



THE

**HUDSON BAY
CONSORTIUM**

Strengthening the Foundation:

Proposal for a Hudson Bay Consortium
Working Group on Search and Rescue

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Executive Summary

Search and rescue (SAR) operations on the water, land, and ice of the Hudson Bay and James Bay region are often challenging due to austere environmental conditions, the strain they place on limited local resources, and the vast distances involved in responding with Canadian Coast Guard assets or Royal Canadian Air Force aircraft based in the South. Further, these operations are generally jurisdictionally complex and require cooperation, coordination, and communication between a wide array of actors at the local, regional, provincial/territorial, and federal levels. The high degree of horizontal and vertical cooperation required for effective SAR operations is rooted in strong and sustained relationships – the foundation of the SAR system.

This report proposes the establishment of a Hudson Bay Consortium (HBC) Working Group on Search and Rescue to strengthen the relationships between SAR partners and address the challenges identified by community and government responders. Using the results of previous meetings of the HBC, the Kivalliq Roundtable on Search and Rescue (Rankin Inlet, November 2022) and the Nunavik Roundtable on Search and Rescue (Montreal, December 2022), interviews with community responders, and an extensive review of government documents, media stories, and scholarly literature, this report:

1. Provides an overview of the SAR system in the Hudson Bay and James Bay region;
2. Assesses the core strengths supporting and the challenges hampering effective SAR operations in the region, with a particular focus on the perspective of community responders.
3. Makes a case for a regional working group focused on search and rescue.

While this report is focused on marine SAR, it also considers the interaction and potential overlap between ground, marine, and air search and rescue in the region, particularly around the land-ice interface.

The skills, knowledge, and passion of community responders are the greatest asset to SAR operations in the Hudson Bay and James Bay region, followed closely by the willingness of the region's communities to pull together during prolonged searches. These efforts have been supported by innovative funding and programming initiatives developed by local, regional, and Indigenous governments. The Canadian Rangers, particularly 2 Canadian Ranger Patrol Group in Nunavik and Eeyou Istchee and 3 Canadian Ranger Patrol Group in Northern Ontario, bolster community capacity for SAR and have carried out marine searches on James Bay and the region's inland waterways. Recent years have also brought new initiatives that have improved search and rescue in the region, including:

- Stronger Canadian Coast Guard engagement and collaboration
- Establishment of the Inshore Rescue Boat Station in Rankin Inlet and its transition into an Arctic Marine Response Station
- The expansion of the Coast Guard Auxiliary in the region
- The Indigenous Community Volunteer Boat Program
- Improved working relationships between certain SAR partners

While progress has been made, much work remains to be done. Community responders, particularly those in Nunavik and Northern Ontario, continue to note the limited interactions they have had with Coast Guard personnel, while responders across the region would like the opportunity to meet more frequently with Joint Rescue Coordination Centre and Royal Canadian Air Force personnel. There is also concern that the recent efforts of the Coast Guard to improve marine SAR may prove fleeting. And, of course, there are still many challenges that need to be addressed, including:

- Increasing SAR case load
- Impact of austere and changing environmental conditions on SAR response
- Slow response times from federal assets
- Limited air support
- Integration of Indigenous Knowledge into SAR response
- Jurisdictional complexity and limited understanding of the SAR system
- The land-ice interface
- Coordination, cooperation, and communication difficulties
- Under reporting of SAR cases
- SAR prevention
- Equipment gaps
- Training gaps
- Body recovery
- Mental health challenges
- Volunteer burnout
- Volunteer recruitment and retention issues
- Administrative burden
- Lack of consistent funding
- Access to private sector resources
- Slow and confusing Canadian Ranger activation process
- Marine SAR in Baker Lake

The creation of a Hudson Bay Consortium Working Group on Search and Rescue would provide the space required to work through these challenges and brainstorm potential solutions in an inclusive and participatory environment. It would build off past efforts to establish regional SAR organizations in Hudson Bay and James Bay. It would allow local and government responders to share best practices and lessons learned on SAR prevention, preparedness, and response, to develop mutual understandings of respective response capacities and gaps, and to examine the SAR risks facing communities. The involvement of community responders in the working group would allow them to learn from one another and develop a community of practice, while asking their government partners for clarity on policy, procedural, and operational issues. Most importantly, the working group would build, strengthen, and sustain the collaborative relationships required for SAR operations in the region. In these ways, the HBC Working Group on Search and Rescue could serve as a long-term resilience-building measure for the Hudson Bay and James Bay region.

1. Introduction

When reviewing the history of marine search and rescue in the Hudson Bay and James Bay region, three landmark cases stand out. The first is the James Bay Tragedy of 1999. On 30 September 1999, eleven people left Moose Factory in two freighter canoes for the annual goose hunt and headed toward Hannah Bay, approximately 40 miles from the community. As they approached Netichee Point – which some community members refer to as Cape Fear – they were hit by strong winds and choppy waves. When one boat started to have trouble, those on board flagged down the other to even out their loads and improve their stability. While doing this, however, both vessels were swamped. Three people on board managed to make it to safety, while eight went missing. On 1 October, Moose Factory Search and Rescue began a search effort that lasted 36 days and eventually involved 550 volunteers, most from adjacent Cree communities, and multiple government agencies.¹ The searchers managed to locate the bodies of Billy (Bayou) Echum, Kenneth Echum, Anita Echum, Johnny Namagoose, Mistie Chum, Micheal Echum, Mark Echum, and Keisha Echum. While the operation stood as testament to the skill and selflessness of community responders, after action reviews highlighted the need to bolster local capabilities, improve boating safety education, and strengthen the coordination and communication between the multiple agencies involved.²



The Avataq circa 1990. Transportation Safety Board.

The next year, while bound from Churchill to Arviat, the dangerously overloaded *Avataq*, which was crewed by Rankin Inlet residents Louis Pilakapsi, Larry Ussak, Sandy Sateana, and David Kadjuk, encountered gale-force winds ten nautical miles south of the community. At 0030 on 26 August, the captain, Pilakapsi, notified relatives using CB radio channel 14 that the vessel was taking on water and that the bilge pumps were not working. A last radio transmission at 0130 advised that the vessel was taking water over the bow and sinking. Several Arviat residents overheard the last radio call and a group of searchers in ATVs proceeded south along the coastline to locate the vessel. Several small boats also attempted to make it to the *Avataq*'s last known location but were

driven back by the sea state. The Arviat searchers did not inform Nunavut Emergency Services (NES) about the situation until 0255. In turn, while NES personnel asked MCTS Iqaluit if there were vessels in the area, they did not communicate the nature of the emergency to the Coast Guard and they did not inform the Joint Rescue Coordination Centre (JRCC) in Trenton, Ontario until 0519. Due to this delay, a CC-130 Hercules aircraft that was over Foxe Basin on a different search did not arrive on scene until 0810. Both Pilakapsi and Ussak were wearing Mustang PFD flotation suits and a coroner found that they died of hypothermia, not drowning. Given the estimated survival time for individuals wearing these suits, the two men may have survived in the 8°C water for at least five hours.³ A Transportation Safety Board report on the incident noted significant vessel safety issues, inadequate understanding of the SAR system, and the poor communication and coordination between the various actors involved.⁴

In 2017, a party of four hunters – Patrick Salt, Kenneth Salt, Gabriel Shecapio, and Matthew Diamond – departed the community of Waskaganish for a camp on Octave River to hunt geese for their families and communities, requiring them to complete a 17 km crossing of Rupert Bay. When the hunters did not arrive at their camp a massive search effort was launched by community volunteers, the Eeyou



Searchers involved in the Waskaganish search. CBC News.

Eenou Police Force (EPPF), the Sûreté de Québec, and JRCC Trenton. Over 300 volunteers, rescue workers, and community members combed the water and shores of Rupert Bay by boat, airplane, and ATV, eventually finding the bodies of Patrick Salt and Matthew Diamond. Once again, the region pulled together: Eastmain supplied a boat and a team of divers, Chisasibi and Nemaska sent groups of searchers, and Moose Factory deployed its SAR team, while other communities provided food and monetary support. While some responders involved in the search suggest that cooperation with government partners had improved since the James Bay Tragedy of 1999, the incident highlighted the challenges of sustaining a long-term search involving multiple actors and issues around how and when to terminate search operations.⁵

Although two of these cases are over two decades old and the third happened six years ago, they continue to resonate in the Hudson Bay and James Bay region. Each case highlighted the central strengths of the SAR system in the region: the skill, dedication, and resilience of community SAR responders and the willingness of the region's communities to pull together during prolonged searches. These cases also underlined some of the central challenges facing SAR operations in the region that continue to concern community responders: difficulties in coordination and communication, the strain placed on finite local capacity, inadequate understanding of the SAR system, gaps in boating safety, and the limited presence of the Coast Guard.

The situation has improved since 1999. Community responders in Northern Ontario note a better working relationship with key government partners, particularly the Ontario Provincial Police (OPP) and the Canadian Army (through the Canadian Rangers), that has made marine SAR in and around James Bay more effective. The Coast Guard opened an Inshore Rescue Boat station in Rankin Inlet in 2018 and will upgrade it to an Arctic Marine Response Station for its reopening in 2023. The Kivalliq region is served by three Auxiliary units in Arviat, Rankin, and Nauyasat, while units have been established in Churchill and in the Eeyou Istchee communities of Chisasibi, Wemindji, Eastmain, and Waskaganish. Building off the marine rescue units established by the Kativik Regional Government in 2004, Coast Guard Auxiliary units are in the process of being established in all fourteen of Nunavik's communities.

Progress has been made, but much work remains to be done. Community responders, particularly those in Nunavik and Northern Ontario, continue to note the limited interactions they have had with Coast Guard personnel. In communities that have experienced increased Coast Guard engagement around marine SAR in recent years, there is worry that these efforts might prove unsustainable and fleeting, or that they will prove inadequate to address the many challenges that continue to undermine SAR operations. Responders from across the region also underlined the need to meet regularly with their SAR partners in the JRCCs and the Royal Canadian Air Force.

This face-to-face engagement is essential because SAR prevention, preparedness, and response activities in the Hudson Bay and James Bay region are extremely complex from a jurisdictional and funding standpoint, involving a wide array of local, regional, territorial/provincial, Indigenous, and federal agencies and organizations including:

- Community-based SAR groups
- Department of National Defence/Canadian Armed Forces
- Civil Air Search and Rescue Association (CASARA)
- Canadian Coast Guard
- Canadian Coast Guard Auxiliary
- Parks Canada
- Public Safety Canada
- Transport Canada
- Environment and Climate Change Canada
- Indigenous Services Canada
- Nunavut Emergency Management
- Nunavut Tunngavik Incorporated
- Kativik Regional Government
- Kativik Civil Security Department
- Makivik Corporation
- Grand Council of the Crees and Cree Nation Government
- Mushkegowuk Council
- Mushkegowuk Council's Emergency Management Services
- First Nations Governments
- Municipal Governments
- Hunters and Trappers Organizations
- Royal Canadian Mounted Police
- Ontario Provincial Police
- Nunavik Police Service
- Nishnawbe Aski Police Service
- Eeyou Eenou Police Force
- Sûreté du Québec
- Private sector (e.g. ISN Maskwa; Nunavik Arctic Survival Training Center; Air Inuit)

Government and community responders have emphasized the requirement to consistently strengthen cooperation between these groups to ensure that the “SAR system of systems” operates at maximum effectiveness.

