

Nunavut Search and Rescue Roundtable

Roundtable 2024: SAR Coordination and Planning



Iqaluit, Nunavut, 15-17 November 2024

Report Prepared by Peter Kikkert and Ian Belton

Background: The Nunavut Search and Rescue Roundtable

The [Nunavut Search and Rescue \(SAR\) Roundtable](#) – a partnership between community responders, government practitioners, and researchers – was created in response to repeated calls from Nunavummiut for review and discussion of the region’s SAR system. Community responders also requested a platform through which they could discuss issues with their search and rescue partners and strengthen the relationships required to conduct effective SAR operations in the region. This roundtable approach closely aligns with two of the guiding principles of Inuit Qaujimajatuqangit: piliriqatigiingniq, the concept of equal collaborative relationships or working together for a common purpose, and aajiiqatigiinni, which means decision making through discussion and consensus.

In January 2020, Nunavut Emergency Management (NEM) and its academic partners held the first roundtable in Cambridge Bay. It was never envisioned as a one-and-done event, however. The roundtable is an ongoing initiative that provides a forum to discuss and improve the search and rescue system, facilitates other SAR-related activities, and strengthens the relationships that are essential for effective SAR



operations. In November 2022, the roundtable organized and conducted [regional meetings](#) for the Qikiqtani (Iqaluit, 11-13 November), Kivalliq (Rankin Inlet, 15-17 November), and Kitikmeot (Yellowknife, 20-22 November). In November 2023, roundtable members participated in the inaugural [Arctic SAR Exchange](#), held at the Canadian Forces Base Trenton, with the primary objective of determining how SAR partners could ‘work better together’ in delivering search and rescue services to the North. In November 2024, Nunavut’s SAR coordinators gathered in Iqaluit for the latest roundtable, which had a focus on coordination, planning, and management.

SAR in Nunavut: The Basics

Through the National SAR Program, federal, provincial/territorial, and municipal organizations share responsibility for search and rescue, with the support and assistance of volunteer organizations and private sector partners. The National Search and Rescue Secretariat (NSS), which is housed in Public Safety Canada, is responsible for coordinating the National SAR Program, provides policy advice to support SAR efforts, coordinates SAR prevention activities, and manages Canada’s contribution to the International Cospas-Sarsat Programme. The Canadian Armed Forces is responsible for the effective operation of the federal coordinated maritime and aeronautical SAR system, while the Coast Guard leads the maritime SAR program, which includes incidents involving a vessel or person(s) on federal waterways.¹ Parks Canada is responsible for search and rescue and visitor safety in the country’s national parks and historic sites,

¹ 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.

including the Ukkusiksalik, Quintipara, Qausuittuq, Auyuittuq, and Sirmilik National Parks, as well as the Wrecks of HMS Erebus and HMS Terror National Historic Site in Nunavut.

Humanitarian SAR (ground SAR or GSAR) cases, such as searches for missing hunters or boaters on inland waters, is a provincial/territorial responsibility and, in Nunavut, has been delegated to Nunavut Emergency Management. Nunavut is unique in that the territorial emergency management organization serves as the agency of jurisdiction for GSAR operations in the territory – generally, this role is played by police services. Nunavut Emergency Management duty officers provide taskings and support to community responders on a 24-hour basis. These duty officers serve as incident commanders during GSAR cases, bearing the responsibility for declaring a search, ensuring it is conducted legally and responsibly, and working with the search coordinator/manager at the community level.

Nunavummiut responders engage in search and rescue activities as part of Canadian Coast Guard Auxiliary (CCGA) units, community GSAR teams, the Civil Air Search and Rescue Association (CASARA), Canadian Ranger patrols, through the Nauttiqsuqtiit program, and various Guardians initiatives in the territory. If these community responders constitute the foundation of the SAR system in Nunavut, their leaders – particularly the territory’s community SAR coordinators – are the cornerstone. These leaders devote a great deal of time and energy into ensuring that their communities are prepared for SAR operations. In many communities, the same coordinator is responsible for managing ground, marine, and even air search and rescue cases at the local level.

Several other territorial, federal, and private sector partners are occasionally called upon to provide support to SAR operations in Nunavut. Conservation officers with the territorial Department of Environment, for instance, have provided support in past GSAR operations. On the federal side, Natural Resources Canada’s Polar Continental Shelf Program (PCSP), which coordinates over 50 fixed- and rotary-wing chartered aircraft in the North, is occasionally called upon to provide aerial support to SAR operations. Private sector actors, such as Baffinland, Agnico Eagle, Kenn Borek Air, and Ookpik Aviation, often provide assistance during SAR operations, when needed and if available.²

Nunavut SAR Roundtable 2024: Setting the Scene

The 2024 Nunavut Search and Rescue Roundtable was held at the Frobisher Inn in Iqaluit, Nunavut between 15 and 17 November. Primary funding and logistical support for the roundtable was provided by Nunavut Emergency Management, the [Nunavut-Nunavik Search and Rescue Project](#), and Public Safety Canada through its Search and Rescue New Initiatives Fund program.³ This roundtable focused on strengthening

² For more information on Nunavut’s search and rescue system, see Kikkert and Lackenbauer, [The State of Search and Rescue in Nunavut](#).

³ The Nunavut-Nunavik SAR Project involves academics from St. Francis Xavier University, the University of Strathclyde, Dalhousie University, Trent University, and the Marine Institute at Memorial University. The project’s principal Inuit research partners are Calvin Pedersen, Angulalik Pedersen, and Baba Pedersen, although guidance has been provided by all members of the Nunavut and Nunavik SAR Roundtables. The project is funded by the National Research Council of Canada and the United Kingdom Research and Innovation through the Canada-Inuit Nunangat-United Kingdom Research Program, which provided the majority of funds used for the exchange. With support from community SAR groups across Nunavut and Nunavik, the



From top left: Valerie Qaunaq, Arctic Bay SAR; Nancy Amarualik, Resolute Bay SAR; Adamie Nuna, Kinngait SAR; George Innuksuk, Sanirajak SAR engage in a participatory mapping exercise to identify where cases are occurring around their communities.

search coordination, management, and planning, including best practices gathered from teams across the territory. Part of this training involved working with the coordinators to develop effective pre-plans for their teams. A SAR preplan is a documented set of possible actions, contacts, and guidelines for a SAR operation and are intended to make operations more effective, ensure that required information is documented and shared, and improve collaboration with partners. This session took coordinators through a general draft preplan, solicited their feedback on its structure, and included a discussion on how to apply the template to each individual team. To assist with developing their pre-plans, coordinators engaged in a participatory mapping exercise to identify where the majority of cases are occurring around their communities. During this session, coordinators also worked through the



SAR coordination, management, and planning in the territory. To achieve this goal, we brought together the SAR coordinators from twenty-one communities and their core territorial, federal, and non-profit partners.⁴

As at every roundtable, participants had the opportunity to share improvements, ongoing challenges, and concerns, suggest improvements, learn from one another, and ask questions. Briefings by the government and non-profit agencies involved in SAR in Nunavut also provided the time and space to discuss how partners could collaborate more effectively during operations in the territory.

This roundtable focused on providing SAR coordinators with guidance and training on

Nunavut Research Institute (Research License No. 05 018 22N-M) and the St. Francis Xavier University (File 25969), Dalhousie University (File 2022-6234), and University of Strathclyde Research Ethics Boards approved the NNSAR project in the fall of 2022. Additional support for the roundtable came from Public Safety Canada's Search and Rescue New Initiatives Fund (SARNIF) program, specifically Project 24040, *Closing the Gaps - Addressing Critical Challenges in Arctic Ground Search and Rescue*.

⁴ The coordinators from Qikiqtarjuaq and Iqaluit could not attend, while the coordinator from Mittimatalik's had to manage an ongoing SAR operation and the coordinator from Clyde River had their flight cancelled.

documentation required to initiate and guide a SAR operation. The coordinators provided feedback on the content and structure of these forms, which will be incorporated into revised versions. Finally, to improve their access to essential environmental data that will improve search planning, coordinators also had the opportunity to learn how to better integrate SmartICE into SAR operations.

To end the roundtable, participants rotated between different thematic stations to discuss pressing challenges and requirements for SAR in Nunavut. There were stations on: SAR prevention; alerting and satellite communications; RPAS systems; air operations; marine operations; and training requirements.

The roundtable involved a mixture of all-participant discussions and small breakout groups to support brainstorming and the sharing of perspectives. To encourage free flowing and candid conversations the roundtable followed the Chatham House Rule – participants may use information from the proceedings, but the identity of the speakers will not be revealed in any reports or briefings. Participants can, however, request that specific stories or information be attributed to them – which several have done in the aftermath of this roundtable. Simultaneous translation into Inuktitut was provided throughout the roundtable.

Given that relationship-building was the overarching objective of the roundtable, we consider the personal conversations shared over coffee and meals to be as valuable as the broader discussions that involved the entire group. As a result, the roundtable involved many extended breaks and shared meals.

The following report summarizes the roundtable’s dialogue on SAR system improvements, challenges, and ongoing concerns, the briefings provided by key partners and the conversations these sparked, as well as key discussions regarding SAR coordination. Additional topics discussed at the roundtable, particularly the best practices and lessons learned for SAR planning, will be shared through other roundtable resources, including the Nunavut SAR Coordinator Guidebook, which remains a work in progress.



Improvements and Ongoing Challenges

The roundtable started off with a review of the core challenges identified during previous meetings and the improvements made. While many serious issues remain unaddressed, all participants agreed that the situation had improved in the last couple of years. A significant driver of this progress has been the regular meetings between key partners facilitated by the roundtable's activities. These have strengthened relationships, improved collaboration, and started to form a community of practice amongst Nunavut's responders, facilitating the sharing of best practices and lessons learned. As Cambridge Bay's representative, Angulalik Pedersen noted, "over the last four years, search and rescue in Nunavut has changed because of this [roundtable], so I wanted to say on behalf of all the coordinators thank-you ... for continuing this work ... because it's noticeable already in our statistics and in our communities of how much better we've gotten because of this, so thank-you."

