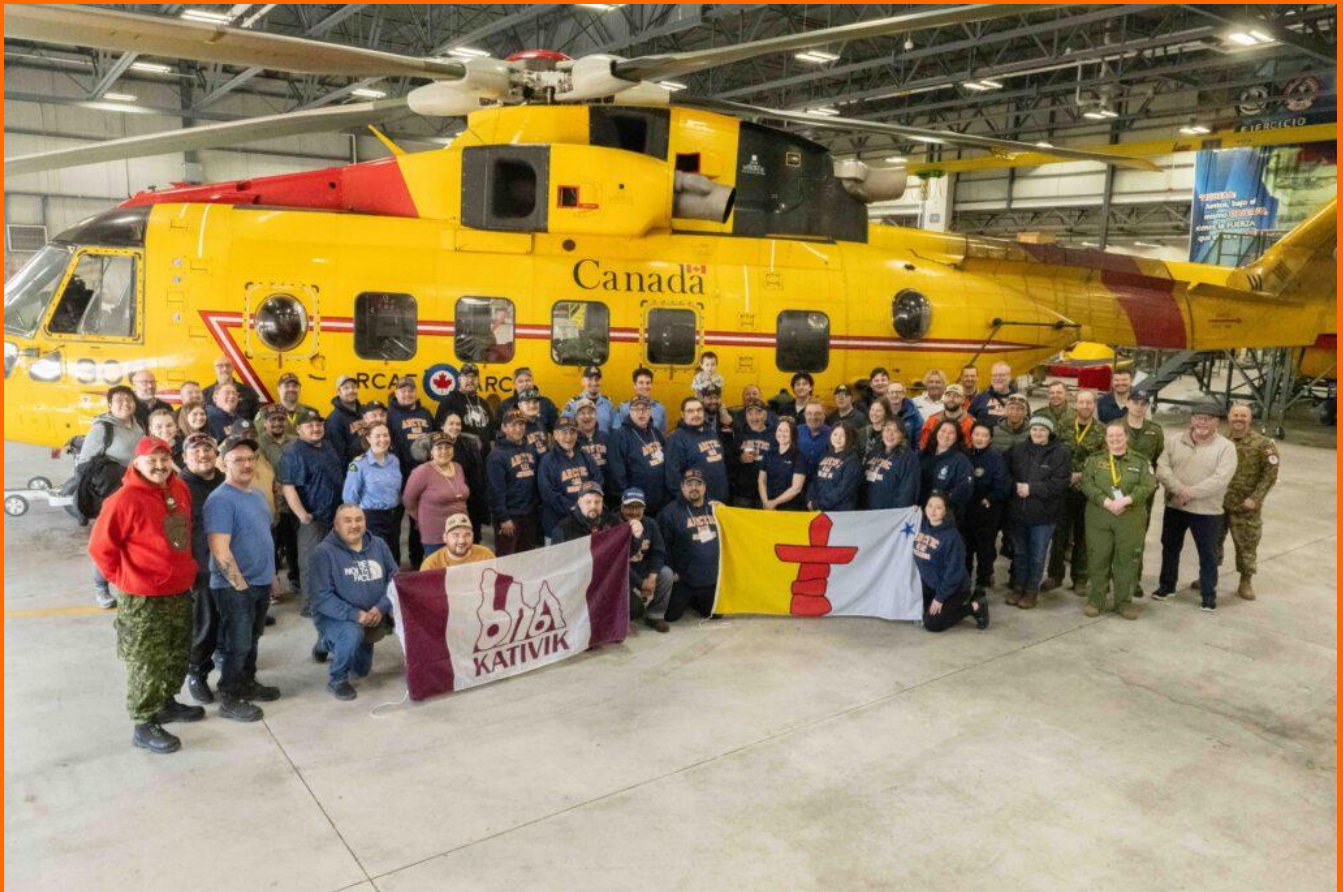


Arctic Search and Rescue Exchange 2025

Operating at the Speed of Trust



Halifax, Nova Scotia, 1-4 March 2025

Report Prepared by Peter Kikkert

Background: The Arctic Search and Rescue Exchange

The Arctic Search and Rescue (SAR) Exchange is built on one core idea: that relationships and collaboration constitute the foundation of an effective search and rescue system. Strong relationships rooted in mutual 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. Effective SAR depends not only on equipment and resources but on trust among all the individuals and organizations involved.



At meetings of the [Nunavik](#) and [Nunavut](#) SAR Roundtables in 2020 and 2022, community responders noted that unfamiliarity with federal agencies, weak or non-existent relationships, past negative experiences working with these partners, and persistent gaps in territorial/provincial and federal resources had sometimes led them to feel they must “go it alone.” They argued that an exchange that brought together Arctic responders and their federal partners – particularly the Joint Rescue Coordination Centres (JRCC), Royal Canadian Air Force (RCAF) SAR squadrons, and the Canadian Coast Guard – would build relationships and directly improve SAR operations in the region. At the same time, an exchange would allow responders from across

the Canadian Arctic to meet one another, share lessons and best practices, and build a community of practice dedicated to strengthening Arctic SAR.