Relationships constitute the foundation of an effective search and rescue system. Relationships allow for the multi-level horizontal and vertical coordination and cooperation required for the execution of SAR operations. They encourage mutual understandings of resources and capabilities, SAR risk, and community-specific needs. They facilitate the sharing of best practices and lessons learned to strengthen SAR prevention, preparedness, and response. They can create the space necessary to ensure that Indigenous Knowledge is infused into the SAR system. Relationships rooted in trust and respect also encourage honest dialogue about the challenges and obstacles that weaken the SAR system.

The creation of a Hudson Bay Consortium Working Group on Search and Rescue would provide an opportunity to build, strengthen, and sustain the collaborate relationships required for SAR operations in the region. At the same time, this working group would allow local and government responders to develop mutual understandings of the SAR system's strengths and weaknesses, brainstorm potential solutions, and improve planning and decision-making through discussion and consensus building – building agreement through a fully inclusive and participatory group process. In so doing, the HBC Working Group on SAR could help to ensure that the progress made on SAR since the James Bay Tragedy and the sinking of the *Avataq* is not lost – and that the issues that continue to undermine the system are properly addressed.

This report describes the status of the SAR system in the Hudson Bay and James Bay region, assesses the challenges faced by responders, and makes the case for a regional working group on search and rescue. To do so, it uses the results of previous meetings of the Hudson Bay Consortium, the Kivalliq Roundtable on Search and Rescue (Rankin Inlet, November 2022), and the Nunavik Roundtable on Search and Rescue (Montreal, December 2022), interviews with community responders conducted in the first months of 2023, and an extensive review of government documents, media stories, and scholarly literature.⁶ While this report is focused on marine SAR – which is complex on its own – it also considers the interaction and potential overlap between ground, marine, and air SAR in the region, particularly around the land-ice interface.



The Nunavik Roundtable on Search and Rescue, Montreal, Quebec, 11-13 December 2022.



The Kivalliq Roundtable on Search and Rescue, Rankin Inlet, Nunavut, 15-17 November 2022.

A collaboration between the North American and Arctic Defence and Security Network and the Kativik Civil Security Department, the Nunavik Roundtable on Search and Rescue – held in Montreal from 11-13 December – brought together community leadership and first responders, regional, provincial, and federal officials, and representatives from Inuit organizations, to strengthen relationships and discuss SAR preparedness, prevention, and response. The roundtable involved over 40 representatives from each of Nunavik’s community and 50 representatives from federal, regional, provincial, Inuit, and non-profit agencies.

2. The Context: Search and Rescue in the Hudson Bay and James Bay Region

Through the National SAR Program, federal, provincial/territorial, and municipal organizations share responsibility for search and rescue (SAR), with the support and assistance of volunteer organisations and private sector partners. The National Search and Rescue Secretariat (NSS) is responsible for coordinating the National SAR Program. The Canadian Armed Forces (CAF) bear overall responsibility for the effective operation of the federal coordinated maritime and aeronautical SAR system. The CAF provides aeronautical SAR services (e.g. response to aircraft incidents; search for downed aircraft) and can assist the Canadian Coast Guard (CCG), which is responsible for the maritime SAR program component, which includes incidents involving a vessel or person(s) from a vessel in Hudson Bay and James Bay.⁷ Humanitarian SAR and Ground SAR cases, e.g. searches for missing hunters or boaters on inland waters are a provincial/territorial responsibility, although authority is often delegated for operational response to other organizations, such as police forces, and federal assistance can be requested. Parks Canada is responsible for SAR in National Parks – in the Hudson Bay and James Bay region this includes Ukkusiksalik in Nunavut's Kivalliq region and Wapusk in northern Manitoba.

The following overview provides more information on the various actors involved in SAR operations in Hudson Bay and James Bay region and explains the approaches taken in the region's various jurisdictions.

2.1 The Canadian Armed Forces



The CAF's primary support for SAR includes three Joint Rescue Coordination Centres (JRCCs) in Halifax, Trenton, and Victoria, five aerial squadrons specifically trained and crewed for search and rescue activities, and the Canadian Mission Control Centre.

Commanded by experienced RCAF SAR pilots or navigators, the JRCCs are responsible for the planning, co-ordination, conduct, and control of SAR operations. JRCC Trenton covers the Hudson Bay and James Bay region, while JRCC Halifax covers part of Hudson Strait. They receive and interpret distress alerts, assess requirements, and develop response

plans, including the identification and tasking of the most suitable response resources to locate the incident, stabilize the situation, and recover survivors to a place of safety.⁸

Under the JRCCs direct tactical control are the five primary SAR squadrons, consisting of CH-149 Cormorant and CH-146 Griffon helicopters and CC-130 Hercules aircraft which are slated to be replaced by the CC-295 Kingfisher.⁹ Most aerial responses to SAR incidents in the Hudson Bay and James Bay region come from 435 (Transport and Rescue) Squadron/17 Wing in Winnipeg, Manitoba and 424 (Transport and Rescue) Squadron/8 Wing in Trenton, Ontario. Incidents in the region can, however, require Cormorants to be flown from Gander or Greenwood, given the limited speed and endurance of the Griffons based at Trenton. Each primary aircraft or helicopter on standby is fully crewed and includes



search and rescue technicians or SAR Techs. The 145 SAR Techs in the CAF are highly trained personnel who can deploy by parachute or hoist to an incident and perform emergency trauma care procedures, stabilising victims for evacuation. SAR crews are obligated to respond within a set Response Posture (RP) standard “measured as the time from when a tasking is received to the crew being airborne.” Currently, a fully operational aircrew is to be airborne within two hours of receipt of an alert (in the recent past, the RP standard called for a response of 30 minutes during normal working hours and two hours at all other times).¹⁰ Other CAF air and naval assets can be called upon to serve as secondary SAR resources, although they respond only as available and are not kept on standby.¹¹

The Canadian Mission Control Centre, stationed at JRCC Trenton, runs the Cospas-Sarsat program, upholding Canada’s commitments to the International Cospas/Sarsat Programme Agreement (ICSPA), a satellite-aided SAR initiative focused on detecting and locating emergency locator radio beacons activated by persons, aircraft, or

vessels in distress.¹² When a Personal Locator Beacon (on person), Emergency Locator Transmitter (on plane), or Emergency Position-Indicating Radio Beacon (on a boat) is activated it sends a signal which is picked up satellites (LEOSAR – Low Earth Orbit SAR; MEOSAR – Medium Earth Orbit SAR; GEOSAR – Geosynchronous Earth Orbit Synthetic Aperture Radar). The distress beacon data is sent to Mission Control Centre for processing, which then sends the distress notification and location to the appropriate JRCC.

The CAF must also have its primary SAR assets and secondary resources prepared for low-probability, high-consequence scenarios that could result in *large-scale* loss of life, namely major aeronautical disasters (MAJAID) and major marine disasters (MAJMAR). To address these scenarios, the CAF must be prepared to undertake mass rescue operations, “characterized by the need for immediate response to large numbers of persons in distress, such that the capabilities normally available to SAR authorities are inadequate.”¹³ During major air and marine disasters, the CAF provides initial care and survival support, medical evacuation, and, possibly, the deployment of its four MAJAID kits (plus an additional training kit that can be deployed if required). Each kit can be air dropped and contains tents, sleeping bags, clothing, medical supplies, heaters, generators, water, and rations to support 80 people for up to 24 hours.¹⁴ In normal conditions, the CAF anticipates it can accomplish the entire MAJAID operation within 72 hours of initial notification.¹⁵ In the case of a large passenger plane crashing or the evacuation of a large vessel in the Hudson Bay and James Bay region, this rapid CAF response would prove vital and, if successful, could save many lives.

2.1.1 CASARA



Rankin Inlet CASARA spotters receiving spotter trained and the DJI Matrice 30 RPAS. Photos courtesy of the Royal Canadian Air Force.

In support of its SAR mandate, the CAF provides funding for the training, insurance, administration, and operations of the volunteers that make up the Civil Air Search and Rescue Association (CASARA).¹⁶ This federally incorporated non-profit volunteer association provides private aircraft, trained volunteer crews, and spotters for military aircraft during search missions. CASARA volunteers participate in search taskings for downed aircraft and other humanitarian missions, while also conducting SAR awareness and training programs.¹⁷ In the Hudson Bay and James Bay region, CASARA has trained spotters in Rankin Inlet, while those in Kuujuaq can also deploy to the area. CASARA units in Northern Ontario have also been tasked to assist with searches near the coasts of Hudson Bay and James Bay. CASARA Manitoba aircraft and spotters have responded to incidents around Hudson Bay, including the members and planes of the Flin Flon chapter which disbanded in January 2023.¹⁸ In 2019, CASARA launched its Remotely Piloted Aircraft Systems (RPAS Program), which puts drones with Advanced Search Imaging Software (LOC8) into the hands of CASARA volunteers. Initial training is scheduled for the Rankin Inlet CASARA group in 2023.