"So each community has learned how to operate in their area in the most efficient way possible. So coming together like this on these roundtables and comparing strengths and weaknesses is amazing because I might have a weakness in my area, and you guys have figured it out in your area or vice versa. And coming together in a room like this to share it's amazing."
- Community responder, Nunavut SAR Roundtable 2024.

Roundtable participants highlighted collaboration – both between federal and territorial agencies, and between those agencies and community responders – as the area of greatest progress. The recent past was marked by limited to no collaboration, cooperation, and information sharing between major partners involved in SAR operations in Nunavut. There was little regular relationship-building between government and community practitioners. But a more collaborative environment has evolved around Arctic SAR, allowing partners to start working better together and operate at the speed of trust. The Coast Guard and the Coast Guard Auxiliary have continued to engage at the local level, providing face-to-face, in-community training opportunities. Personnel from JRCC Trenton and JRCC Halifax have participated in all roundtable activities and engaged in bilateral exchanges with Nunavut Emergency Management. Public Safety Canada's National Search and Rescue Secretariat launched a new Arctic and Northern SAR Roundtable in November 2024, largely based on feedback from previous roundtables in Nunavut and Nunavik. With participation from territorial, regional, and federal practitioners and policymakers, this roundtable will facilitate high-level efforts to improve the SAR system across the North, create synergies between efforts, and improve collaboration. At the territorial level, a stronger working relationship had been formed between Nunavut Emergency Management, the Royal Canadian Mounted Police (RCMP), and other government partners.

Participants emphasized that roundtables and other engagement activities have helped community responders feel more confident in working with partners, fostering a more collaborative environment and tangible operational improvements. Stronger relationships have made it easier to navigate the often-blurry jurisdictional boundary between ground and marine SAR in Nunavut. Reflecting this shift, the Coast Guard Auxiliary has revised policies to better support unit participation in ground search and rescue operations. Participants also noted that duty officers at Nunavut Emergency Management have been more willing to

provide support and listen to community requirements. Several community coordinators explained that the RCMP had been more willing to provide assistance during SAR operations, including increased support from local detachments and additional resources deployed into communities, such as scent dogs and Remotely Piloted Aircraft Systems (RPAS).

This growing spirit of collaboration has also facilitated capacity building initiatives. The Canadian Coast Guard Auxiliary (CCGA) has expanded rapidly across Nunavut, now comprising 13 units, 161 members, and 13 boats. These units provide communities with stronger federal support, while bringing vital local skill, knowledge, and energy into the SAR system. The results are clear: CCGA units have delivered fast, effective, and life-saving responses for both community members and visitors. Demand has grown as well – the number of official maritime SAR cases in the Arctic Region rose from 64 in 2020 to 121 in 2024, reflecting a combination of increased risks, stronger reporting, greater community awareness, and the presence of reliable local responders

Participants also noted that collaboration between community responders and their non-profit and private sector partners have also continued to evolve in recent years. Agnico Eagle and Baffinland were highlighted as companies that often generously support SAR operations, particularly through the provision of aerial resources and supplies. Concerns raised by community responders at past roundtables that they had limited access to environmental information to guide search planning and improve responder safety had led to sustained and effective efforts by SmartICE to expand its operations to additional communities and better integrate its services into SAR operations. Relationships that community responders built with SmartICE personnel at previous roundtables lead to projects in several communities (Salluit, Cambridge Bay, and Kugaaruk).

Despite these improvements, the challenges affecting SAR operations in Nunavut remain multi-faceted, deeply rooted, and dynamic. Nunavummiut responders continue to face a heavy and complex workload. They struggle with an array of organizational and administrative barriers that make funding, supporting, and equipping their teams extremely difficult. Long-standing issues with the territory's community-based SAR contributions policy continue to cause issues on the ground, including a lack of clarity around the definitions for searches and rescues, the requirement for teams to maintain non-profit society status, confusion caused by the private search category, little information on search suspension and recovery procedures/guidelines, and almost no mention of the insurance coverage provided to SAR volunteers. Further, jurisdictional issues, such as the land-sea ice interface and the boundaries between federal and inland waters, continues to impede effective responses. In general, participants highlighted the ongoing need to fully integrate Inuit Qaujimajatuqangit (traditional knowledge) into SAR prevention and response (planning, operations, medical aid). These structural issues have been well documented in past roundtable reports.

Participants pointed out that these policy issues and the limited training opportunities and support provided to responders can lead to difficulties recruiting new members. Several participants noted that although they wanted to step back from their SAR roles to protect their mental health and prevent burnout, they felt unable to do so because no one else was willing or prepared to take their place.

Participants at the 2024 roundtable also focused on the response issues that they faced in the field, including:

- Austere, rapidly changing operating environment
- Distance, size, climate combine to make time the enemy of all responders
- Hazardous conditions for responders
- Responders often must rely on their own snowmobiles or boats, bearing the cost of wear and tear
- Changing conditions make operations harder on people, machines, and equipment
- Given the range of skidoos, ATVs, and boats, and the failure of many search subjects to share their travel plans, it can be very difficult to determine search area
- Training and equipment gaps
- Technical capability gaps (e.g. high angle rescue, ice rescue, avalanche rescue, etc)
- Very limited training has been provided for coordinators, particularly in SAR management and planning, despite the difficulty and importance of their role
- Limited relevant data to support SAR planning (e.g. on Lost Person Behaviour)
- Lack of timely and accurate environmental information
- Distance makes mutual aid a challenge between communities
- Limited local access to air support
- Difficulties managing dozens of untrained, spontaneous volunteers during searches
- Communication limitations
- Small volunteer pool in communities + heavy workload + critical incidents = volunteer recruitment, retention, and burnout issues
- Critical Incident Stress
- Limited mental health supports – those available are usually short-term and usually delivered by outsiders unfamiliar with the northern context

Partner Briefings and Discussions

Nunavut Emergency Management

Jessica Young, the assistant deputy minister for Community and Government Services in the Government of Nunavut, Calvin Pedersen, manager of Search and Rescue, and Susan Peter, SAR officer, delivered the briefing on behalf of Nunavut Emergency Management (NEM). They noted that NEM duty officers are meant to act as incident commanders during SAR operations, providing support to community coordinators and their teams. They acknowledged, however, that in the past that support has been inconsistent. They had listened to stories from responders detailing past SAR cases in which they had felt ignored, disrespected, or poorly advised by NEM duty officers. The overall message was that NEM was trying to improve its internal capacity for supporting SAR operations by hiring more personnel, improving training, and developing standard operating guidelines. The goal is to ensure that NEM duty officers can provide required support, advice, and assistance when and if requested by community SAR teams.

Together, the three highlighted the significant progress made in improving Nunavut's SAR system over the last year:

Organizational Developments

- The Department of Community and Government Services (CGS) established a dedicated position for search and rescue management – the Manager of Search and Rescue. Long-time Kugluktuk and Cambridge Bay responder, and co-organizer of the Nunavut SAR Roundtable, Calvin Pedersen, was appointed to this new role. This position provides much-needed leadership and coordination capacity within the territorial system.
- CGS has also introduced new emergency response funding through the Municipal Block Fund that communities can use to strengthen their SAR teams.
- CGS is also seeking funding to pilot a Community Safety Liaison Officer program, which would help strengthen community-level emergency preparedness and response. These officers could take on various SAR roles.

Partnerships and Collaboration

- NEM has developed closer working relationships with key SAR partners, particularly the Royal Canadian Mounted Police (RCMP), which provided operational assistance on several searches over the past year, including through the deployment of drones and scent dogs.
- To strengthen collaboration among agencies, NEM convened the first Nunavut SAR Advisory Forum in November 2024, immediately preceding the annual SAR Roundtable. The forum brought together senior representatives from territorial and federal departments, key SAR agencies, and selected community members. Discussions focused on jurisdictional issues (such as the RCMP's role in GSAR operations and activation procedures for the Canadian Rangers), resource availability, and improved coordination.
- NEM has also deepened its collaboration with Kativik Civil Security and the Kativik Regional Government, an important step given the number of SAR incidents that occur along the Nunavut–Nunavik border.

Training and Policy Development

- The department is collaborating with the Nunavut–Nunavik SAR Project team to develop new coordinator and searcher training materials that reflect the unique nature of SAR operations in Nunavut.
- It is also conducting an ongoing review and update of Nunavut's Community Based Search and Rescue Contributions Policy, addressing long-standing issues such as outdated definitions, funding structures, and the requirement that community SAR teams be registered non-profits. The goal is to produce a clearer, more functional policy framework that supports community capacity.
- To improve real-time operations, NEM is also developing standard operating guidelines for duty officers to enhance coordination and response consistency.

- Finally, the department has conducted several operational debriefs following complex incidents, with the intent to collect, analyze, and disseminate lessons learned across the SAR system.

Support for Communities and Responders

- The Government of Nunavut has implemented measures to recognize and support community SAR volunteers, including access to mental health resources and ongoing funding to help communities replace or maintain essential equipment.
- In addition, the territory's Income Tax Act has been amended to allow SAR volunteers to claim a \$722 tax credit, and mental health supports have been made available for community responders.
- Through these initiatives, CGS aims to ensure that communities are not only better equipped but also more resilient and supported in the demanding work of SAR response.