With this guidance, the organizers of the Nunavik and Nunavut SAR Roundtables worked with JRCC Trenton to hold the inaugural Arctic SAR Exchange at Canadian Forces Base Trenton and Belleville, Ontario from 3-5 November 2023. The exchange brought together community responders from Nunavik, Nunavut, and the Northwest Territories, as well as practitioners from Nunavut Emergency Management (NEM), Nunavik's Kativik Civil Security Department (KCS), JRCC Trenton, 424 Transport and Rescue Squadron, the Civil Air Search and Rescue Association, Canadian Coast Guard (CCG) Arctic Region, and the Canadian Coast Guard Auxiliary.

The primary purpose of Arctic SAR Exchange 2023 was to bolster relationships between SAR partners and discuss how they could “work better together” in delivering search and rescue services. The exchange provided community responders and Northern government practitioners with a chance to see how the JRCC functions and to develop a better understanding of the capabilities possessed by the

military and Coast Guard. Further, it allowed them to meet face-to-face with their federal partners to identify, discuss, and address barriers to effective collaboration and coordination. Exchange participants also discussed how local knowledge and Indigenous Knowledge could be better integrated into the SAR system – a critical component for successful collaboration.¹

Arctic SAR collaboration has rapidly improved since 2022 – a development emphasized by Nunavummiut and Nunavimmiut responders. As a result, Arctic SAR Exchange 2025 asked one basic question: how do we build on these positive developments to strengthen and sustain the relationships, frameworks, and procedures that foster collaboration in Arctic SAR? How can we operate at the speed of trust?²



Arctic SAR Exchange 2023, Canadian Forces Base Trenton

SAR in the Canadian Arctic: The Basics

Search and Rescue in Canada is intended to function as a system of integrated systems. 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, oversees SAR prevention activities, and manages Canada's contributions to the International Cospas-Sarsat Programme.

¹ See Peter Kikkert and Ian Belton, [*Arctic Search and Rescue Exchange 2023: Working Better Together*](#), A Report Prepared for Nunavut Emergency Management, Kativik Civil Security, and the Nunavut and Nunavik SAR Roundtables, [Nunaviksar.ca/Nunavutsar.ca](#), 2024, 48 pp.

² Funding for the 2023 and 2025 Arctic SAR Exchanges came from the Nunavut-Nunavik SAR Project and Public Safety Canada. 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. With support from community SAR groups across Nunavut and Nunavik, the Nunavut Research Institute (Research License No. 05 018 22N-M) and the St. Francis Xavier University (File 25969), Dalhousie University (File 2022-he majority of support 6234), and University of Strathclyde Research Ethics Boards approved the NNSAR project in the fall of 2022. The majority of funding for the 2025 exchange 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.

The Canadian Armed Forces (CAF) bears overall responsibility for the effective operation of the federal coordinated maritime and aeronautical SAR system. The CAF provides aeronautical SAR services (e.g., responses to aircraft incidents and searches for downed aircraft) and can assist the Canadian Coast Guard (CCG) during marine incidents.³ The CAF's primary support for SAR includes three Joint Rescue Coordination Centres in Halifax, Trenton, and Victoria, five aerial squadrons specifically trained and crewed for search and rescue activities, and the Canadian Mission Control Centre, Cospas-Sarsat program, upholding Canada's commitments to the International Cospas-Sarsat Programme Agreement. Each primary aircraft or helicopter on standby is fully crewed and includes search and rescue technicians or SAR Techs. The 145 SAR Techs in the CAF are highly trained personnel who can deploy by parachute or hoist to an incident and perform emergency trauma care procedures, stabilizing victims for evacuation.

The primary responsibility for the provision of the maritime component of the federal search and rescue program rests with the Canadian Coast Guard. The Coast Guard's SAR activities include the provision of maritime distress and safety communications and alerting services, as well as distress monitoring, communications, and SAR operations. The Coast Guard's SAR program is delivered with the support of its fleet and using the communications and alerting services provided through its Marine Communications and Traffic Services (MCTS) program. In 2018, the CCG established the Inshore Rescue Boat Station in Rankin Inlet, Nunavut, which provides 24/7 search and rescue services to the Nunavut communities of Rankin Inlet, Chesterfield Inlet, and Whale Cove – the first primary search and rescue asset stationed in the North. The station was upgraded to an Arctic Marine Response Station for the 2023 season. The upgrade includes the hiring and training of additional crew from local communities, the extension of the station's operational season by one month, the procurement of an additional SAR vessel, and other infrastructure improvements. Coast Guard fleet vessels, such as icebreakers, serve as secondary SAR assets, which maintain all SAR operational standards and have a 60-minute SAR departure standby time. On these icebreakers, the Coast Guard employs rescue specialists – highly skilled professionals capable of administering emergency pre-hospital care in challenging marine environments, generally serving aboard ships and at coastal SAR stations.