2.1.2 Canadian Rangers

Through the Canadian Rangers, the CAF provides local SAR capacity to many of the communities in the Hudson Bay and James Bay region (1 Canadian Ranger Patrol Group (CRPG) in Nunavut; 2CRPG in Nunavik and Eeyou Istchee; 3CRPG in Northern Ontario; and 4CRPG in Northern Manitoba). Canadian Rangers are part-time, non-commissioned Canadian Armed Forces (CAF) Reservists who serve as the “eyes, ears, and voice” of the military in remote parts of the country “which cannot conveniently or economically be covered by other elements of the CAF.”¹⁹ The CAF provides Canadian Rangers with flexible training that is tailored to local terrain and environmental conditions but generally involves several elements directly related to SAR capabilities: first aid, wilderness first aid, GSAR, constructing emergency airstrips on land and ice, and communications. Within their communities, Rangers often serve as Ground SAR volunteers who know how to work effectively as a group or, when formally activated by the CAF, as a formal team on an official military tasking for which they are paid.²⁰

The Rangers in 2CRPG and 3CRPG are the most likely to be officially tasked to engage in GSAR operations. Since 2009, the 2CRPG Rangers have been mobilized more than 170 times, averaging 14 ground search and rescue (GSAR) operations annually. 3 CRPG is unique in having signed a memorandum of understanding with the Ontario Provincial Police authorizing it to provide formal support in GSAR operations in northern Ontario – often making these patrols the force of first resort for their communities. Rangers can take the two-week long Ontario Provincial Police SAR course that is mandatory for personnel in its elite emergency response teams. The patrol group also holds an annual RANGER TRACKER exercise, which brings together Rangers from across Northern Ontario to conduct SAR-related scenarios.²¹



*Canadian Rangers from 3CRPG on boat patrol.
Photo from 3 Canadian Ranger Patrol Group
Facebook Page.*

The Canadian Rangers of 3CRPG have also conducted SAR operations on inland waterways and off the coasts of Hudson Bay and James Bay. In June 2019, for instance, two Cree boaters left Kashechewan in a freighter canoe to retrieve a snow machine stranded the previous winter. When the boaters did not return when expected, one of their wives called a member of the band council who also served as a Ranger and he quickly gathered a search party of five Rangers and one civilian volunteer. When the local police detachment could not execute a search outside the community, they requested the assistance of the CAF, which then authorized the local Rangers to respond. The searchers left Kashechewan in

three freighter canoes around 1 a.m. and headed south, keeping close to the shoreline. After about two hours they heard gunshots from the shore and found the men on the beach. The men had run aground in shallow waters after a heavy fog had forced them towards shore.²²

Canadian Rangers in 3CRPG have also been heavily involved in marine safety work for the Canadian Safe Boating Council, promoting safe and responsible boating in Northern Ontario, with an emphasis on life jackets, reboarding devices, cold water awareness, and sharing trip plans.

2.2 The Canadian Coast Guard and Coast Guard Auxiliary

The Canadian Coast Guard Search and Rescue program involves distress monitoring, communication, and search and rescue operations, including coordination response, planning, training, and exercises. This program is delivered with the support of the Coast Guard's fleet and the communication and alerting services provided through its Marine Communications and Traffic Services (MCTS) program. The Coast Guard has primary SAR assets which are designed, equipped, and crewed for search and rescue, and maintain a 30-minute SAR departure standby time. Other fleet vessels, such as icebreakers, serve as secondary SAR assets, which maintain all SAR operational standards and have a 60-minute SAR departure standby time.

Starting in 2015 with the launch of the Coast Guard's Arctic Search and Rescue Project and accelerated through the creation of the Canadian Coast Guard Arctic Region, the agency has dramatically transformed its approach to SAR across the North, including in the Hudson Bay and James Bay region. The Arctic SAR Project was a response to increasing maritime activity, the need to improve marine safety, and a requirement to meet the "unique challenges of SAR in the Arctic." It entailed a two-year study (2015-2017) of marine risks and SAR requirements in coastal Arctic communities (Risk-based Analysis of Maritime SAR Delivery—RAMSARD), better support for existing Auxiliary units, and the establishment of new units.²³ The Coast Guard developed the project around community engagement and sustained relationship building, which started with visits to over 45 communities by the agency's Arctic RAMSARD team. In June 2017, the agency formed its Arctic Community Engagement and Exercise Teams (ACEET), which began visiting communities in June 2017 to connect with existing Auxiliary units, introduce the program to communities without one, and provide the support and training required for the establishment of new units.²⁴

Coast Guard Auxiliary units are made up of trained local volunteers who use their own vessels or a community vessel (such as those provided under the the Indigenous Community Boat Volunteer Pilot Program) to respond to SAR incidents. CCGA members receive specialized training, insurance coverage, and reimbursement for certain operational costs, but they also fundraise to purchase additional equipment. In the Hudson Bay and James Bay region, there are Auxiliary units in Arviat, Rankin Inlet, Naujaat, Churchill (all of which fall into the Auxiliary's Central & Arctic Region), Chisasibi, Wemindji, Eastmain, and Waskaganish (part of the Auxiliary's Quebec Region). Building off the marine rescue units established by the Kativik Regional Government in 2004, Coast Guard Auxiliary units are being established in all fourteen of Nunavik's communities. Through the Oceans Protection Plan, many of these units have benefitted from the Indigenous Community Boat Volunteer Program, which provides funding – generally between \$250,000-\$350,000 – for community SAR vessels and marine safety equipment. In the region, the following units have accessed this program: Aivilik Marine Search and Rescue Society (Naujaat), Rankin Inlet, Arviat, Churchill, Nunaturlik Land Holding Corporation of Kangiqsujuaq, and the Cree Nation of Waskaganish.

While the new vessels provide a welcome boost to community marine SAR capabilities, they would have limited value without the training required to use them effectively. To support these units, the Coast Guard Arctic Region and its Auxiliary partners engage in a robust training cycle. These efforts have been bolstered by the hiring of Indigenous SAR response officers to assist in SAR operations, liaise with the Auxiliary units, conduct training and exercise activities in the field, and assist with equipment and vessel maintenance. Coast Guard Auxiliary members learn how to coordinate with the Joint Rescue Coordination Centres, Royal Canadian Air Force aircraft that might be on scene, and other vessels, as well as safe boat handling, navigation, marine first aid, marine firefighting and emergency duties, radio communications, search patterns, and CCG operations.²⁵



Inshore Rescue Boat crew on the water near Rankin Inlet, Nunavut. CNW Group/Canadian Coast Guard.

Other major initiatives in the Coast Guard Arctic Region that have improved the SAR system in the Hudson Bay and James Bay region include the Training and Exercising Industry Program and the Arctic Marine Response Station in Rankin Inlet. Launched in 2019, the Training and Exercising Industry Program works to improve interoperability and preparedness among key stakeholders in the event of a mass rescue incident in the Canadian Arctic. In 2018, the CCG established the Inshore Rescue Boat Station in Rankin Inlet, which provides 24/7 search and rescue services to the Nunavut communities of Rankin Inlet, Chesterfield Inlet, and Whale

Cove. The station is currently being upgraded to an Arctic Marine Response Station for its reopening in 2023. The upgrade will include the hiring and training of additional crew from local communities, the extension of the station's operational season by one month, the procurement of an additional SAR vessel, and other infrastructure improvements.²⁶

2.3 Parks Canada

Parks Canada is responsible for search and rescue and visitor safety in the country's national parks and historic sites, including Ukkusiksalik in Nunavut's Kivalliq region and Wapusk, Prince of Wales Fort National Historic Site, and York Factory National Historic Site in northern Manitoba. Parks Canada engages in "visitor risk management and visitor safety planning, builds and maintains facilities (such as hazard signs and fenced compounds), and works with other government departments and non-governmental agencies to provide trip planning and safety information, as well as search and rescue services."²⁷ Parks staff will assist with medical evacuation, missing or overdue people, ground searches, and marine SAR when and where possible.

2.4 SAR in Nunavut

Nunavut Emergency Management offers 24-hour support for humanitarian searches, providing guidance, approving expenditures, and contracting aerial support as required. Each community has an all-volunteer GSAR team, often supported by a formal SAR Committee. While team members volunteer their time and typically use their personal equipment, NEM provides funding to cover expenses such as training, fuel, lubricants, emergency supplies, food, and equipment repair. NEM orchestrates GSAR training opportunities through the Nunavut Municipal Training Organization, providing a basic SAR course and a coordinator course. Upon completion of basic training, NEM provides SAR Teams with Go-Bags (two per community) and Garmin InReach devices.²⁸ A SAR tasking usually begins in the community when someone on the GSAR team is told of a missing person or party and they report the case to NEM. If a person in need of assistance is using one of the dozens of SPOT devices that NEM has provided to each community (loaned out by community SAR committees, hunters and trappers organizations, and/or hamlet offices), the initial notification will go to the NEM personnel on duty and they will contact the local SAR team to activate a search.²⁹

In Nunavut, communities without a Coast Guard Auxiliary unit continue to rely on their community GSAR teams and SAR committees to execute marine searches, although these volunteers often lack the training, equipment, and vessel required to conduct these activities safely. In the past, the Kivalliq region has benefitted from the Nunavut Inuit Marine Monitoring Program (IMMP), an initiative led by Nunavut Tunngavik Inc. and the regional Inuit associations that aims to collect information on shipping activities in the region that is relevant and useful to communities. The IMMP employed Inuit Marine Monitors during the shipping season to observe vessel activity and report on environmental conditions and wildlife.³⁰

2.5 SAR in Nunavik

The Nunavik Police Service (NPS), formerly known as the Kativik Regional Police Force (KRPf), is responsible for search and rescue operations in Nunavik. These operations are guided by policies for land, maritime, and aeronautical SAR.

The NPS uses three levels to classify ground searches. A level 1 case involves the mobilization of community resources to search for a missing person. At level 2, the NPS informs the Sûreté du Québec (SQ) and may charter an aircraft or helicopter to support search efforts. For the first two levels, expenses are shared equally between the municipality and the Kativik Regional Government's (KRG) Inuit Hunting, Fishing and Trapping Support Program when the search subject is a James Bay and Northern Québec Agreement (JBNQA) beneficiary engaged in harvesting activities. In all other cases, the NPS assumes responsibility for expenses. During a level 3 search, the SQ takes over the SAR operation and termination of the response is at its discretion. For cases in which the missing person is a JBNQA beneficiary and the

municipality wishes to continue the search after the SQ has terminated operations, it can request financial assistance from the KRG to extend the search up to seven days. At level 3, search expenses are shared between the SQ and the NPS.³¹

The NPS defers most operational responsibilities for SAR operations to municipal leadership, northern village emergency services, and 2nd Canadian Ranger Patrol Group. Within this system the mayor of a municipality has considerable responsibility to organize and coordinate SAR operations. There are no standard operating procedures at the community level. As multiple participants in the Nunavik Roundtable on SAR commented, “there are 14 different search and rescue systems in Nunavik.”³²

The Kativik Regional Government, its Civil Security Department, and Makivik Corporation (legal representative of Quebec's Inuit) often provide communities with technical assistance, SAR planning, training opportunities, and funding for equipment and other critical resources, including SAR prevention activities. In 2004, for instance, the KRG and Makivik spent \$3.5 million to provide a fast rescue craft to each of Nunavik's communities in the aftermath of the 2003 Ungava Bay Tragedy, in which Martha Kauki, her husband Joanassie Epoo, and their two children, Jacob and Victoria Epoo, were lost in a boating accident. The KRG also assumed the financial responsibility for the costs of annual insurance for the craft, annual outboard motor maintenance, and a regular outboard motor replacement program. The Kativik Civil Security Department took the lead on annual maintenance of the boats and is working with communities to ensure effective, well-trained local responders could operate the response craft. Since 2011, it has offered marine SAR training that meets Transport Canada safety standards to dozens of community captains and crewmembers.