Prevention and Technology

- NEM continues to invest in preventative safety programs, including its long-running SPOT device program, and is currently replacing damaged devices.
- The department will also continue issuing Garmin inReach, ZOLEO, and GPS units to community SAR teams that complete the territory's basic SAR training.
- These tools are key to enhancing communication and safety for responders and travellers on the land, reflecting the department's focus on prevention and preparedness alongside response.

Discussion: The community responders present at the roundtable agreed that Nunavut Emergency Management had made rapid improvements in terms of how it handles SAR cases. Still, the many challenges identified during the previous discussion continued to impede their operations. During this Q and A period, responders emphasized four main points:

- Depending on the duty officer, there can be delays in providing teams with a tasking number, leading them to deploy independently. In general, the coordinators noted their desire to have the freedom to deploy their teams before contacting NEM, particularly during more urgent cases.
- Coordinators are consistently approached by community members to respond to incidents that are not

"...when we call NEM and tell them that somebody is not home, sometimes it takes a while to get a tasking number, but as long as we already have the gas and we're ready to go, we usually just take off without waiting for a tasking number. So we end up using a lot of our own equipment and our own gas, our own gear and that's still how it is in the smaller communities because in the Arctic we know how time matters when somebody is not home, especially in the winter. We're not going to wait around for you guys to say, 'yeah, you can go now.' Us locals, when one of our own is not back home, we're not going to wait for somebody on the phone to say, 'you can go now.' Because they're our family, they're our friends, we grew up with them, we're going to do everything we can to get them back home."

- Community SAR Coordinator, Nunavut SAR Roundtable 2024.

clear-cut SAR cases. A good example is people who run out of gas on the land. On the one hand is someone who has run out of gas a couple of kilometres from the community, who a coordinator knows could easily be re-supplied by well-equipped family or friends. On the other hand is someone who has run out of gas a few kilometres from the community but who has no one able to resupply him or who is facing increased risk due to worsening weather conditions. When faced by the former, coordinators often insist the family provide the resupply, which can lead to significant criticism from fellow community members. When faced by the latter kind of case, coordinators have sometimes found it difficult to convince duty officers at NEM or even other members of their team of the need to rescue the individual. “Making these judgment calls can be very hard for us,” explained one coordinator. Coordinators would like greater clarity and

“Who is going to get these guys when they run out of gas, get stuck, or have a breakdown? What happens when their family and friends can’t or won’t? It’s not like in the south, we can’t just get a tow. It’s either the SAR team or no one in a lot of communities.” - Community SAR Coordinator, Nunavut SAR Roundtable 2024.

The vast majority, 99% or whatever of concerns are genuine concerns. But sometimes, there’s that very few cases that aren’t. In [community removed], we had an example. Fall time, boating, the mother comes to see me. ‘I’m worried about my son. He’s not back yet.’ ‘Okay. Does he have food?’ ‘Oh, yeah. He has food. He should have been back today. He’s not back yet.’ ‘Okay.’ I got all the details from her... I went back home. I called Jack. We started talking. I said, ‘This is a big family. They’ve got other members of their family have got boats. It doesn’t seem like it’s an important or a serious situation.’ I go back to the mother again and say, ‘Well, you have another son that’s got a boat. Why can’t he go out?’ ‘Oh, it’s granddaughter’s birthday. We’re having a party. I don’t want my son to go out.’ He’s in a cabin. He’s got food. No communication. It does not seem important. Sometimes, we just said, ‘Look. No, we’re not going out. This does not seem to be an emergency. We’ll wait until tomorrow. Then, we’ll reconsider again.’ Sure enough, the son pulls up the next day. And we heard he’s coming in, so we went down to the shore to meet him.... And he goes to his mum, ‘Quit phoning them for no reason. I was trying to stay away from you. I’m tired of you all.’” - Community SAR Coordinator, Nunavut SAR Roundtable 2024.

consistency on what should be considered a legitimate SAR case. They require training on the risk factors that should be considered when they are determining whether or not to respond. They would also appreciate more support from NEM duty officers when they make the decision to resupply someone who has run out of gas after they have considered all the risk factors involved.

- This situation also demands policy change. The current Community Based Search and Rescue Contributions Policy includes the following statement: “A Search and Rescue Operation does not include the recovery of equipment that has failed, or the supply of fuel or other items necessary for the operation of the equipment.” This policy does not reflect actual practice. SAR teams frequently resupply people who have run out of fuel on the land, for the reasons stated above. Further, the policy should not put SAR responders in a position where they have refuse to retrieve personal

equipment. “That skidoo is someone’s food security. That’s how they feed their families. We aren’t going to just leave it behind,” explained one coordinator.

- Coordinators would like more consistent training opportunities focused on the management and planning of SAR operations, particularly materials made with, for, and in Nunavut.

The Royal Canadian Mounted Police

The RCMP brief was provided by Superintendent Kent Pike who serves as the criminal operations officer for all RCMP detachments in Nunavut. Superintendent Pike has over 20 years’ policing experience in the North and recognizes SAR as a major priority due to the vast territory, unforgiving weather, and frequent land/ocean travel by residents. Nunavut is unique in Canada because the RCMP is not the agency having jurisdiction for SAR, but it can play a critical role, especially when cases become missing persons investigations or may involve criminality.

Communication and Reporting

- Immediate reporting to local RCMP detachment is critical for every SAR event, even if it is believed to be routine.
- Delayed notification (e.g., 1–2 days) can hinder RCMP’s ability to investigate and support, especially if criminal factors are possible.
- Strong, face-to-face relationships between SAR teams and local RCMP officers are essential.

Support for Communities and Responders

- RCMP can:
 - Donate surplus equipment (54 vehicles, sleds, ATVs) to registered non-profits.
 - Provide operational resources: police service dogs, drones, incident command expertise.
 - Lend snowmobiles and other equipment during operations.
- Communities should request resources through local commanders; Superintendent Pike is committed to backing these requests when justified. Nunavut

And we’ve certainly seen, and I notice from Calvin, even though those two communities where we gave extra resources was not successful, it certainly helped with me and my team going in, the extra resources. And it’s an added comfort. I mean, if you’ve been at it for a week and there doesn’t seem any relief coming in, it’s an added comfort to see other people who can come in, lighten the load, and actually bring their expertise to the table.

We bring a lot of experience to the table. And what I can assure every one of your teams here is that we’re making a change. It’s a change for the better.

So we’re here to help. If there’s anything, please, after a past experience where you feel you can’t go to your local detachment, I can tell you, I do not share that belief. As long as I’m in the chair and the things that I’m going to put in place for whoever’s going to replace me whenever my time comes to leave, it’s going to be there because I want this to help move forward. I want it to be clear for people to know when we should be in control of a situation because it’s a missing person or it could be some criminality involved.

*—
Superintendent Kent Pike, Royal Canadian Mounted Police, Nunavut SAR Roundtable 2024.*

Emergency Management can also request support from the RCMP for SAR coordinators.

- RCMP can help deliver difficult news to families when needed, to provide closure and reduce emotional strain on SAR volunteers.
- Air support is often critical; RCMP can mobilize aircraft for urgent SAR needs despite high costs.

Training and Preparedness

- Encourages tabletop exercises for SAR teams to practice coordination before incidents occur.
- RCMP members can participate in local SAR training to strengthen teamwork.
- Emphasis on avoiding complacency – being prepared ensures faster, safer responses.

Operational Lessons and Improvements

- During past SAR cases in which the RCMP has been involved, a lack of documentation has been an issue. Accurate documentation and note-taking during SAR is crucial. Memory alone can lead to misinformation.

Well-being and Support for Volunteers

- SAR work is emotionally challenging. Superintendent Pike urged volunteers to look after mental health and talk openly with peers or family.
- Acknowledged that some volunteers step back due to traumatic experiences and emphasized the importance of peer and community support.

Discussion: Coordinators for communities in which the RCMP have supported recent SAR operations highlighted the value of these services. RCMP have provided greater assistance on the investigation side of cases and on the ground, through their deployment of Remotely Piloted Aircraft Systems (RPAS) and scent dogs. Roundtable participants highlighted a few issues:

- They would like it to be easier for SAR teams to use RCMP equipment, particularly the skidoos available at some detachments.
- Similarly, they would like SAR teams to be given the opportunity to take on machines that detachments are replacing due to age or mechanical issues.

“The support we got in Kugluktuk and in Cambridge Bay was very different than we have seen in the past in a total 180 direction. We had aircraft from you guys. We had plane, helicopter, the officers. In Cambridge Bay, we had our locals getting tired, so the officers said, ‘we can’t go on our own, but can we go with one of your guys so one of your guys can relax?’ So they had all these ideas. And I think it’s based off of you with them and how your reactions are. So I just wanted to say thank you for all of that. It makes a huge difference.” – Angulalik Pedersen, Assistant SAR Coordinator, Cambridge Bay, Nunavut SAR Roundtable 2024.

- They would also like to see greater police involvement during SAR cases that involve substance abuse or despondency.

“...when this transition happened where the RCMP gave up the authority to NEM for search and rescue, it was not well thought out. It wasn't clear in terms of how they would work together, how involved the RCMP would be, how much support they'd provide. But with the leadership of these two organizations working together to put it together, I think again, some of the barriers to cooperation that existed, they're not there anymore.” – Peter Kikkert, Nunavut SAR Roundtable 2024.

Joint Rescue Coordination Centres Halifax and Trenton

Major Christopher Simm, the officer-in-command of JRCC Halifax, Major Marc Crivicich, officer-in-command of JRCC Trenton, and Daniel Loghin, maritime SAR coordinator at Trenton, provided an update on the activities of the Joint Rescue Coordination Centres and the Royal Canadian Air Force. The officers explained the state of Canada's search and rescue air assets and what the situation will be over the next five years. Canada's SAR air capacity is in a fragile state, marked



by aging fleets and upcoming transitions that will limit availability. While the JRCC personnel explained that the new C-295 Kingfisher will improve search capabilities, they pointed out that the new aircraft would not be fully in place for two years. Their overarching message was clear – to bridge this resource gap strong coordination, early notifications, and better integration of local knowledge into the SAR system are essential.