Parks Canada is responsible for search and rescue and visitor safety in the country's national parks and historic sites. Parks staff assist with medical evacuations, the investigation of missing or overdue people, ground searches, and marine SAR when and where possible.

Humanitarian SAR or ground SAR (GSAR) cases, such as searches for missing hunters or boaters on inland waters, are a provincial/territorial responsibility, although authority for operational response is often delegated to police organizations. Nunavut is unique in that the territorial emergency management organization (Nunavut Emergency Management) has been given authority for SAR operations in the territory (assumed tasking authority from the RCMP in 2017). In the Yukon, NWT, and Nunatsiavut, the

³ 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.

RCMP has primary responsibility for humanitarian SAR cases, while the Nunavik Police Service and Sûreté du Québec are responsible for those in Nunavik. Each of these agencies may make a request for humanitarian assistance through the JRCCs, and subject to weather conditions and to competing demands from its primary search missions, they will provide aerial support.

Several other territorial, provincial, and federal government agencies are also occasionally called upon to provide support to SAR operations in the Canadian North. On the federal side, for instance, 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.

Across the Canadian North, community responders engage in search and rescue activities through the Civil Air Search and Rescue Association (CASARA), the Canadian Coast Guard Auxiliary (CCGA), the Yukon SAR Association, the Newfoundland and Labrador SAR Association, community marine SAR and GSAR teams, the Canadian Rangers, and various Guardian programs. While some of these community GSAR teams operate as non-profit associations (such as Yellowknife SAR), others are more informally organized. The level of support, equipment, training, and funding provided to community-based teams, and their integration into broader SAR systems, varies considerably across the region.

These community responders constitute the cornerstone of the SAR system in the North. Many are driven by a desire to serve their communities and by a deep sense of responsibility – they have the required skills and experience in a limited human power pool. Community responders match their dedication with their intimate knowledge of the land, local environmental conditions, and their fellow community members. They often know the habits and capabilities of search subjects, their equipment, and where they may have travelled. Further, their service facilitates the integration of local and Indigenous Knowledge into the broader SAR system – knowledge that often proves crucial during SAR operations. Outside the larger population centres, community responders almost always know for whom they are searching – they are family, friends, and neighbours. These close bonds are a powerful motivating factor, compelling them to keep going back out, often with limited support, and even as they struggle with stress, anxiety, and critical incident stress.

SAR operations in the Arctic are often extremely challenging. As one Nunavummiut responder explained, “In my community, and probably in all the communities, searchers have to cover a lot of ground. There's a lot of space up here. And all the machines – the boats, the snowmobiles, even the quads – are so powerful now, it makes it easier to go further out. You got the big area, you got the weather, the ice, and it's all changing. It isn't easy.” These words, from an experienced community SAR responder, highlight some of the basic issues facing responders in the Arctic. The region's vast size and austere environment combine to make time the enemy of all responders. Added to this are limited local resources, infrastructure, equipment, and training gaps, complex jurisdictional issues, and a wide array of other issues.

One way to address these challenges is through close collaboration between local, territorial/provincial, regional, federal, non-profit, and private sector SAR partners. To make sure that this ‘system of integrated systems’ actually works requires mutual understanding of roles, responsibilities, capabilities, and processes, clarity on command and control, effective information sharing, joint planning and training opportunities, and, underpinning it all, strong relationships and trust. Members of the Nunavik and Nunavut SAR Roundtables have highlighted that these critical components have been lacking, although recent initiatives by the Coast Guard Arctic Region and JRCCs (e.g. the expansion of the CCGA, greater engagement efforts) have somewhat improved the situation. They suggested that greater effort is required to improve vertical and horizontal coordination, cooperation, and communication across the SAR system in the Arctic.⁴

Arctic SAR Exchange 2025: Setting the Scene



Arctic SAR Exchange 2025 was dedicated to the memory of Nunavik responder Junior Lingard

Held in Halifax and Canadian Forces Base Greenwood from 1-4 March, Arctic SAR Exchange 2025 brought together community responders from Nunavut and Nunavik, personnel from Nunavut Emergency Management, Kativik Civil Security, the Coast Guard, JRCC Halifax, and 413 Transport and Rescue Squadron, as well as representatives from Public Safety Canada, the Coast Guard Auxiliary, and the Civil Air Search and Rescue Association.