These community-based fast rescue craft provided marine SAR services to the Nunavik region. While they sometimes worked with the JRCCs, often they acted independently and handled cases exclusively at the local level. Over the past few years, as part of the Coast Guard Auxiliary expansion in the Coast Guard's Arctic Region, the fast rescue craft and their crews have transitioned into Auxiliary units. This process has been slow and painful at times and continues to require significant relationship building between all partners involved.³³

2.6 SAR in Eeyou Istchee

In Eeyou Istchee, overall responsibility for the initiation and execution of SAR operations rests with the Eeyou-Eenou Police Force, which works with Sûreté du Québec as required. Generally, however, community public safety and/or fire departments or community public safety officers organize and coordinate SAR responses and lead prevention and preparedness activities. In the past, these actors have conducted both ground and marine SAR operations in James Bay.³⁴ In Whapmagoostui and Kuujjuarapik, Inuit and Cree responders often search together, although this can create confusion over funding responsibilities and jurisdiction.

Previously, marine SAR training for boat captains and crews has been provided through various local and regional initiatives, with funding secured through a wide array of entities, including Cree Human Resources Development, Cree Outfitting and Tourism Association, Eenou-Eeyou Limited Partnership, and various federal agencies.³⁵ With the absorption of the rescue craft and crews in Chisasibi, Wemindji, Eastmain, and Waskaganish into the Canadian Coast Guard Auxiliary (Quebec), there is hope that sustained and consistent funding and training will be provided for marine SAR in the region.³⁶

2.7 SAR in Treaty 9 Territory / Northern Ontario

Humanitarian SAR operations fall under the jurisdiction of the Ontario Provincial Police and the Nishnawbe-Aski Police in Northern Ontario. Given the lack of federal marine SAR infrastructure in the region, the OPP also provides marine search and rescue services in Western James Bay. The OPP in Moosonee use a 25-foot Stanley Twin Engine police vessel for SAR operations in the James Bay and Moose River areas. The OPP detachment upgraded their vessel in response to the waters becoming busier in the wake of warmer weather, longer boating seasons, and the opening of the Victor diamond mine near Attawapiskat.³⁷

The actual execution of marine and ground SAR operations, however, regularly falls to volunteer community SAR groups or the Canadian Rangers in 3CRPG, who have knowledge of local land and waters. Often, community groups will handle searches independently, without informing provincial and federal partners, so that they do not “have to ask for approval to do things.” Moose Factory Fire & Rescue, which has several full-time staff members and a sizeable force of volunteers, is particularly active in SAR operations, often providing assistance to neighbouring communities. The group has two vessels that it uses for marine SAR. For almost 15 years, the group’s funding has come from a private company that bid on a fuel hauling contract and pledged to contribute \$500,000 for search and rescue – a fund that is starting to run out.³⁸

Through its Emergency Management Services, the Mushkegowuk Council – a non-profit regional chiefs’ council that provides advisory services and program delivery to its eight member nations – supports regional and community-level SAR efforts. The service “fought hard to acquire full funding from the ISC [Indigenous Services Canada] Federal Government and other Agencies to deliver training & education to our emergency services volunteers within each First Nation with a supply of appropriate equipment & gear for the tasks.” It has provided equipment, gear, and uniforms for ground search and rescue, water and ice response and recovery, and emergency coordination.³⁹

The Council’s Emergency Management Service has also started to develop a partnership with the Canadian Coast Guard as part of the agency’s establishment of its Arctic Region. As EMS manager Wilbert Wesley explained in 2021: “Nih-Gee-mah-gunn in my Cree language means, 'My Paddling Partner,' partnership, collaboration, helps to pave a way to success, in turn leads to many friendships. Here in our Emergency Management Services of Mushkegowuk Council we're open to new opportunities with the DFO & Canadian Coast Guard Regions; in turn benefiting those that live and rely on the emergency services in Hudson and James Bay.”⁴⁰

Aerial support for searches in the region can be acquired from private operators in Cochrane or from the OPP rescue helicopter stationed in Orillia. Volatus Aerospace Corp is also providing ongoing Remotely Piloted Aircraft Systems technical skills training to Moose Cree First Nation members, which will be used for search and rescue activities.⁴¹

Since 2022, Missanabie Cree First Nation ISN Maskwa has provided incident management and evacuation support training to over 250 Indigenous community members. ISN Maskwa’s primary mission is to “provide Indigenous-led solutions to emergency management” and to assist “communities in building trained teams of leaders and support personnel to support an Indigenous-led response during evacuations or community emergencies.” The organization also offers deployable community support personnel and an Indigenous Emergency Operations Centre. Its incident management training includes a search and rescue component. *ISN Maskwa, “Indigenous-led Community Support,” n.d., <https://isn-maskwa.com/>.*

2.8 SAR in Treaty 5 Territory/Northern Manitoba

Along the Hudson Bay coast of Manitoba, humanitarian SAR cases fall under the jurisdiction of the Royal Canadian Mounted Police, with support potentially provided by local volunteers, the Churchill Canadian Ranger Patrol, and other Rangers from 4th Canadian Ranger Patrol Group. A Coast Guard Auxiliary unit has provided marine SAR services in the waters off Churchill since 2016.⁴²

3. Strengths of the Hudson Bay and James Bay Region SAR System

Search and rescue responders who operate in the Hudson Bay and James Bay region identified several core strengths supporting effective SAR operations.

3.1 Community Responders

On a volunteer-basis, the community-based organizations responsible for conducting SAR operations are *generally* able to recruit enough skilled and dedicated people. Community responders match their dedication with intimate knowledge of the land, local environmental conditions, and their fellow community members. Their service facilitates the integration of Indigenous Knowledge into the broader SAR system. In support of these responders, local, regional, and Indigenous governments have developed innovative funding and programming initiatives to secure ground and marine SAR training and equipment, and to pay for SAR operations.

3.2 Close Community Collaboration

Across the region, communities often share volunteers, equipment, and resources, particularly during prolonged searches. This regional cooperation has been showcased in major past searches, such as the 1999 James Bay marine SAR operation and the 2017 Waskaganish response. During the latter search and recovery operation, the Mushkegowuk Council and the Moose Cree First Nation organized and paid for charter flights for Cree from Ontario to fly to Waskaganish to join the effort.⁴³ Effective SAR groups also frequently respond to small-scale searches in adjacent communities, if their support is requested.

3.3 Greater Coast Guard Engagement

Over the last few years, responders in the region, particularly those in Nunavut and Eeyou Istchee, have observed greater Coast Guard efforts at community engagement, relationship-building, and maintaining long-lasting partnerships with communities, municipal, territorial, and Indigenous governments.⁴⁴

The Coast Guard's launch of the Arctic SAR Project in 2015 and its establishment of the new Arctic Region emphasized the importance of relationship-building. In 2018, the CCG Director General, Operations, Gregory Lick, explained that: "These partnerships afford us the chance to learn at their feet so that we can better serve them and their communities, and to allow the communities to become actively involved in the search and rescue system...One of the big revolutions in our thinking is that we shouldn't be bringing southern solutions to the North. The North should absolutely be asking and developing those solutions with our support, but they should be the leaders in developing those solutions."⁴⁵ His comments encapsulate the Coast Guard's approach – it is not just about "made in the North" solutions, but "made with the North" solutions.

The process required effort: there were stumbles at first and a steep learning curve. For example, when the Coast Guard first approached the hamlet of Arviat, the community was still dealing with a negative

search outcome and a failed SAR society that saddled the hamlet with a \$20,000 debt. When the CCG outreach team tried to convince community members of the benefits of creating a SAR society in which to nest the Auxiliary unit, local residents were worried that the Coast Guard was “trying to change them rather than listen to what works best for their community.”⁴⁶ Over time, however, repeat visits, further engagement, and a willingness to listen brought the community on board. Arviat became recipient of community boats funding, and its mayor and council told the news media that they are “very excited with the ongoing support from Canadian Coast Guard Auxiliary...Support like this continues to promote safety and professionalism to all marine traffic in the area. Without this type of support, it is very difficult to deliver this very valuable service.”⁴⁷

The Coast Guard’s community engagement and relationship-building efforts have been bolstered by the fact that it has been the same people carrying out these activities throughout the year (not only during the summer months) and for extended periods of time. To Northerners used to federal agencies sending up new personnel every year, who often repeat the same questions, this is a positive development.⁴⁸

Further, this engagement had produced tangible results, such as the inshore rescue boat in Rankin, the expansion of the Auxiliary, and the Indigenous Community Volunteer Boat Program. This has also helped to build trust and strengthen relationships.

While responders in Nunavik and Northern Ontario recognize that the Coast Guard has intensified its relationship-building efforts, there is a sense that the agency has been slower to engage with these regions than other parts of the North. Given increases in maritime activity and the lack of SAR assets in the area, the Coast Guard focused its initial efforts on Nunavut and Inuvialuit Nunangat. Responders in other communities do not feel they have received similar support. This is a gap that could be partially addressed through the HBC Working Group on SAR.

3.4 Expansion of the Coast Guard Auxiliary

In laying out its mission and mandate, a draft Coast Guard Arctic SAR Project report explained that “developing Auxiliary capacity represents an opportunity to marry the strengths, skills, and knowledge of the CCG SAR framework with the strengths, skills and knowledge of the Arctic coastal communities with centuries of local experience.”⁴⁹

In the Hudson Bay and James Bay region, Coast Guard Auxiliary units deliver faster marine SAR response times, encourage the reporting of SAR cases, and provide a platform to integrate the Indigenous Knowledge of community responders into the broader SAR system. Their training, reliable boats, knowledge of local geography and environmental conditions, and ability to work with the JRCCs and other federal SAR assets allow Auxiliary members to effectively and safely deliver SAR services. These units can reduce the reliance of communities on CCG icebreakers, often situated hours or days away from the location of an incident, and RCAF fixed and rotary-wing aircraft based thousands of miles to the south.

Participation in Auxiliary units encourages skill-building and intergenerational knowledge exchange through training and collective responses on the land. As a new member gains experience, they can pass along their acquired knowledge to another recruit – all of which strengthens the overall SAR system.

Across the country, CCG Auxiliary members play important roles as “SAR detectives” by collecting information about SAR cases and providing it to the Joint Rescue Coordination Centres. In the North,

however, this service becomes even more important given the JRCCs lack of familiarity with the region and the hunting, fishing, and travel activities of residents, alongside few alternative resources to investigate search and rescue cases. Auxiliaries' knowledge of local conditions, marine spaces, and the marine activities of their fellow community members make them uniquely suited to be SAR detectives. During SAR operations, they gather local intelligence on the condition of missing vessels, the skill of crews, and potential travel routes, which they relay to the JRCC. In case of an overdue boat, for instance, Auxiliary members can call the overdue person/persons family, friends, or other witnesses to gather more information, including their travel plans and preferred hunting/fishing areas. Such detective work can also identify false alarms and prevent the JRCC from unnecessarily deploying icebreaker or RCAF assistance, thus saving resources that can be used for other SAR cases.