Organizational Developments

- Joint Rescue Coordination Centre Halifax (JRCC) is strengthening continuity and relationship-building in Arctic SAR by appointing Captain Maia Hudak as a dedicated point of contact for Nunavut and northern partners. Captain Hudak will serve at JRCC Halifax for the next several years, ensuring consistent communication, follow-up, and institutional memory within Canada's aeronautical and maritime SAR system.

Operational Capacity and Challenges

- Air response capacity remains a significant short-term challenge. Ongoing Cormorant helicopter upgrades and the retirement of the C-130 Hercules aircraft will strain SAR aviation resources until at least 2026. Long travel distances from southern and East Coast bases continue to delay arrival times for aeronautical SAR assets in Nunavut.
- All 13 Cormorants are undergoing mid-life upgrade (2025–2030). By 2026, East Coast coverage may be reduced to just one available aircraft.
- The C-130 Hercules aircraft are 30-plus years old, increasingly unreliable, and being retired by 2031.
- In the interim, early notification from Nunavut Emergency Management (NEM) to JRCCs and partners is essential to enable earlier planning and mobilization.
- Communities were encouraged to explore local or regional aviation partnerships to help fill response gaps.
- While the upcoming CC-295 Kingfisher aircraft promises to enhance future coverage, short-term support will depend on coordination and mutual support among territorial and federal partners.

“We are in a fragile place. Our three main SAR aircraft that would respond up in these regions are going through various stages of either retirement or development, or, in the case of the Cormorant, a mid-life upgrade. We have two Cormorants. We have two Cormorants on the East Coast that would likely respond to this region, one in Gander, one in Greenwood. It's a very capable, medium-lift helicopter. It's really our bread and butter of our rescue capability, but it's limited by its cruising speed to 140 knots. From Gander up to Iqaluit, it's 1,000 nautical miles. It's about 7½ hours of flight time. Plus, it's probably going to have to refuel in Goose Bay and Kuujuaq before it gets here. From Greenwood, it's 1,100 miles up here. So, that's even longer. We're looking at 10, 11 hours before it can make it here. So, that's a challenge that we have to overcome, and that's a challenge that, I think, we can work closely with NEM to get that notification of a distress earlier. I am noticing much more, better conversations happening early, so I think that's a really good step.” – JRCC personnel, Nunavut SAR Roundtable 2024.

Technological

- Hercules aircraft out of Winnipeg and Greenwood now have the Cellular Airborne Sensor for Search and Rescue (CASSAR) system. Essentially, the aircraft becomes a mobile cell tower. If the aircrew can get the phone number of the search subject, if the person's phone has battery power, and if it is powered on, the CASSAR system can pinpoint the device. “It's another tool that we have in the box to be able to take that search out of the equation.”
- When the C-295 Kingfisher comes online, it will be slower and have shorter range, but it will be far superior in terms of search capability with infrared, radar, and electro-optical sensors. It can start using these integrated sensors 40 kilometres out from a search site. “On the sensor side, it is a huge improvement from the Herc, which mostly involve eyeballing. The sensors could cut down search times dramatically and should work very well in the Arctic.”

Partnerships and Coordination

- The JRCC personnel emphasized the value of real-time collaboration and shared situational awareness across agencies. To avoid communication delays and “phone tag,” JRCC personnel proposed that, when a case arises, multi-agency calls via FaceTime or Microsoft Teams be used to establish a common operating picture – ensuring everyone has the same information simultaneously.
- Close coordination also continues between JRCC, the Canadian Coast Guard, and Coast Guard Auxiliary units. When auxiliary vessels deploy, JRCC tracks their status through local reporting and stressed the importance of consistent communication: prior to departure (to review case details), during operations (to share updates), and upon safe return (to confirm completion and crew safety).

Use of Local Knowledge and Collaboration Principles

- They highlighted the Inuit principle of Aajiiqatigiingniq, decision-making through discussion, consensus, and collaboration. They pointed out that this makes a lot sense from a JRCC perspective and could really strengthen the SAR system.
- Local knowledge of currents, tides, terrain, and wind patterns is invaluable for refining JRCC’s drift and search models. Community insights on how local geography influences surface movement can dramatically improve search accuracy and containment planning.
- They expressed strong interest in continuing to integrate Inuit Qaujimajatuqangit (IQ) and local expertise into operational planning.

The Canadian Coast Guard and Coast Guard Auxiliary

Erin Pigott, deputy superintendent for maritime search and rescue in the Coast Guard’s Arctic Region, SAR officer Brenda Panipakoocho, and Coast Guard Auxiliary Arctic Director, Rob Wilkins, discussed recent developments in marine search and rescue. The CCG Arctic Region is building a northern-led, community-based SAR system, supported by collaboration, communication, and inclusion. The agency has developed a better understanding of the marine risks facing the region and its SAR requirements, which has guided new investments in equipment, capabilities, and people. The Coast Guard has worked to stitch Arctic responders, with their particular



knowledge and skills, into the broader SAR system. Continued capacity-building, training, and partnerships are essential to strengthen resilience and coverage across Arctic waters.

Operations and Resources

- Primary maritime SAR resource: the Arctic Marine Response Station (AMRS) in Rankin Inlet, operational seasonally from June to October, covering Rankin to Chesterfield Inlet and Whale Cove.
 - Responded to 8 calls this past season, covering 737 nautical miles.
 - It is the only Coast Guard station in Canada equipped with a firearm, for polar bear safety.
- Secondary SAR resources in the region include CCG icebreakers, Royal Canadian Navy vessels, and other vessels of opportunity.
- 2024 Arctic Region SAR caseload:
 - 257 total cases, including 111 maritime, 69 humanitarian, and 78 aeronautical.
 - Increase attributed partly to improved reporting and Auxiliary engagement.

Partnerships and Coordination

- The CCG works closely with JRCCs, RCAF, RCMP, and Nunavut Emergency Management (NEM).
- Emphasized the importance of liaison and communication, especially post-incident follow-ups to improve coordination and training.
- CCG personnel have spent a lot of time listening to and learning from Northerners and the other mariners that operate in Arctic waters. They have developed a much deeper understanding of community and industry marine activity, risks, and requirements. This learning process has been formalized in the Risk-Based Analysis of Maritime Search and Rescue Delivery (RAMSARD) Program, through which CCG personnel visit every community in the Arctic Region over a five-year cycle to update risk assessments and review SAR services. Collecting data on currents, hazards, case locations,



CCG SAR officer Brenda Panipakoocho takes the roundtable through the Indigenous Search and Rescue Training Program.

and community knowledge helps to inform future operations and prioritization.

- Collaboration extends to Canadian Hydrographic Service (CHS), using data loggers on Auxiliary vessels to map uncharted Arctic waters near communities. This program has “the intent of gathering the depth data from your depth and basically using that information to build up the information on the chart, because they’re usually pretty blank around the areas that you guys are actually operating in. And that’s been voiced numerous times, how most of the soundings are usually where the bigger ships go, not closer to shore where all of you guys are normally operating.”

Community Involvement and Training

- Coast Guard Auxiliary (Arctic):
 - Composed of community-based volunteer units.
 - Units are organized as local societies, not federal entities, and rely on contribution agreements for reimbursement of fuel and maintenance (approx. \$270/hour operational rate).
 - 13 active Auxiliary units across Nunavut, with more planned in the future.
- Recruitment and Inclusion:
 - Ongoing recruitment for northern and Indigenous crew members; goal is fully Indigenous crews for AMRS operations.
 - Seasonal summer employment opportunities (June–October) for youth with marine knowledge and Inuktitut fluency.
- Training:
 - Conducted annually at Parry Sound, with pre-season training in Rankin Inlet.
 - Indigenous Search and Rescue Training Program, developed under the Oceans Protection Plan, offers accessible, community-driven SAR training (covering mental health, first aid, small craft safety, and equipment use).
 - Joint instruction between CCG staff and Auxiliary units, reinforcing collaboration and shared learning.

“And the first time I ever, just as my story, first time we went to Rankin, when we were hired on a SAR programme, officers, they took us to Rankin for training. And from when I started as a woman, there’s only certain things that I could do, right? And then I went to Rankin, we did the training and Kiara, she taught us vessel inspection from front to back, engines and everything. And then she’s there driving the vessel and stuff and I’m like, she was a coxswain, so she... I was just amazed and I’m like 30 years ago when I started, we couldn’t do this and now all the [guard rests 0:15:36] and everything, we now have a coxswain who is driving the vessel and now she’s the AMRS coordinator. So a lot has... we’ve gone a long ways from 30 years ago to now. So this is something I’m really proud of, working with Coast Guards. It’s very inclusive.” - CCG SAR officer Brenda Panipakoocho, Nunavut SAR Roundtable 2024.

Challenges and Priorities

- Administrative burden: The paperwork system for Auxiliary reimbursement remains a major challenge; some units missed fuel compensation due to unreported missions. As a result,

“community units were running deficits at the co-op for fuel or with the hamlet for fuel, and not being able to pay those bills. So that’s something that was a take-away that we’ve worked to fix. We’ve identified a better communication method so that we can flag them and we can follow-up on them. But the paperwork component still remains such an important, central part of that process.”

- Capacity gaps: Many Arctic communities still lack dedicated SAR resources, leading to reliance on vessels of opportunity.
- Human resource goal: Recruit and train more local, permanent northern personnel, reducing dependence on southern staff.
- Post-COVID catch-up: Focus has shifted from Auxiliary expansion to standardizing training and capacity-building across existing units.
- Infrastructure limitations: Seasonal operations, distance, and limited shore support remain structural constraints.

