctic Council was established in 1996 as a highlevel forum through a political declaration signed in Ottawa, Ontario, by member states that included Canada, Denmark (including Greenland and the Faroe Islands), Finland, Iceland, Norway, the Russian Federation, Sweden and the United States.

Along with member states, the Arctic Council includes a category of members called Permanent Participants. This category welcomes full consultation and active participation of Arctic indigenous representatives within the Arctic Council.

Six international indigenous peoples organizations are Permanent Participants of the Arctic Council and they include the Aleut International Association, the Arctic Athabaskan Council, Gwich'in Council International, the Inuit Circumpolar Council, the Saami Council, and Russian Arctic Indigenous Peoples in the North. Since its inception, the Arctic Council has met at different locations and established numerous working groups to encourage cooperation, coordination and interaction among Arctic states, communities and inhabitants. Together, these participants have established goals and spearheaded many projects that aim to protect and enhance the Arctic environment, economy, culture and health of its citizens.

Canada will chair the Arctic Council meetings from 2013 to 2015. The chairing and location of the Arctic Council is rotated among the member states every two years and Arctic Council Ministerial meetings take place once every two years. These meetings and ongoing initiatives of all Arctic states and Permanent Participants will continue to establish the Arctic Council as one of the important drivers for collaboration, exploration and advances in the North. This contributes to Canada's priorities — as outlined in its Northern Strategy, to demonstrate sovereignty, advance economic and social development, and enhance environmental protection and governance in the Arctic.