CCGA members also make essential contributions to marine safety in their regions and communities. Many units educate their communities about boating safety, the importance of having a sail plan, and the need to bring proper gear.⁵⁰

Given the benefits that Auxiliary units bring to the SAR system and their communities, it is striking that no units have yet been established on western James Bay. This is a gap that the HBC Working Group on SAR could explore.

3.5 Indigenous Community Volunteer Boat Program

The Coast Guard's initial community outreach and RAMSARD study concluded that many northern communities would struggle to find suitable SAR vessels that meet all applicable regulatory requirements. As a result, the agency used funding from the Oceans Protection Plan to launch the Indigenous Community Boat Volunteer Pilot Program (ICBVPP) in 2017, which has since been renamed the Indigenous Community Volunteer Boat Program. The program allows communities to apply to purchase a new SAR vessel (generally between \$250,000-\$350,000), buy required equipment (such as communications and navigation gear), and construct proper storage facilities for their boats. In the Hudson Bay and James Bay region, the Aivilik Marine Search and Rescue Society (Naujaat), Rankin Inlet, Arviat, Churchill, Nunaturlik Land Holding Corporation of Kangiqsujuaq, and the Cree Nation of Waskaganish have benefitted from the program. With the new boats, communities feel empowered that they can safely and effectively execute search and rescue operations and are less reliant on southern intervention.⁵¹

The Churchill Auxiliary Unit provides a good example of the program's positive impact. While the unit was highly trained, in the first years of its existence it depended on boats regularly used for tourist activities which could lead to delays in response times. Through the ICBVPP the units secured a vessel solely for SAR operations and training, which helped to improve its response times and operational flexibility.⁵²

3.6 The Canadian Rangers

The search and rescue training provided to Canadian Rangers bolsters the capacity of most communities in the Hudson Bay and James Bay region, particularly in Northern Quebec and Northern Ontario. While not the case in every community, Canadian Rangers often volunteer as unpaid responders during searches. Sergeant Matthew Gull, commander of the Ranger patrol in Peawanuck, captured the motivation of many Rangers when he explained why he responded to the 2017 Waskanaganish search and recovery operation: "for me, it was the right thing to do. I've been trained by the army and the Ontario Provincial Police in search and rescue and I've done a lot of searches over the years. I couldn't

sit back and just watch. I did it as a Cree, too. We were about to have (Exercise Ranger) Tracker, a major search and rescue exercise, and yet something real was happening just across the bay, where people were asking for our help. I wanted to help them. So I, along with other Rangers, went as a volunteer.” When he arrived in Waskanaganish, Gull used his training and experience to suggest changes in the operation of the search command centre, which proved “a big help.”⁵³

When searches go on for extended periods, the search area becomes too vast to be covered by GSAR teams, and/or there are insufficient community volunteers, Rangers can be officially tasked and paid for their service, thus offering an accessible community-based solution that can relieve the pressure on unpaid responders.

3.7 Improvements to Working Relationships Between SAR Partners

Several of the community responders interviewed for this project noted general improvements to working relationships with certain government SAR partners, even though much work remains to be done to improve coordination and cooperation. Some responders in the Kivalliq noted stronger ties with Nunavut Emergency Management, many in Nunavik highlighted positive interactions with Kativik Civil Security and 2CRPG, while Moose Factory Fire and Rescue explained that its working relations with the Ontario Provincial Police during SAR operations have improved over the last twenty years.

4. Challenges to the Hudson Bay and James Bay Region SAR System

Search and rescue responders who operate in the Hudson Bay and James Bay region identified a wide array of challenge hampering effective SAR operations.

4.1 An Increasing SAR Case Load

Community responders throughout the region highlighted that changing environmental conditions have intersected with the failure of some people to take sufficient fuel and equipment on the land and water, the loss of traditional skills and knowledge, and overreliance on technology to increase the dangers of personal travel, affecting safe access to harvesting grounds, disrupting travel between communities, and causing high SAR incident rates, injury, and deaths.⁵⁴ Many responders also confirmed how the pressures of food insecurity often force harvesters to travel further afield and in poor conditions, increasing their risk.

On the marine side, sea ice reduction has led to longer boating seasons, with boaters travelling earlier in the spring and later in the fall, when weather and travel conditions are their most uncertain, increasing the hazards to which they are exposed. Community members in the region have also reported more severe and unpredictable weather and sea states. There is concern amongst responders that marine traffic will grow in the region, including bulk carriers, pleasure craft, and cruise ships, and place a growing strain on the region’s limited SAR resources.

On the ground side, changes to traditional sea ice routes have increased the risk of becoming lost in unfamiliar areas, running out of gas, breaking through unexpected areas of thin ice, and having to travel over rough ice and/or land resulting in snowmachines and other equipment being lost and damaged. A SAR coordinator from the Kivalliq explained that “bad ice, rough ice, can make things worse. You get

someone out there without skills, they don't know how to handle it. So they can get into trouble with the ice." Thawing permafrost is also making travel by all-terrain vehicles (ATV) more challenging in the summer months, while the early melt and late freeze up of lakes, rivers, and sea ice in the shoulder seasons (spring and fall) make travel routes more difficult and dangerous.⁵⁵

4.2 Impact of Austere and Changing Environmental Conditions on SAR Response

Harsh and changing environmental conditions not only increase the SAR case load, they also pose significant challenges to all responders. Marine and ground SAR operations are frequently hindered by poor weather conditions across the Hudson Bay and James Bay region, which can slow responses and increase risk.

On the marine side, changing ice conditions can complicate searches. Reduced ice coverage has expanded potential search areas, particularly for short-range community SAR boats looking for other community boaters. With the boating season starting earlier and ending later, responders are also exposed to the harsher spring and fall environmental conditions, increasing their level of risk. Further, the extended boating season means that community boaters are heading onto the water before Coast Guard icebreakers have deployed North, limiting response options if a situation arises. Changing ice conditions also make it more difficult to predict ice drift and characteristics when planning searches.

Worsening ice conditions are also creating challenges around the aerial rescue of search subjects on sea ice. In the past, helicopters and ski-equipped airframes have frequently landed on the ice to evacuate located individuals. With thinner, less predictable ice coverage, however, this procedure has become more dangerous. In 2013, two hunters were stranded on an ice floe near Arviat, Nunavut after their boat took on water. JRCC Trenton contracted a Bell 206 Jet Ranger helicopter from Custom Helicopters in Manitoba to pick them up. The helicopter landed on the ice and immediately started to sink, requiring the hunters to rescue the pilot and SAR Techs to jump on the scene. Responders at the Kivalliq roundtable shared this story and suggested that as ice conditions continue to deteriorate, the ability of helicopters to land safely on the ice to retrieve search subjects will decline, necessitating a hoist system capability or new approaches to retrieval.

Ice also adds to the dangers faced by RCAF SAR Technicians who may have to jump into Arctic waters during a rescue. With boaters operating earlier in the spring and later in the fall each year, situations may develop in which SAR Techs must jump into ice fields. In late October 2011, three SAR Techs jumped out of a Hercules airplane into ice-covered waters to rescue two Inuit hunters caught in their boat in the ice near Igloolik, Nunavut – one, Sergeant Janick Gilbert died on the mission, his body recovered in an ice field of 45 per cent slush with ice pieces up to five feet in diameter. While the investigation into Sgt. Gilbert's death could find no physical evidence that he was struck by ice, the final report emphasized the ice hazard risk facing SAR Techs: "Larger pieces of ice propelled by the actions of the wind and waves may damage a raft, capsize it or eject the occupants. Once ejected from the raft, successive pieces of ice may trap the occupant under water or result in crush injuries...."⁵⁶

Changing environmental conditions have also made the conduct of GSAR operations more challenging for community responders in parts of the Hudson Bay and James Bay region, for instance in terms of determining search areas. Searchers used to have a better idea of where to start looking for people. Many responders emphasized the growing need for accurate and timely information on ice conditions as they planned their SAR operations and noted how difficult this can be to acquire. GSAR responders reported that worsening ice conditions generally make their job harder – the ice is tougher on their machines, it

slows down their movements, and it can be dangerous. Many SAR groups are also struggling to respond during the shoulder seasons (spring thaw and fall freeze-up) when ATVs often get stuck and require towing. Responders indicated that new training and equipment will be required as ice operations become increasingly complicated.

4.3 Slow Response Times from Federal Assets

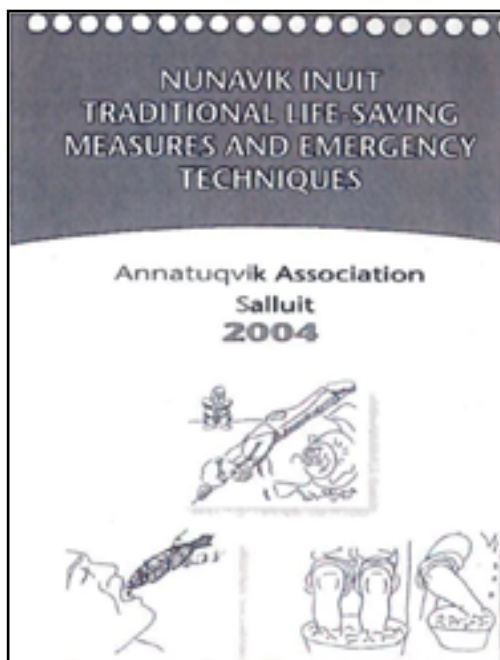
The tyranny of time and distance has a major impact on SAR operations in the Hudson Bay and James Bay region. Community responders frequently underscore slow response times from Coast Guard icebreakers and southern-based SAR air assets as a source of major concern. Given the distances involved, it can be hours before aircraft arrive on scene during an incident in the region. The average response time to Rankin Inlet, for instance, is 4 hours for a fixed wing aircraft and 11.5 hours for a rotary wing.⁵⁷ Incidents in the region can require Cormorants to be flown all the way from Gander, Newfoundland or Greenwood, Nova Scotia given the limited speed and endurance of the Griffon helicopters based at Trenton.

Some community responders in the region also expressed concern that they have less access to SAR services from Coast Guard icebreakers because most are posted further North during the busy summer months.

4.4 Limited Air Support

At the Nunavik Roundtable on Search and Rescue, the communities on the Hudson Bay coast explained that they are rarely able to secure aerial support from government or private sector aircraft. While community responders in other parts of the Hudson Bay and James Bay region noted that they or their government partners could often track down private sector helicopters and fixed-wing aircraft, this was a relatively ad hoc and uncertain practice. It is a challenge to keep an up-to-date list of private sector aerial resources stationed around Hudson Bay and James Bay.