“Just a note here, the Stanley boat that you see, the rescue boat there, holds about 600l of fuel and that gives a range of approximately three hours out, three hours back, depending on speed, you can extend that. 600l of fuel, how many jerrycans does it take to fill 600l of fuel? 20 litres a jerrycan? Yeah, 30 jerrycans full of fuel. Any of my pilots over here, how many... what does 600l of gasoline weigh? Roughly? Just under a thousand pounds, right? Each time we refuel the boat it’s a thousand pounds of lifting and carrying because there isn’t... we’re lucky we see a dock and we see drones in this picture, but the previous picture with the gravel shingle beach is much, much more realistic in the world. Most of the world that we live in and just to highlight, that’s a volunteer effort with running jerrycans back and forth to the fuel station to refuel the boat. When we think of quads, we think of sleds, one or two jerrycans at a time, maybe we have a QAMUTIK with 10 jerrycans or 15 jerrycans in it. But we’re only really handling a couple at a time. When we’re talking about a rescue boat, it’s a thousand pounds of fuel each time we go out and it’s a refuelling of up to a thousand pounds of fuel. A little perspective there.” – Rob Wilkins, Arctic Director, Canadian Coast Guard Auxiliary, Central and Arctic.

1 Canadian Ranger Patrol Group

Lt. Colonel Travis Hanes, the commanding officer of 1 Canadian Ranger Patrol Group (1CRPG), provided an update on the Canadian Rangers. Rangers are part-time, non-commissioned Canadian Armed Forces Reservists who serve as the “eyes, ears, and voice” of the CAF in remote parts of the country “which cannot conveniently or economically be covered by other elements of the CAF.”⁵ They lead and support territory protection operations (including surveillance patrols), conduct and support CAF operations, and ensure a CAF presence in local communities. The CAF provides Canadian Rangers with flexible training that is tailored to the local terrain and environmental conditions but that generally involves several elements directly related to SAR capabilities, including first aid, wilderness first aid, navigation, GSAR, constructing emergency airstrips on land and ice, and communications. Much of the equipment supplied to individual

⁵ DAOD 2020-2, Canadian Rangers, 21 May 2015, <https://www.canada.ca/en/department-national-defence/corporate/policies-standards/defence-administrative-orders-directives/2000-series/2020/2020-2-canadian-rangers.html>.

Rangers and their patrols also supports SAR operations: communications equipment, navigation and geolocation gear, first aid kits, etc. Within their communities, Rangers often serve as SAR volunteers who know how to work effectively as a group or, when formally activated by the CAF, as a team on an official military tasking for which they are paid. When officially activated, the Rangers are compensated for the use of their personal equipment through an Equipment Usage Rate and can have their equipment replaced if it is damaged during the operation.⁶

Operational Process and Decision-Making

- Activation Pathways: Ranger involvement in SAR can begin through three main channels:
 1. Direct contact from Rangers in the community (via Ranger Instructors) providing the “five Ws” (who, what, where, when, why).
 2. Direct calls from NEM, RCMP, JRCCs, and other authorities to Ranger command (less common).
 3. Formal Requests for Assistance (RFAs) routed through Joint Task Force (North) (JTFN).
 - The first method is typically fastest; formal RFAs are often slow and may arrive after operations are already underway.
- Decisions to deploy depend on authority, safety of Rangers, mission urgency, and likelihood of success, with priority given to cases involving immediate threats to life and limb.
- The Rangers cannot participate in recovery operations or direct law enforcement support without higher authorization.
- Ranger command emphasizes verification and quick judgment based on severity rather than full certainty – prioritizing speed and life safety over procedural delay.

Partnerships and Interoperability

- Support to SAR Authorities: The Rangers’ role is always in support of recognized SAR authorities (NEM; JRCCs).
- SmartICE Collaboration: Some Ranger patrols now carry and deploy SmartICE equipment during patrols to expand ice monitoring coverage beyond communities, strengthening shared situational awareness.
- Shared Infrastructure: Rangers maintain sea cans, storage shacks, and supply caches across northern communities, which are often co-located with RCMP detachments to improve efficiency and readiness.
- Equity and Pay Considerations: Hanes emphasized sensitivity around pay differences between military and volunteer responders.
- With limited human resources in the North, close cooperation between the Rangers and civilian SAR organizations is essential to prevent duplication and maximize effectiveness. “If we don’t work together, we’re wasting opportunities.”

⁶ See Peter Kikkert and P. Whitney Lackenbauer, “The Canadian Rangers: Strengthening Community Disaster Resilience in Canada’s Remote and Isolated Communities,” *The Northern Review* 51 (2021): 1-33, <https://thenorthernreview.ca/index.php/nr/article/view/901>.

Future Plans and Priorities

- Incorporate SAR data to focus patrol coverage on high-risk routes and areas where travellers frequently go missing.
- Continue developing SmartICE collaboration to enhance environmental situational awareness.
- Improve rapid communication protocols between Rangers, RCMP, and NEM.
- Maintain emphasis on joint crisis response preparedness ensuring unified planning, shared data, and mutual understanding of capabilities.

Discussion: After LCol Hanes explained the Ranger activation process, some roundtable participants noted continued confusion over how, when, and why a Ranger patrol can be officially activated to help with SAR and wondered who makes that decision. They pointed to confusion over what constitutes an “urgent” or “life and limb” situation and how risk is assessed for each GSAR case. They also asked what tasks can Rangers be assigned, and who/what organizations can assign them? One responder noted, “My husband’s a Ranger and he always say, ‘Why don’t we get help from the Rangers?’ Every time I talk to the sergeant, ‘No, that’s not part of the job.’ So it’s always at me, he’s not helping me, who do I contact?”

Other roundtable participants noted that while Canadian Rangers do serve as volunteer members of the GSAR teams in many communities, this is not always the case. Some SAR coordinators highlighted challenges in getting Rangers to volunteer for searches before they are officially activated. The response that coordinators have received from some Rangers is that they are not permitted to volunteer for a search unless they are officially activated by 1CRPG. Other community responders suggested that some Rangers will choose not to volunteer, instead waiting in the hopes that they will be officially activated and paid.

Moving forward, participants agreed that continued efforts to clarify when and how the Rangers are activated, how their training as Rangers fits with that provided by other SAR organizations, and under what conditions Rangers and their equipment are protected while on searches are important to sustaining trust and building capacity.

Civil Air Search and Rescue Association

The Civil Air Search and Rescue Association (CASARA) gave a presentation outlining its volunteer-based operations and growing involvement in northern Canada, particularly Nunavut. Bev Williams, CASARA’s Acting Vice-President of Operations and Training, explained the operations of the organization’s national network of about 1,800 volunteers. CASARA works closely with the Royal Canadian Air Force (RCAF) and the Joint Rescue Coordination Centres (JRCC), supporting search and rescue (SAR) operations and providing training to enhance local capacity.

Mandate and Role

- Volunteer Model: Members include trained pilots, aircrew, and ground personnel who volunteer their time to support official SAR operations.

- **Respect for Local Authority:** CASARA's northern operations are guided by a community-led, invitation-only approach. The organization only enters communities when invited, ensuring that local priorities, knowledge, and leadership shape how CASARA's support is used and integrated.

Operations and Northern Expansion

- **Nunavut Presence:**
 - CASARA now maintains or is developing eight resource units across Nunavut – in Cambridge Bay, Gjoa Haven, Arctic Bay, Pond Inlet, Sanirajak, Qikiqtarjuaq, Rankin Inlet, and Baker Lake.
 - Some units remain inactive, but CASARA is working to reactivate and strengthen them through new spotter and drone training initiatives.
- **Community Partnerships:**
 - Following relationships built through northern SAR roundtables, CASARA was invited to Baker Lake to help establish a new local unit.
 - This visit resulted in the recruitment and training of 14 new members, including the creation of operational air spotters in Baker Lake and Rankin Inlet.
 - These local spotters can now support aerial searches aboard military or chartered aircraft, a major step forward in building locally based air search capacity within Nunavut.



CASARA's RPAS training in Baker Lake.

- Integration with Broader SAR Network: CASARA's growing northern footprint complements the work of RCAF, JRCC, and ground SAR organizations, helping to link community, air, and military resources in a unified network.

RPAS Program and Technological Innovation

- National RPAS Initiative: After four years of research, testing, and deployment in southern Canada, CASARA launched its national drone program. The program is now being expanded into Nunavut to strengthen community-based aerial search capacity.
- Baker Lake RPAS Training:
 - The Baker Lake initiative combined classroom instruction, ground school, and flight practice over a week period, culminating in Transport Canada's Advanced Drone Pilot certification exam.
 - Participants trained in thermal imaging, night operations, and screen-based observation.
 - Seven participants successfully completed the program, becoming Nunavut's first group of CASARA-certified advanced drone pilots.
- Next Phase of Training: These new pilots will undergo search and rescue-specific drone training in Winnipeg. This training will focus on:
 - Autonomous flight and flight planning
 - Thermal imaging for ground search
 - Night operations
 - Beyond Visual Line of Sight (BVLOS) techniques
 - Use of advanced platforms such as the DJI Matrice M30T
- Adapting Training to the North: The Baker Lake ground school served as a pilot program for northern delivery. Lessons learned will guide the redevelopment of the curriculum to make it:
 - More regionally relevant, reflecting Arctic flight conditions and northern communication realities.
 - Culturally and linguistically accessible, incorporating Inuktitut-translatable training materials.
 - Future iterations of the course will emphasize hands-on, community-led learning and local mentorship, ensuring that training aligns with community capacities and learning preferences.
- Program Expansion: CASARA plans to extend drone and spotter training to additional Nunavut communities, including Cambridge Bay and Rankin Inlet, in partnership with local governments and SAR teams.
- Drone Performance and Limitations:
 - Current drones can operate for roughly 20-40 minutes per battery and perform reliably to around -20 °C, making them most effective during shoulder seasons rather than in extreme winter conditions.
 - Multiple batteries are cycled to extend search duration.
 - Ongoing Research: CASARA is collaborating with Canadian research institutes and technology partners to develop and test cold-weather-capable drones for Arctic operations.