4.5 Integration of Indigenous Knowledge into SAR Response



A major theme at the Nunavik Roundtable on Search and Rescue was the need to better integrate Indigenous Knowledge into federal SAR response operations, particularly traditional medical practices involving hypothermia and drowning. Community responders emphasized the need to consistently raise awareness amongst key SAR partners about the value of Indigenous Knowledge, skills, and practices. While the expansion of the Coast Guard Auxiliary and involvement of the Canadian Rangers in rescue operations have provided critical entry points for Indigenous Knowledge into the broader SAR system, much work remains to be done.

4.6 Jurisdictional Complexity and Limited Understanding of the SAR System

Participants at previous HBC workshops and at the Kivalliq and Nunavik SAR Roundtables highlighted confusion about how to report a SAR case and initiate a response. They expressed uncertainty about which agencies are responsible and uncertain about how to contact them.

Search and rescue is a complex “system of systems.” That complexity, combined with limited understanding of how the system works amongst community members, responders, and government officials, can cause delays and complications, as was seen during the *Avataq* case.

Many communities choose to handle marine and ground searches solely at the local level. Several community responders highlighted that this approach allows them to avoid red tape and bureaucracy, sidestep confusion over jurisdiction, and retain control of searches.⁵⁸ It is also a response to limited regional/territorial/provincial/federal SAR infrastructure in the region. Some communities have been “going it alone” at the local level for so many years that the idea of communicating and coordinating with higher level jurisdictions during a search and giving up local autonomy and control is difficult. Speaking about marine SAR, one responder from Nunavik noted, “we’ve been doing it alone for a long time now. We’ve had to. We do the coordinating and organizing. We handle things. Would some help be a good thing? Sure. We can want help, know we have to work together, and want to keep control at the same time.” This understandable feeling adds to jurisdictional complexity in the SAR system.

In some contexts, a limited understanding of the value that government partners bring to the table also accounts for why communities choose to “go it alone.” Community responders do not always know the value that working with the JRCC can bring to a SAR operation (e.g. information, coordination support, reimbursement and/or insurance, data reporting, which alleviates administrative pressure on the community, etc.).

Several community responders (particularly those in the Coast Guard Auxiliary and the Canadian Rangers) raised questions and concerns about the official mandates and missions of their community-based groups. Could the Coast Guard Auxiliary be tasked to execute a ground search and rescue if it is suspected that the missing people are near the coast? If hunters or fishers go up on the shoreline on ATVs and go missing, could the Auxiliary be tasked? How flexible is the boundary between a ground and marine search? How much room is there for local decision-making by an Auxiliary unit? The national guidelines for the CCG Auxiliary say that units may use patrols for placing a suitable response closer to where it is likely to be needed, as well as for searching for persons/vessels that might be in difficulty but did not communicate a distress alert.

What kind of leeway and local authority do Auxiliary units have for this kind of preventative action? Participants, particularly at the Kivalliq Roundtable on SAR, noted confusion over how, when, and why a Ranger patrol can be officially activated to help with SAR. What is the threshold for their official involvement? What tasks can Rangers be assigned and who/what organizations can assign them?

Communities around the Hudson Bay and James Bay region require effective information about the SAR system, how it functions, and how partners work together (e.g. if this type of SAR incident occurs, call this number, and this is what will happen). They also require information on the responsibilities of local, regional, territorial/provincial, Indigenous, and federal governments for funding, training, equipment, and the provision of other kinds of support.

4.7 The Land-Ice Interface

Community responders have consistently highlighted the jurisdictional confusion around SAR operations centred on land-fast ice and the floe edge, particularly when this ice breaks away as an ice floe – a common cause of SAR cases in the region. They questioned which organizations had responsibility: “NEM and local GSAR teams or is it handled by JRCC and Coast Guard?” If a snowmachine or ATV is used to reach the ice, it is a ground search and rescue. This is, however, a situation in which capabilities do not align with mandate. Often, a search on the floe edge and, more obviously, when ice breaks away from shore, would be best handled as a marine SAR case by JRCC and the Coast Guard. The HBC Working Group on SAR could work to bring clarity to the confusion caused by the land-ice interface.

4.8 Coordination, Cooperation, and Communication Difficulties

Greater efforts are required to improve vertical and horizontal coordination, cooperation, and communication across the SAR system in the Hudson Bay and James Bay region. Roundtable and interview participants highlighted the need for stronger coordination and cooperation between the various organizations responsible for SAR at the community level, between groups from different communities, between local responders and the regional, provincial/territorial and federal agencies with which they work, and between these government practitioners.

Coast Guard Auxiliary, GSAR, Rangers, CASARA, and other community SAR groups need to be able to work together as effectively as possible. Without the opportunity for joint training and exercises, however, this is difficult, even though responders often wear “many hats” and are members of two or more of these groups. Coordination can be even more challenging when these groups have to work with one another and federal responders. One veteran responder – a leader of his community’s Auxiliary unit and GSAR team – explained the communication and coordination challenges that often emerge during searches: “when we’re working with our local searchers, we’re using one system. Then the Rangers are working on their system. The aircraft, the Hercules or Cormorant are on another setting. The people in the command post, we need to ask the search teams we’re working with what setting are they using. I’ve sent searchers to coordinates given to me, but because the setting on the GPS was different, they were hundreds of miles away.... We need to familiarize and get one setting that all departments will coordinate. When we’re not told what setting is used, we’re sending guys away from people we’re trying to save.”

Opportunities to practice more with southern organizations, particularly the JRCC, would be helpful. It can be a challenge for some community responders to speak effectively to the JRCC and to understand southern SAR partners more generally, given specialized jargon (particularly with the military).

4.9 Under Reporting of SAR Cases

Across the Hudson Bay and James Bay region, marine and ground search and rescue cases are not always reported to the responsible government agency.⁵⁹ As a result, the SAR data for the region, which guides SAR planning and is used to justify the allocation of resources at the federal level, is incomplete and inaccurate. As one participant at the Nunavik Roundtable on SAR explained, “The SAR we do locally without disturbing other authorities is done a lot. [Our SAR team] goes out half the time and I don’t even hear about it. We emphasize getting things done.” Another Nunavik responder pointed out, “We’ve always been told to report – make data. We’ve never received the training, where to send it, how to fill it out for the communities. We don’t know how.”

SAR case data needs to be collected in a more systematic manner. The processes need to be simple and intuitive. The importance of data collection and maintaining accurate records to SAR planning and resource allocation needs to be made clear to community responders.

The presence of Coast Guard Auxiliary units that require official taskings to respond and the use of the Canadian Rangers will improve reporting. In Nunavik, the Kativik Civil Security department is in the process of executing a Search and Rescue New Initiatives Fund project to establish a data management system that will also facilitate the collection of SAR data and the reporting of cases.

4.10 SAR Prevention

To reduce the strain on community-based SAR organizations, greater investment in preventative measures should focus on whole-of-society SAR education and technological solutions. In the Hudson Bay and James Bay region there is consensus amongst community responders that SAR prevention activities need to be amplified. Referring to both ground and marine searches, one SAR coordinator from the Kivalliq explained: “So many of these searches are for backpack hunters. They go out with almost nothing. They don’t know how to go out on the land.” Community responders from Nunavik highlight how alcohol and drugs often lead to searches (and that these cases are rarely reported). More initiatives are required to promote on-the-land skills, vessel safety, and boating safety culture. Many responders insist that on-the-land survival skills should be a part of the school curriculum. Those going on-the-land and water also need better access to weather and environmental data, which can reduce risk.

Across the region, a wide array of actors, including community-based organizations, NGOs, and every level of government are providing programming that falls under SAR prevention. The construction of additional VHF towers by various communities and organizations, programs that provide community members with SPOT devices, youth programs aimed at on-the-land skill development, a wide array of boating safety initiatives, and several past Search and Rescue New Initiatives Fund projects, such as Water Safety Prevention in the Inuit Community and Provision of Marine Radio Safety Services in Inuktitut, represent a few examples. While there are many positive initiatives, there is little cohesion or overarching direction to these activities. There is also little knowledge about the effectiveness of these programs and whether they are reducing the number of SAR cases in the region. Mapping out what various actors are doing in the preventative SAR space and discussing best practices should be a focus of the HBC Working Group on SAR.

4.11 Marine Infrastructure Gaps

Community responders across the Hudson Bay and James Bay region have highlighted a lack of critical infrastructure, such VHF radio towers. Several communities in Nunavik report that they must wait for high tide to be able to launch their rescue boats, which can delay a SAR operation by hours. They would like more suitable facilities that can support fast SAR responses. With no shelter, the Cree fast rescue craft in Whapmagoostui had to sit outside all winter, which negatively affected its operational readiness – a situation experienced by other communities as well.

4.12 Equipment Gaps

SAR equipment gaps represent a longstanding source of concern in communities across the Hudson Bay and James Bay region. While the expansion of the Coast Guard Auxiliary and the Indigenous Community Volunteer Boat Program has assisted some communities in securing suitable vessels and equipment for marine search and rescue, others continue to struggle to find suitable craft. Many of the fast rescue craft in Nunavik communities are over twenty years old and are showing their age – they require replacements as soon as possible. Further, even though a community may have a suitable SAR vessel, it can be difficult to acquire and maintain the appropriate technical equipment required for effective marine searches.

On the GSAR side, while some communities have invested in community SAR snowmachines and ATVs, many responders must use their personal machines and equipment. While responders in most Canadian jurisdictions can obtain reimbursement if they prove that their machine was damaged during a search, there is no compensation for regular wear and tear on equipment (despite the rough terrain and seascapes in which SAR personnel operate). Although each community has different equipment requirements, community practitioners point to the common need for snowmachines, all-terrain vehicles (ATVs), boats, technical equipment, survival gear, and camp supplies – or for better compensation for the use of personal equipment. Given that they are providing an essential public safety service on a volunteer-basis, community volunteers argue that they should be given greater access to the equipment (or compensation) that they require.

4.13 Training Gaps

Community participants emphasized the need for greater access to training, particularly courses in basic and wilderness first aid, traditional medical practices, radio operation, navigation, technical rescue skills, and knowledge of the SAR system. Even when training is available at the community level, other occupational demands can limit involvement by community responders. They encourage governments and the private sector to provide workers with greater support and flexibility for participation in training activities.

At times, past marine and ground SAR training provided to community responders has been inaccessible and too “southern-focused.” One responder at the Nunavik Roundtable on SAR commented that he “would like to see Inuit trainers because many of our people are poor in second languages. One time, we were having training on the Zodiac and two white men came to my community to train. I was a rescue boat captain and I was the one who ended up training trainees from other communities because the white men were just sitting there, not knowing what to do. I didn’t know the system but I was training people. Many men have poor reading skills and cannot read the manual.”