Parks Canada

Caryn Smith from Parks Canada's Nunavut Field Unit presented on search and rescue operations in the territory's national parks. Increasing adventure tourism and research expeditions in remote areas are increasing the SAR risk in these parks.

Operations

- Parks Canada maintains a 24/7 emergency response structure across Nunavut's national parks and adjacent communities.
- It responds to medical evacuations, missing or overdue persons, and ground searches within park boundaries.

Training and Preparedness

- During peak seasons, there is always a duty officer on call, supported by a manager on standby, and additional coordination through Jasper Dispatch. Emergency preparedness includes strategically placed rescue equipment, such as snowmobiles and boats, and trained staff.
- All field staff maintain advanced first aid (minimum 40-hour, some 80-hour first responder), Incident Command System (ICS 100–300) training, and bear safety certification. Some are also trained in low-angle rescue, rough terrain navigation, and swift-water awareness.
- Each year, Parks Canada produces an emergency response fact sheet detailing contact information, response capabilities, and available equipment.
- Mandatory registration and orientation are required for non-Inuit visitors entering parks, ensuring awareness of environmental risks and safety protocols. Inuit are exempt from these requirements and may carry firearms, unlike visitors.
- Parks Canada produces detailed visitor information packages outlining terrain risks, safety precautions, and response limitations. These are available on the agency's website and in community offices.
- To mitigate bear risks for southern adventurers, Parks Canada encourages hiring local bear guards, supporting both safety and local economic development.
- Parks Canada also provides joint training opportunities for community partners such as Hunters and Trappers Organizations (HTOs) and SAR members. Specialized training, such as first aid and boating safety, has been provided to strengthen community readiness.

Limitations

- Parks Canada does not maintain in-house capability for: high-angle, glacier, or avalanche rescues.
- Visitors undertaking technical or remote travel (e.g., glacier expeditions or multi-day backcountry hikes) are warned that rescue response times may extend up to several days, depending on terrain and aircraft availability.
- Parks Canada typically does not have aircraft permanently based in Nunavut but relies on contracted helicopters through PCSP.

- Reliance on southern-based specialists increases response delays (potentially several days).

SmartICE

The SmartICE team told the roundtable about their operations across the North and, more specifically, the role their services can play in SAR operations. SmartICE is a social enterprise that combines Inuit knowledge and technology to improve ice travel safety and support community well-being. Several SAR coordinators highlighted how SmartICE has reduced the number of searches in their communities.

Community Partnerships and Governance

- Co-Management Model: Each community has a local management committee, typically including representatives from the hamlet, hunters and trappers organizations, SAR teams, and elders.
 - Committees determine sensor placement, data collection routes, and local training needs.
- Community Engagement: SmartICE only works *by invitation* from communities and co-designs activities with them.
- Employment Impact: Over 13,500 hours of local employment in Nunavut (2022–23), plus 39 community climate monitors trained in Tuktoyaktuk.
- Hands-On Community Training: Each operator training includes classroom learning, safety briefings, and extensive on-ice practice using SmartICE equipment.
 - Curriculum Highlights:
 - Ice monitoring techniques
 - Equipment assembly, maintenance, and troubleshooting
 - Occupational health and safety
 - Trip preparation and reporting
 - Community communication and data sharing
 - Elder Involvement: Elders participate in training sessions to share traditional ice knowledge and ensure the integration of Inuit Qaujimagatuqangit.

Operations and Technology

- Guiding Principle: Technology should *complement, not replace*, Inuit knowledge.
- SmartICE works with elders to document and transmit traditional ice knowledge, producing Inuit knowledge-based travel safety products for community use and SAR application.
- This approach embodies the principle of Aajiiqatigiingniq — collaborative, consensus-based decision-making rooted in local expertise.
- Smart Buoy: A community-deployed sensor that monitors ice thickness, snow depth, and temperature gradients throughout the ice season, transmitting data via satellite to communities and SmartICE.
 - Data allows year-to-year tracking of ice conditions.
 - New features under consideration (from JRCC and others): visibility sensors, emergency alert buttons, and satellite distress signals.

- SmartQAMUTIK: A mobile ice thickness scanner mounted on a sled, used during community trail surveys or SAR missions.
 - Provides real-time ice thickness readings displayed on a screen and uploaded for community access within seconds.
 - Valuable for SAR responders assessing ice safety and potential search routes.
- Data Access: All SmartICE data is available through the SIKU app and website, providing easy access for communities, SAR coordinators, RCMP, Coast Guard, and JRCC.

SmartICE and SAR Operations

- SAR prevention: Local access to real-time maps has reduced winter SAR incidents by improving traveller safety and awareness.
- Ice data also supports decision-making for SAR missions, especially identifying safe routes or likely hazard areas where travellers may have encountered thin ice.
- Examples of use:
 - In Pond Inlet, SmartICE data guided a Twin Otter landing on sea ice during a medical evacuation, ensuring safe aircraft operations.
 - Several coordinators explained that they use SmartICE information to help with search area determination.
- SAR-Specific Adaptation: SmartICE is now modifying its training based on responder feedback, with pilot programs in Cambridge Bay and Salluit to tailor instruction to SAR contexts.
- SmartICE is working to strengthen collaboration with RCMP, Coast Guard, JRCC, and NEM to better integrate SmartICE data into SAR planning.

“Several years ago, I’m also a member of the search and rescue team for Pond Inlet, we had a call and it was during February when the sunlight is finally starting to come back to the community. They had an elder that had an accident and he got run over by a qamutik and we had to go to the site, it’s about a three hour drive. And we had to assess him, how we should bring him back to the community, either by snowmobile or get a Twin Otter to land on the ice. And once we got to the person and assessed them, it wasn’t a good idea to bring him back by snowmobile. So we had a Twin Otter that came from, I think it was Resolute and the pilot... we had communications with the pilot with our handheld radio. And for him to be sure to safely land on the ice, I was able to use our SmartQAMUTIK sensor and inform him how thick the ice is for the pilot to safely land and take up the person. And he’s still with us today and that’s one of my stories for having a Twin Otter landing on the ice, to get a person safely back to the community.” – Andrew Arreak, Regional Operations Manager, SmartICE

SAR Coordination Discussion

During this part of the roundtable, coordinators shared how they plan, execute, and manage SAR operations. The following represents a general summary of this dialogue. Many of the ideas, approaches, and best practices discussed by roundtable participants will be shared through future roundtable outputs, such as a coordinator's guidebook and training materials.

There are few formalized standard operating guidelines for SAR operations in Nunavut. NEM has established several key steps that should be followed for GSAR cases. Essentially, when advised of a missing person, SAR coordinators are to call NEM, provide basic search information to the duty officer (who, what, where, when, and how), receive a tasking number through which to purchase fuel and food for the search party, complete the Pre-Search Vehicle Condition report, and, after the conclusion of the search, finish the after-action reports and invoices. Beyond these steps, however, community SAR teams organize and execute searches using an array of different approaches.

All coordinators at the roundtable emphasized their role as SAR detectives, gathering information about the search subject, their travel plans, equipment, and capabilities, environmental conditions, and the terrain, often engaging with the family and friends of the search subject, experienced hunters, and Elders. This information-gathering by community coordinators is essential given the lack of familiarity that various agencies – NEM, JRCCs, RCMP – have with the region and the local hunting, fishing, and travel activities of its residents. During marine cases, for instance, coordinators pass along information to the JRCCs on the condition of missing vessels, the skill of crews, and potential travel routes. In the case of an overdue boat, they can call the overdue person's/persons' family/families, friends, or other witnesses to gather more information, including about their travel plans and preferred hunting/fishing areas.

"And wife told us he had 10 gallons of gas, he had a 600 ace 4-stroke. So like, OK, we did the we did the math and we did the ground search based on the distance he could have travelled. But, he had five extra gallons than what we were told.... That extra five gallons, a jerrycan, an extra five gallons on a four-stroke vastly expanded the search area. It added 380 kilometres of extra area. ... So you got to be really careful with knowing how much gas a person has. That 5 gallons on a four stroke is a long ways. ... So even getting that kind of detail, 'How much gas did this person have with them on their sled' is really important to understand how far they might have gone, right? ... I think it's not in there, but that five gallons probably added four or five days of searching because we couldn't find him where we thought they were."

- Angulalik Pedersen, Assistant SAR Coordinator, Cambridge Bay.

Coordinators suggested that they often focus on gathering the following key information during a search:

- Where might this person be hunting or fishing right now?
- What is the condition of the trail the person may have used?
- Do they have cabins they go to frequently?
- Were they planning on visiting anyone, either on the land or in a neighbouring community?
- How capable is the person of dealing with the current conditions?

- How good is their equipment?
- What kind of track does the person's machine make?
- How much fuel did the person take with them?

Coordinators used the last point about fuel to highlight how important it was to capture as much detail as possible when gathering information. Given the efficiency of new skidoos, for instance, a couple of gallons of gas can make a huge difference in terms of determining the search area.

Participants discussed the need to practice how to read the story the clues are telling. The roundtable discussed how to use the information gathered to develop scenarios for what might have happened.

A scenario is a description, in story form, of what might have happened to the missing person – these scenarios can help to plan out SAR operations.

As they gather information during a SAR operation, most coordinators will establish a formal command post from which to manage their responders. Some teams have their own building or office for this purpose, while other coordinators must set up in whatever space is available, often in the hamlet office or in their own homes. Participants were encouraged to share responsibilities within the command post, using tools and teamwork to manage the complex flow of information during an incident.

Coordinators emphasized the role that Elders play in their command posts. Their knowledge and experience were critical for:

- analyzing decision points
- general terrain analysis
- working through various scenarios
- identifying high probability areas
- assessing survivability
- decision-making support

Elders also provide moral support to the whole SAR team and can assist with difficult conversations around search suspension. They are critical members of every team.

Most SAR coordinators have a small group of experienced searchers that they will activate first, deploying them out in pairs or in parties of four. Some communities will pair experienced searchers or Elders with younger volunteers, which reduces risk and helps with the transmission of knowledge and skills. Often, SAR teams will start their searches on trails and at known cabins, where someone might be expected to seek shelter. They then conduct sweeps by spreading into a long line, retaining visual sight of one another. The coordinator keeps track of these movements from the command post and maintains hourly communication check-ins. During extended searches, some groups will establish base camps on the land, and, if there are enough responders, searchers will work in shifts. As the search

And yes, it's good to have Elders helping you out because all those days when we were doing our search, we had four different Elders coming in every day, taking turns. It was really good to have Elders in the base. It really helped us, motivated us, giving the guys who were down there at the search area support. So it was hard, but I had to call the search off with the Elders' advice. It's good to have Elders in your base. They really helped me manage it. So if it's possible, try and have Elders in your base because, also, they know the land. They're good, also, advisors too on what to do and what not to do. - SAR Coordinator, Nunavut SAR Roundtable 2024.

extends and expands and more searchers are required, the coordinator will often issue a call out through social media or the community radio station.

During the discussion, participants established the following critical requirements that they thought would strengthen SAR coordination in Nunavut:

- None of the SAR coordinators around the table had ever taken a formal SAR coordinator course. Roundtable participants asked that a Nunavut SAR Coordinator be established that covers ground, marine, and aerial search and rescue and reflects the unique nature of search and rescue in the territory.
- Coordinators highlighted the need to document and share best practices around how to prepare their teams and themselves for SAR operations. Participants shared the following ideas:
 - Keep an up-to-date list of members of your team, including contact info
 - Setup a group chat for communications
 - Ensure equipment ready to roll
 - inReach and GPS devices charged
 - Team machines checked regularly
 - Fuel available
 - Regular training and team meetings – these can be informal, but are important for knowledge sharing and team-building
 - Track team member training, key skills, and equipment (e.g.)
 - Who is a good tracker?
 - Who has medical training?
 - Who can build an ice strip for air evacuation?
 - Who has a satellite communication device?
 - Who is comfortable with the inReach?
 - Identify command post
 - Mapping resources (e.g.)
 - Paper-based
 - Garmin
 - Google Earth
 - SAR Topo
 - Access to environmental information
 - SIKU
 - Windy
 - Connect with local SmartICE operators
 - Create connections with NEM, particularly Manager, SAR
 - Create connections with RCMP detachment and hamlet office - NEM can support these outreach efforts
 - Participants agreed that the following were critical questions that must be answered in advance of any SAR operation:

- What equipment/gear does your team need? Share needs with NEM, CCG, CCGA, and other partners.
 - How are you going to ensure your team has access to fuel if pumps are closed?
 - How are you going to communicate with your team members while they are on an operation? You must ensure that you have two-way communications.
 - Who on your team will be able to assess and stabilize an injured subject?
- Participants raised the need for well-constructed standard operating guidelines for SAR coordination. These guidelines could create efficiencies, break complex processes down into step-by-step instructions, ensure everyone knows their roles and responsibilities, facilitate cooperation, coordination, and communication between different agencies and communities, and make searches safer. Roundtable participants highlighted the need to engage all SAR partners in the co-development of these guidelines and to continuously update them using the lessons pulled from SAR cases and exercises.
 - Standard operating guidelines could also help improve documentation. Currently, documentation is inconsistent between teams and represents a critical gap that must be addressed. The discussion focused on why documentation is so important during SAR operations:
 - It is almost impossible to create accurate records of a SAR operation when it is over.
 - It is easy to forget key facts during a busy SAR operation.
 - It helps you to keep track of your search progress and what still needs to be done.
 - It helps you to avoid wasting your limited resources (e.g. by checking the same area twice by mistake).
 - It makes sure everyone is on the same page if you change coordinators and command team during a long search.
 - It allows you to share your work with partners, such as NEM, the RCMP, and the JRCCs. Remember, while everyone on your SAR team might know the colour of the search subject's snowmachine or their parka, your partners will not - having it down in writing will make cooperation much easier.
 - It will help you to explain your decisions and actions to family.
 - It can be used after SAR operations to figure out what caused the incident and how to prevent future incidents.
 - It can be used after SAR operations to determine what worked well and what might need improvement.
 - It can be used to help plan future SAR operations (e.g. lost person behaviour; survivability).

Participants agreed that standardized and more accessible forms and reports might improve documentation. As a start, participants suggested the following forms should be created for Nunavut SAR: standardized initial incident report, subject profile template, timeline and event log, communications log, and tasking sheets.

- During the discussion on documentation, participants were introduced to a draft "Urgency Analysis" form designed to help coordinators assess and communicate how critical a search and rescue situation is and determine the level of response required. The tool provides a structured way to evaluate risk and urgency, ensuring that Nunavut Emergency Management (NEM), the JRCCs, the

RCMP, and other partners share a common understanding of the situation's severity and can respond appropriately. The form guides coordinators through key factors that influence urgency: age, medical condition, number of persons, experience and local knowledge, weather, terrain, known hazards, time overdue, and history of incidents in the area. Each factor is rated along a scale from low to high risk. By combining this information, coordinators can quickly determine whether a case warrants immediate action or continued monitoring. For instance, a missing experienced hunter in good health and fair weather may indicate low urgency, while a lost child in rough terrain with an oncoming storm signals high urgency and triggers immediate tasking. Urgency analysis forms are widely used during SAR operations in the south and the one provided to the roundtable was adapted from the forms used by several southern organizations.

- While coordinators recognized the need for some kind of urgency analysis process, they were less enthusiastic about the formal rating system. Instead, they supported a risk assessment process that would use the answers to key questions to craft a narrative around the level of risk facing a subject. Discussions indicated to the following approach:
 - The Subject(s)
 - Age
 - Very young / very old?
 - Health
 - Fitness level?
 - Medical condition?
 - Mild / severe?
 - Knowledge/Experience
 - Equipment/Clothing
 - Past behaviour
 - How long overdue
- The Land
 - Environmental conditions
 - Weather conditions
 - Sea state
 - Ice conditions
 - Land conditions

Who is going to get these guys when they run out of gas, get stuck, or have a breakdown? What happens when their family and friends can't or won't? It's not like in the south, we can't just get a tow. It's either the SAR team or no one in a lot of communities. - Community SAR Coordinator, Nunavut SAR Roundtable 2024.

I guess it varies. Sometimes, I ask, 'Hey. Does your family have a snowmobile? Do you have a boat?' or something like that. Do they have that? Most of the time, it's their only snowmobile, or it's their only transportation. In that case, we have to go. - Community SAR Coordinator, Nunavut SAR Roundtable 2024.

Things can change so quickly here. You can never forget that. You have to think about what might happen. What might happen on the land? What is the weather going to do? What might the person do? What might happen to this person? You say you can't bring them gas, so they try and talk back to the community. They get lost and the situation is much worse. A hunter is a couple of hours overdue and it's a sunny day, no big deal. A person is a couple of hours overdue with a storm brewing, that's different. Every case is different. - SAR Coordinator, Nunavut SAR Roundtable 2024.

- Hazards in area
- History of incidents in area
 - Honest answers to these questions would allow the coordinator to determine of an incident was high risk (high urgency: immediate deployment of all available resources, including air support, if possible), medium risk (medium urgency: fast response and mobilization of key resources, ready to intensify as more information comes in), or low risk (low urgency: slower response, fewer resources mobilized e.g. if only slightly overdue and good environmental conditions, give the subject more time to return).

Breakout Groups

During this session, coordinators rotated between different thematic stations to discuss pressing challenges and requirements for search and rescue in Nunavut and to ask more specific questions to their partners. There were stations on: SAR prevention; alerting and satellite communications; RPAS systems; air operations; marine operations; and training requirements. Building off previous discussions at the roundtable, the training requirements group collected ideas on how to design SAR coordinator and responder courses for Nunavut. The information gathered in these breakout groups will be shared in other roundtable products.

Wrap-Up and Next Steps

The roundtable concluded with a conversation about key next steps required to improve SAR in Nunavut, which would build on the progress that has been made in recent years.

- Develop Nunavut Search and Rescue Coordinator Course.
- Develop Nunavut-specific training materials for ground search and rescue.
- Secure funding for additional SAR roundtables.
- Work towards the establishment of a Nunavut Search and Rescue Association.
 - In both 2003 and 2007, efforts were made to establish a Nunavut SAR society to provide a regional framework for SAR, which would take the pressure off community groups and potentially open up new funding opportunities. A territory-wide association could be created with distinct branches for the Kitikmeot, Kivalliq, and Qikiqtani regions. A made-in-Nunavut SAR association could combine marine, ground, and aerial SAR. This association would represent the interests of and be the voice for all SAR teams in the territory, involved in soliciting and administering funding, strengthening relations between SAR partners, providing responder health and safety support, and developing new programming. Community responders at the roundtables suggested that this model could generate more support from Nunavut Tunngavik Incorporated, the regional Inuit associations, and the federal government. It would also help to build a “SAR culture” across the territory.
- Revise the territorial SAR policy to provide teams with more flexibility in terms of how they are organized.