Currently, community stakeholders explained that there is little to no formal coordination between the different government agencies responsible for providing SAR training. These agencies should seek to synchronize training schedules and share information on local capabilities. For example, if the Rangers bring in an instructor to teach wilderness first aid, an invitation to participate should be extended to the community’s GSAR team and Auxiliary unit. If Coast Guard trainers are running an exercise with a community’s Auxiliary unit, they could invite the Ranger Patrol and GSAR team to participate in a joint exercise. Sharing training schedules between government agencies is a straightforward solution to leverage existing community-based capabilities, realize cost savings, and improve efficiencies.

4.14 Body Recovery

Community responders frequently participate in recovery operations in the Hudson Bay and James Bay region, often at the request of police organizations. They emphasize the limited specialized equipment and capabilities they have for these operations, particularly on the marine side, the lack of assistance and financial support provided by other government agencies, and the mental health impacts of these activities.

Communities have been disappointed by the unwillingness of government agencies to support prolonged recovery operations and by what they view as premature termination of searches by the Joint Rescue Coordination Centre. During the 2017 Waskaganish search, for instance, the community struggled to resource the recovery operations after the JRCC terminated search efforts. In response, Chief Darleen Cheechoo noted, “I think there’s a cultural difference as to how First Nations people relate to the loss of loved ones in these types of tragedies. For us, it’s so important to bring home our people, regardless of time and effort. We feel we are not successful until each of our loved ones is back in our community.” Cheechoo explained that “her people could not understand it when the military withdrew its search assistance when it became clear the missing hunters were dead.” Eventually the CAF activated Canadian Rangers to participate in the recovery operations in response to letters from Cheechoo and Grand Chief Jonathon Solomon of the Mushkegowuk Council.⁶⁰

Communities struggle to secure the funding and resources – such as qualified divers, sonar equipment, remotely operated underwater vehicles – required for prolonged recovery operations. A 2019 case in Baker Lake is a good example of the intense effort and financial investment that communities put into recovery operations. In 2019, the community fundraised to bring HEART (the Hutterian Emergency Aquatic Response Team, based at the Oak Bluff Hutterite Colony, just south of Winnipeg) and its specialized underwater equipment to recover the body of a missing boater, Solomon Tulurialik, in Baker Lake. When that proved unsuccessful, they recruited and paid the travel expenses of a marine sonar team from Minnesota (Crossmon Consulting LLC) to take over recovery operations (with the Americans conducting the search for free). Using marine sonar technology that can scan a 200-foot swath of lake-bed at a time, the team found Tulurialik's body under about 99 feet of water, after more than five hours of searching.⁶¹

4.15 Mental Health Challenges

Searchers in Hudson Bay and James Bay communities are usually family, friends, or acquaintances with the people for whom they are looking. This makes searching incredibly stressful. Searchers have found missing people who have died from accidents and the elements, and whose bodies are in poor condition. These situations are very traumatic. As one Eeyou Istchee community responder explained: “You never know what’s going to happen on a rescue mission. Could be blood, bodies. Our rescuers, especially our young rescuers, are very hurt by this. They lack the support needed. It’s not just the rescue, it’s the aftermath.”⁶²

Some jurisdictions provide access to local critical incident stress management immediately after searches (e.g. Weeneebayko Health Ahtuskaywin for Moose Factory Fire and Rescue). Other community SAR groups have taken the initiative to organize after-action activities, including sharing circles led by elders, which allow for debriefing, the sharing of observations by team members, and critical incident stress management. Most community responders, however, do not have access to the required mental health supports – a critical gap identified at both roundtables and by every responder interviewed for this report. Several responders suggested that this was the “greatest crisis” facing the SAR system in Hudson Bay and James Bay.

4.16 Volunteer Burnout

The heavy workload, combined with the lack of volunteers and the fact that missing persons are often friends and family, can lead to emotional, mental, and physical exhaustion. Searches are not easy. Maintaining a Coast Guard Auxiliary unit or SAR team is not easy. In some communities, SAR organizations have regular meetings, organize fundraisers, and have to take care of all the administrative work that is required to maintain non-profit society status. Many of the community participants wear multiple hats and are involved in multiple groups responsible for SAR – some are GSAR members, Coast Guard Auxiliary, Rangers, and CASARA volunteers. The responsibilities and requirements of involvement in these organizations and the trauma caused by searches contributes to high rates of volunteer burnout in many communities.

4.17 Volunteer Recruitment and Retention Issues

The level of community involvement differs across Hudson Bay and James Bay, with some responders reporting a high degree of involvement and others suggesting that it was hard to recruit volunteers.

In communities where finding enough volunteers can be a challenge, the same people are on call all the time and the same small group of people respond to all of the searches. In some Coast Guard Auxiliary units, the same people are on call for most of the summer, which hinders their ability to get on the land to hunt and fish for their families. This is unsustainable and can lead to burnout and ineffectiveness.

Across the communities, it is a challenge to get young adults engaged in SAR. Even those who are interested might not have adequate on-the-land experience/skills or suitable equipment. Some participants also suggested that a lack of perceived enticements or incentives make it difficult to recruit new members.

Even in communities with a substantial volunteer pool, team leaders emphasized difficulties in getting people to attend meetings, training, practice, and fundraise.

4.18 Administrative Burden

The administrative side of community SAR organizations can be a challenge. This includes keeping organizations registered as non-profit societies, budgeting, and producing annual financial statements. The administrative burden is also heavy during and after a search: summarizing expenditures with supporting receipts, completing invoices, reporting on the status of any equipment, along with completing all the actual search paperwork. The amount of administrative work can be overwhelming. Many of the coordinators and unit leaders at the roundtables highlighted that the accounting and administration side of coordinating a search and rescue organization is a struggle.

4.19 Lack of Consistent Funding

Community SAR groups in the Hudson Bay and James Bay region access funds through various government and non-governmental sources. Often, however, these groups must fundraise to cover costs, particularly for prolonged search and recovery operations. It can be difficult for community SAR organizations to identify different funding opportunities, let alone apply for them.

4.20 Access to Private Sector Resources

Private industry can be a source of aerial support during community searches and can donate funds and equipment to community SAR organizations. It can be difficult, however, to know what resources are available and to form the relationships required to facilitate this kind of resource sharing.

4.21 Slow and Confusing Canadian Ranger Activation Process

Some communities report that the process of officially activating their Canadian Ranger patrol is confusing and time-consuming. While every Canadian Ranger Patrol Group operating in the Hudson Bay and James Bay region has taken steps to simplify this process in recent years, many community stakeholders still find the process slow, convoluted, and overly complicated. One Moose Factory Fire & Rescue responder explained: “We wish we could just use the Rangers right away. Just call them up. Involve them right away. We should be able to activate them right from the start during a search.”⁶³

4.22 Marine SAR in Baker Lake

A major issue identified at the Kivalliq Roundtable on SAR is the critical gap in marine SAR services caused by Baker Lake’s classification as an inland waterway – waters that are not the legislated responsibility of the Canadian Coast Guard. The community has been unable to participate in the Coast Guard Auxiliary expansion or the Indigenous Volunteer Community Boat Program. They struggle to secure suitable equipment for marine searches and to obtain assistance during SAR operations on Baker Lake – which is approximately 1,887 km² in size. In short, “they have been left on their own.”⁶⁴ In the community, marine SAR should be the responsibility of the RCMP or Nunavut Emergency Management, but they do not have the capacity to take on this mission. Currently, the Coast Guard is working with community leadership in Baker Lake to address this critical gap.

4.23 Need to Strengthen Relationships

While progress has been made, much work remains to be done to build and sustain SAR relationships across Hudson Bay and James Bay. Community responders, particularly those in Nunavik and Northern Ontario, continue to note the limited interactions that they have had with Coast Guard personnel. Others worry that positive developments in the Coast Guard’s engagement efforts and its focus on improving Northern SAR may prove fleeting. Responders across the region would like the opportunity to meet with Joint Rescue Coordination Centre and Royal Canadian Air Force personnel. As one community responder at the Nunavik Roundtable on SAR explained, “JRCC, Coast Guard never come to our communities. I’ve been part of SAR for a long time and no ones ever been to the community. All of you here, this is the first time I’ve seen your face and I’ve been in SAR a long time. We need to work together.”⁶⁵ All partners, particularly those on the federal side, must continue to work on strengthening relationships.

5. A Whole of Society Working Group for a Whole of Society SAR System

One of the central public safety objectives of Canada's Arctic and Northern Policy Framework is to "increase whole-of-society emergency management capabilities in Arctic and Northern communities." The objective recognizes that "emergency requirements are constantly changing, there is a need for collaboration amongst all areas of society to enhance community safety and resilience." The ANPF also prioritizes improvements to the "Search and Rescue reaction and responsiveness to emergencies for Arctic residents and visitors" and the need to strengthen intergovernmental partnerships and "enhance the participation of Indigenous representatives in this work."⁶⁶

The HBC Working Group on SAR will build the kind of whole of society approach to search and rescue prevention, preparedness, and response envisioned in the ANPF. It will foster discussion and build consensus on community and region-specific SAR strengths, challenges, requirements, best practices, and lessons learned in SAR preparedness, prevention, and response. Its members can co-develop innovative solutions, suggestions for human and physical infrastructure development, and new policies. It can ensure that Indigenous Knowledge is fully integrated into the Hudson Bay and James Bay SAR system and determine culturally appropriate mechanisms for debriefing and providing mental health supports to community responders.

The working group will also allow community responders to learn from one another and form a community of practice that can be drawn upon moving forward. At the same time, the working group will offer a forum in which community members can ask their government partners for clarity on policy, procedural, and operational issues. Community and government responders can use the working group to improve their working relationships and troubleshoot the coordination and cooperation challenges that have been identified by community responders.