- The territorial SAR policy is based on the formation of non-profit community SAR organizations. Community responders have consistently highlighted that the administrative burden required to maintain society status and secure funds, which includes submitting detailed budgets and activity reports, is too onerous. The annual funding that the Government of Nunavut provides to these groups is also insufficient and has gone down since the first societies were established in 2003 (from \$2,500 to \$1,000). There are other models. In the past, for instance, Nunavummiut suggested that SAR groups should be formalized and fall under the jurisdiction of the hamlets, along the same lines as volunteer fire departments. Regardless, greater flexibility should be built into the policy, allowing teams to organize in the manner that best suits their local context and requirements.

The roundtable concluded with the announcement of Arctic SAR Exchange 2025, to be hosted at JRCC Halifax and Canadian Forces Base Greenwood. The Arctic Search and Rescue Exchange is built on one core idea: that relationships and collaboration constitute the foundation of an effective search and rescue system. Relationships rooted in trust and respect allow SAR team members and partners to work together during operations, to understand each other's resources, capabilities, and limitations, and to overcome challenges. A lot of progress has been made since Arctic SAR Exchange 2023 and the first Nunavik and Nunavut SAR Roundtables. The 2025 exchange will explore how to build on these positive developments to strengthen and sustain the relationships, frameworks, and procedures that foster collaboration in Arctic SAR. How can we work better together? How can we operate at the speed of trust?

About the Authors

Dr. Peter Kikkert is an Associate Professor of Public Policy and Governance at St. Francis Xavier University. He is the academic lead for the Nunavut-Nunavik SAR Project and co-creator of the Nunavik and Nunavut SAR Roundtables and the Arctic SAR Exchange. He is a Team Leader and Training Officer with the Strait Area Ground Search and Rescue (SAGSAR) Association in Nova Scotia.

Dr. Ian Belton is a Lecturer at the University of Strathclyde. His research expertise centres on supporting and enhancing human judgment and decision making at both individual and group levels. He has conducted decision-making research in a range of applied contexts including strategic management, risk and reliability evaluations, the criminal justice system, and the defence and security sectors.

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Appendix I: Roundtable Agenda and Participant List

Schedule

15 November

7:30-8:30 am	Breakfast
8:45 am-9:15 am	Welcome and Introduction to the Roundtable
9:15 am-10:15 am	Recap: 2022 Regional Roundtables and 2023 Arctic SAR Exchange
10:15 am-10:30 am	Break
10:30 am-12:00 pm	Working Better Together: Briefings/Updates from Canadian Coast Guard Arctic Region, Canadian Coast Guard Auxiliary, and JRCC Trenton and Halifax followed by Q and A period
12:00 pm-1:00 pm	Lunch
1:00 pm- 2:30 pm	Working Better Together: Briefings/Updates from the Royal Canadian Mounted Police, Parks Canada, the Civil Air Search and Rescue Association, and 1 Canadian Ranger Patrol Group, followed by Q and A period
2:30 pm-2:45 pm	Break
2:45 pm-4:15 pm	GSAR in Nunavut: Briefing/Update from Nunavut Emergency Management on Operations, Policy, and Programs, followed by Q and A period
4:15 pm-4:30 pm	Looking Ahead: A Nunavut SAR Association?
5:00 pm-6:30 pm	Roundtable Opening Dinner

16 November

7:30 am-8:30 am	Breakfast
8:45 am-9:00 am	Welcome and Review
9:00 am-9:10 am	Introduction of the Draft <i>Nunavut SAR Coordinator's Guidebook</i>
9:10 am-10:10 am	The Foundation of Response: Building Search and Rescue Preplans

- ❖ A SAR preplan or readiness plan is a documented set of possible actions, contacts, and guidelines for a SAR operation. The preplan is intended to make operations more effective, ensure that required information is documented and shared, and improve collaboration with partners. This session will take coordinators through the draft preplan included in the coordinator's guidebook and invite feedback based on the best practices of all roundtable participants.

10:10 am-10:30 am Break

10:30 am-12:00 pm The Foundation of Response: Building Search and Rescue Preplans

12:00 pm-1:00 pm Lunch

1:00 pm-2:30 pm Working with SmartICE to Support SAR Operations

- ❖ In this session, roundtable participants will learn how SmartICE can be used to support search and rescue prevention and response in Nunavut. They will also have the opportunity to provide feedback on how SmartICE operator training and travel safety products can be best adapted for SAR operations.

2:30 pm-2:45 pm Break

2:45 pm-4:15 pm Working with SmartICE to Support SAR Operations

4:15 pm-4:30 pm Daily Wrap-Up

17 November

7:30-8:45 am Breakfast

9:00 am-9:15 am Welcome and Review

9:15 am-10:45 am Working Through Challenges and Opportunities: Breakout Groups

- ❖ During these sessions, participants will rotate between different thematic stations to discuss pressing challenges and opportunities for search and rescue in Nunavut. There will be stations on SAR Prevention; Alerting and Satellite Communications; Best Practices in Search Planning and Management; Communicating and Collaborating with Partners; Drones; Air Operations; and SmartICE.

10:45 am-11:00 am Break

11:00 am-12:00 pm	Discussing the Creation of a Nunavut SAR Association
12:00 pm-1:00 pm	Lunch
1:00 pm-2:30 pm	Working Through Challenges and Opportunities: Breakout Groups
2:30 pm-2:45 pm	Break
2:45 pm-3:15 pm:	Working Through Challenges and Opportunities: Breakout Groups
3:15 pm-3:45 pm:	Roundtable Wrap-Up and Next Steps

Roundtable 2024 Participants

Community SAR Coordinators

Valerie Qaunaq	Arctic Bay Search and Rescue
Gina Paniloo	Clyde River Search and Rescue (could not attend due to flight cancellation)
Marty Kuluguqtuk	Grise Fiord Search and Rescue
Tony Kunuk	Igloolik Search and Rescue
Rosie Akavak	Kimmirut Search and Rescue
Adamie Nuna	Kinngait Search and Rescue
Mary Jaworenko	Mittimatalik Search and Rescue (could not attend due to ongoing SAR case)
Julai Alikataqkuk	Pangnirtung Search and Rescue
Nancy Amarualik	Resolute Bay Search and Rescue
Alex Puasi Ippak	Sanikiluaq Search and Rescue
George Innuksuk	Sanirajak Search and Rescue
Daniel Kablutsiak	Arviat Search and Rescue
Harold Putumiraqtuk	Baker Lake Search and Rescue
Barnie Aggark	Chesterfield Inlet Search and Rescue
Hannah Angootealuk	Coral Harbour Search and Rescue
William Kopak	Naujaat Search and Rescue
Lorna Netser	Rankin Inlet Search and Rescue
Angulalik Pedersen	Cambridge Bay Search and Rescue
Clayton Keknek	Gjoa Haven Search and Rescue
Christopher Tungilik	Kugaaruk Search and Rescue
Baba Pedersen	Kugluktuk Search and Rescue
Bryan Ukuqtunnuaq	Taloyoak Search and Rescue

Territorial, Federal, Non-Profit Representatives

Jessica Young	ADM, Community and Government Services, Government of Nunavut
Calvin Pedersen	Manager, Search and Rescue, Nunavut Emergency Management
Susan Peter	SAR Officer, Nunavut Emergency Management
Alex Ker	Senior Consultant, NVision Insight Group Inc.
Rob Wilkins	Arctic Director, Canadian Coast Guard (CCG) Auxiliary
Erin Pigott	Deputy Superintendent, Maritime SAR, CCG Arctic Region
Brenda Panipakoocho	SAR Programs Officer, CCG Arctic Region
Supt. Kent Pike	Officer-in-Command, Criminal Operations, V Division, RCMP
S/Sgt. Chris Smith	Acting Officer-in-Command, East District, V Division, RCMP
Caryn Smith	Parks Canada, Nunavut Field Unit
LCol Travis Hanes	Officer-in-Command, 1 Canadian Ranger Patrol Group
Cpt. Marty Zimmer	CASARA Liaison Officer, 424 Squadron RCAF
Bev Williams	CASARA, VP Operations & Training
Peter Kadlak	Rankin Inlet Search and Rescue / CASARA Nunavut
Major Chris Simm	Officer-in-Command, JRCC Halifax
Captain Maia Hudak	SAR Mission Coordinator, JRCC Halifax
Major Marc Crivicich	Officer-in-Command, JRCC Trenton
Captain Sean Crites	Deputy Officer-in-Command, JRCC Trenton
Daniel Loghin	Maritime SAR Coordinator, JRCC Trenton
Major Sean Brinkema	Detachment Commander Nunavut, Joint Task Force (North)

Nunavik Observers

Craig Lingard	Director, Kativik Civil Security
Mitch Vail	Civil Security Coordinator, Kativik Civil Security
Kris Tukkiapik	Civil Security Technician, Kativik Civil Security

SmartICE Training Team

Andrew Arreak	Regional Operations Manager, SmartICE
Trevor Bell	Founding Director, SmartICE
Gillian Davidge	Training Support and Curriculum Development, SmartICE
Adrianne Mike-Qaunaq	Knowledge Coordinator, Arctic Bay, SmartICE
Mari-Lynn Taylor	Operations Program Manager, SmartICE

Nunavut-Nunavik SAR Project Representatives

Peter Kikkert	St. Francis Xavier University / Nova Scotia Ground Search and Rescue
Liam Smith	St. Francis Xavier University
Ian Belton	University of Strathclyde
John Quigley	University of Strathclyde

Robert Brown
Kerri-Ann Ennis
Floris Goerlandt

Marine Institute, Memorial University
Marine Institute, Memorial University
Dalhousie University