The HBC Working Group on SAR can build on several previous attempts to establish regional organizations focused on search and rescue in the Hudson Bay and James Bay region. In the late 1990s, a Search and Rescue New Initiatives Fund project (ON 2/98) was launched called "Formation of a SAR Organization on the James Bay/Hudson Bay Coast" Although the organization it proposed did not come into fruition.⁶⁷ In the aftermath of the 1999 James Bay Tragedy there were several attempts to form a regional SAR association that would have stitched together some of the communities around James Bay and Hudson Bay.⁶⁸ In the early 2000s, Moose Cree First Nation worked diligently to create a Far North Emergency Preparedness and Response (EPR) Centre of Excellence. The project's coordinator, Doug Cheechoo, explained, "Our institute will be the headquarters for ongoing regional EPR development and training efforts, including research, planning, coordination and other activities... [It] will provide EPR training and development services specifically designed to meet the unique and growing training requirements for aboriginal people and northerners living in remote far north communities."⁶⁹ The initiative eventually led to the construction of an EPR Centre on Moose Factory Island, which serves as an emergency services hub for the Moose Cree First Nation. In September 2011, the EPR centre hosted a Regional Search and Rescue Conference for the Mushkegowuk Region's First Nations communities, with the objective of achieving better coordination of large-scale searches. This meeting led to the drafting of a written protocol and agreement to create a Regional Search & Rescue / Recovery Organization, although the current status of this effort is unclear.⁷⁰ In addition, officials from several of the jurisdictions in the Hudson Bay and James Bay region participated in the Northern SAR Roundtable (NSARR), organized by the National Search and Rescue Secretariat between 2010-2016. The NSARR held regular meetings, bringing together policymakers and practitioners to discuss common operating challenges and solutions to SAR operations and other emergency situations.

Clearly, there has been considerable appetite in the past for the kind of collaborative structure that could be provided by an HBC Working Group on SAR. The enthusiastic community support for the academic-driven SAR roundtables in Nunavut and Nunavik that inform this report is evidence that this appetite remains alive and strong.

We propose that the HBC Working Group on SAR hold its inaugural meeting in the fall of 2023. It should include representatives from as many of the groups mentioned in the first half of this report as possible, with an emphasis on the inclusion of community responders, particularly the leaders of SAR organizations. This first meeting should be used to scope out the working group, identify its priorities, and create breakout groups focused on specific topics, such as: policies and programs; operational challenges; lessons learned and best practices; and critical incident stress management. It is essential that these smaller breakout groups be formed as quickly as possible to tackle the challenges identified in this report. Consideration should be given to hosting these small breakout groups at the Moose Cree First Nation EPR Centre, building on the legacy of regional collaboration that it embodies.

In concluding the Kivalliq Roundtable on SAR, one community responder remarked: “We need more of these. We need to meet each other and talk through everything. It makes things simpler” – a sentiment shared by the other local and government responders around the table. They are correct. The cases are increasing and the challenges mounting. The demand for SAR services will only intensify in the future. Strong, collaborative relationships between SAR partners are more important than ever. It is time for a Hudson Bay Consortium Working Group on Search and Rescue.

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6. Endnotes

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⁷ According to the Canadian Aeronautical and Maritime Search and Rescue Manual, for maritime SAR purposes, the Coast Guard is responsible for all oceanic, coastal (coastal waters include any tributary’s estuary), and secondary waters (as defined in the Canada Shipping Act, 2001), but not inland waters (as defined in section 2 of the Customs Act), except for the Canadian inland waters of the Great Lakes, St. Lawrence River System, and Lake Melville.

⁸ Joint Rescue Coordination Centre Halifax Briefing to the Qikiqtani Roundtable on Search and Rescue, Iqaluit, Nunavut, Canada, 11-13 November 2022.

⁹ Canada, National Defence, “An Overview of Our Search and Rescue Aircraft,” 17 January 2022, <https://www.canada.ca/en/department-national-defence/maple-leaf/rcaf/2020/09/an-overview-of-our-search-and-rescue-aircraft.html>. The RCAF’s primary SAR squadrons are: 442 (Transport and Rescue) Squadron/19 Wing Comox, BC; 435 (Transport and Rescue) Squadron/17 Wing Winnipeg, MB; 424 (Transport and Rescue) Squadron/8 Wing Trenton, ON; 413 (Transport and Rescue) Squadron/14 Wing Greenwood, NS; 103 (Rescue) Squadron/9 Wing Gander, NF.

¹⁰ The RP standard is currently under evaluation. Between 1958 and, at least, 2020, the RP standards were set as: “During normal working hours, a fully operational aircrew is to be airborne within 30 minutes of receipt of an alert (RP30), and at all other times a fully operational aircrew is to be airborne within 2 hours of an alert (RP2hrs).” Joint Rescue Coordination Centre Trenton Briefing to the Kitikmeot Roundtable on Search and Rescue, 21 November 2022. See also Canada, National Defence, *Evaluation of CAF Operations – Search and Rescue* (Ottawa: Performance Measurement and Evaluation Committee, October 2020), <https://www.canada.ca/en/department-national-defence/corporate/reports-publications/audit-evaluation/evaluation-caf-operations-search-rescue.html>.

¹¹ Canada, National Defence, *CJOC Search and Rescue Directive 2021 - 3385-1* (SAR/RDIMS #529476) (Ottawa: Department of National Defence, Canadian Joint Operations Command, 2021).

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¹³ The CAF is responsible for preparing for a MAJAID, while the CCG prepares for a MAJMAR.

¹⁴ See Canada, National Defence, “Operation Nanook,” (last modified September 21, 2022), <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-nanook.html>; Richard Lawrence, “OPERATION NANOOK - EXERCISE SOTERIA (MAJOR AIR DISASTER - MAJAID),” *Esprit de Corps* (October 11, 2018), <http://espritdecorps.ca/richard-lawrence/operation-nanook-exercise-soteria-major-air-disaster-majaid>.

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²³ See, for instance, Canadian Coast Guard, Draft Report: Canadian Coast Guard Arctic Search and Rescue Project, n.d., Access to Information and Privacy (ATIP) Request A-2019-00023-DQ-Final; Canadian Coast Guard Arctic Search and Rescue (SAR) Project, Partnering with Coastal Communities to Enhance Arctic SAR Capacity, n.d., Access to Information and Privacy (ATIP) Request A-2019-00025-DQ-Final; Community Engagement and Exercise Team, Community Engagement and Exercise Team Reports, 2018, Access to Information and Privacy (ATIP) Request A-2019-00023-DQ-Final.

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⁴⁷ Nunatsiak News, “Feds earmark money for new search and rescue boats in three Nunavut communities,” *Nunatsiak News*, 15 October 2020, <https://nunatsiak.com/stories/article/feds-earmarkmoney-for-new-search-and-rescue-boats-in-three-nunavut-communities/>.

⁴⁸ Kivalliq Roundtable on Search and Rescue, 15-17 November 2022; Interview with Arviat Community Responders, March 2023.

⁴⁹ Canadian Coast Guard, Draft Report: Canadian Coast Guard Arctic Search and Rescue Project, n.d., Access to Information and Privacy (ATIP) Request A-2019-00023-DQ-Final.

⁵⁰ Kikkert and Whitney Lackenbauer, “Search and Rescue, Climate Change, and the Expansion of the Coast Guard Auxiliary in Inuit Nunangat / the Canadian Arctic.”

⁵¹ Canadian Coast Guard, “Indigenous Community Boat Volunteer Program,” Government of Canada, n.d., <https://www.ccg-gcc.gc.ca/search-rescue-recherche-sauvetage/indig-boat-bateau-autoch-prog-eng.html>.

⁵² Canadian Coast Guard, “Government of Canada Partnering with Indigenous Coastal Communities to Enhance Marine Safety in Nunavut and Manitoba,” Government of Canada, 13 October 2020, <https://www.canada.ca/en/canadian-coast-guard/news/2020/10/government-of-canada-partnering-with-indigenous-coastal-communities-to-enhance-marine-safety-in-nunavut-and-manitoba.html>.

⁵³ Peter Moon, “Canadian Rangers from Ontario support search in Quebec,” *NetNewsLedger*, 28 November 2017, <https://www.netnewsledger.com/2017/11/28/canadian-rangers-from-ontario-support-search-in-quebec/>. When the community could no longer sustain the search for the bodies of the two hunters that remained missing, Chief Darleen Cheechoo and Grand Chief Jonathon Solomon of Mushkegowuk Council wrote to the CAF requesting that it renew its support for the recovery operation. In response, the CAF placed Rangers from 2CRPG on active duty to assist, while the Rangers from Northern Ontario who joined the search efforts were “retroactively placed on active duty for the time they were involved in the search and paid accordingly.”

⁵⁴ In 2004, Moose Factory Fire and Rescue reported that the demand for search and rescue operations has risen over the previous 15 years – an increase in incident response of 600% since 1990, including a total of 23 fatalities. Legislative Assembly of Ontario, Proceedings of the Standing Committee on Justice Policy, Emergency Management Statutes Review. This reflects the findings of research conducted in other Northern regions.

⁵⁵ Kivalliq Roundtable on Search and Rescue, 15-17 November 2023 and Nunavik Roundtable on Search and Rescue, 11-13 December 2022.

⁵⁶ Department of National Defence (DND), 2013. Canadian Forces Flight Safety Investigation Report (FSIR) File number 1010-CC130323 (DFS 2-2) Final Report. Ottawa: Directorate of Flight Safety.

⁵⁷ JRCC Halifax Presentation, Qikiqtani Roundtable on Search and Rescue, Iqaluit, 11-13 November 2022.

⁵⁸ This sentiment was expressed by multiple responders at both the Kivalliq and Nunavik Roundtables on SAR. It was also expressed during one-on-one interviews with responders from multiple jurisdictions. Interview with Kivalliq community responders, March 2023; Interview with Eeyou Istchee community responder, 20 March 2023; and Interview with Moose Factory Fire & Rescue, 3 March 2023.

⁵⁹ Kivalliq Roundtable on SAR, 15-17 November 2022; Nunavik Roundtable on SAR, 11-13 December 2022; Interview with Kivalliq community responders, March 2023; Interview with Eeyou Istchee community responder, 20 March 2023; and Interview with Moose Factory Fire & Rescue, 3 March 2023.

⁶⁰ Peter Moon, “Canadian Rangers from Ontario support search in Quebec.”

⁶¹ Kivalliq Roundtable on Search and Rescue, 15-17 November 2022.

⁶² Interview with Eeyou Istchee community responder, 20 March 2023.

⁶³ Interview with Moose Factory Fire & Rescue, 3 March 2023.

⁶⁴ Kivalliq Roundtable on Search and Rescue, 15-17 November 2022.

⁶⁵ Nunavik Roundtable on Search and Rescue, 11-13 December 2022.

⁶⁶ Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC), *Arctic and Northern Policy Framework: Safety, Security, and Defence Chapter*, Government of Canada, 2019, <https://www.rcaanc-cirnac.gc.ca/eng/1562939617400/1562939658000>.

⁶⁷ National Search and Rescue Secretariat, *The New SAR Initiatives Fund (NIF) Final Report 1999-2000* (NSS: Ottawa, 2002).

⁶⁸ *OMUSHKEGO ISHKOTAYO TIPACHIMOWIN* 2, no. 2 (2000).

⁶⁹ Legislative Assembly of Ontario, Proceedings of the Standing Committee on Justice Policy, Emergency Management Statutes Review.

⁷⁰ *Weehtamakaywin*, Spring 2012 Edition.

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