The exchange started with commemoration of and a moment of silence for the fifteen individuals who lost their lives in on-the-land incidents that triggered the SAR system in Nunavut and Nunavik. We also reflected on the service of a responder from Nunavik – and a member of the Nunavik SAR Roundtable – who passed away shortly before the exchange. Junior Lingard was a skilled, dedicated, and experienced SAR responder, who was

⁴ For overviews see, Peter Kikkert, Calvin Pedersen, P. Whitney Lackenbauer, Ian Belton, John Quigley, and Ronald Pelot, [The State of Search and Rescue in Nunavut](#), A Report Prepared for Nunavut Emergency Management and the Nunavut Search and Rescue Roundtable, December 2024, 113 pp. Peter Kikkert and P. Whitney Lackenbauer, [The State of Search and Rescue in Nunavik](#), A Report Prepared for the Kativik Civil Security Department and the Nunavik Search and Rescue Roundtable, June 2023, 62 pp. Peter Kikkert and P. Whitney Lackenbauer, “‘That Others May Live’: Search and Rescue,” in *Evolving Human Security Frameworks and Considerations for Canada’s Military*, eds. Shannon Lewis-Simpson and Sarah Jane Meharg (Kingston: Canadian Defence Academy Press, 2023), 143-147. Peter Kikkert and P. Whitney Lackenbauer, “‘A Great Investment in Our Communities’: Strengthening Nunavut’s Whole of Society Search and Rescue Capabilities,” *Arctic* 74, no. 3 (September 2021): 258-275, <https://doi.org/10.14430/arctic73099>; and Peter Kikkert and P. Whitney Lackenbauer, “[Search and Rescue, Climate Change, and the Expansion of the Coast Guard Auxiliary in Inuit Nunangat / the Canadian Arctic](#),” *Canadian Journal of Emergency Management* 1, no. 2 (July 2021): 26-62, <https://doi.org/10.25071/vaa86009>



Arviat SAR coordinator, Daniel Kablutsiak, introduces himself to the exchange.



Kugluktuk Elder and long-time SAR responder, Roger Hitkolok, shares his experiences.

always willing to risk life and limb to help his fellow community members. He worked hard to improve SAR and was a regular participant in roundtable activities. He lived our motto: That Others May Live. The exchange was dedicated to his memory.

The bulk of the discussion-based part of Arctic SAR Exchange 2025 on 1 and 4 March focused on how to strengthen relationships and improve collaboration. During this time, we reviewed the progress made in this area since the last exchange, identified ongoing challenges and concerns, and discussed best practices to enable responders to operate at the speed of trust.

While we had this group of experienced SAR responders, policymakers, and researchers together, we also worked through core challenges and critical requirements for Arctic SAR. Participants rotated between different thematic stations on marine SAR operations, aerial SAR operations; GSAR planning, management, and training requirements; emergency alerting and communications; reporting and

documentation; and SAR prevention. These breakout stations provided an opportunity for participants to ask questions and seek information in smaller group settings. A dedicated lunch-hour breakout session on women in SAR provided focused discussion of the challenges and emerging opportunities for women participating in Arctic search and rescue.



Arctic SAR Exchange 2025 participants at the Coast Guard facility in Halifax.

On 2 and 3 March, exchange participants toured Joint Rescue Coordination Centre Halifax, the Canadian Coast Guard facilities in Halifax, and 413 Transport and Rescue Squadron at Canadian Forces Base Greenwood.

The exchange involved several extended breaks and shared meals in which participants were encouraged to get to know each other over coffee and conversation – these informal, personal discussions were as important as anything else we did during the exchange.

To encourage free flowing and candid conversations, the exchange 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. If, at any point, discussions became exhausting or triggering, participants were encouraged to step away and use the mental health and critical incident stress supports available to them at the exchange.

Arctic SAR Exchange 2025 would not have been possible without the enthusiastic support of Major Chris Simm, Officer Commanding of JRCC Halifax, who led the coordination of visits to the Joint Rescue Coordination Centre, Canadian Coast Guard facilities, and CFB Greenwood. Exchange participants also expressed sincere appreciation to personnel from the Canadian Coast Guard and 413

Squadron for their openness, professionalism, and willingness to share their perspectives and capabilities.

Visits to Joint Rescue Coordination Centre Halifax, the Canadian Coast Guard Facilities in Halifax, and 413 Transport and Rescue Squadron at Canadian Forces Base Greenwood



Arctic SAR Exchange at JRCC Halifax.

On Sunday, 2 March Arctic SAR Exchange participants visited JRCC Halifax and Canadian Coast Guard facilities in Halifax. During the tour of the Coast Guard facilities, exchange participants were introduced to the agency's training, maintenance, and communications services. At the JRCC, RCAF and Coast Guard personnel provided a detailed overview of their policies, procedures, and operations, including their planning and communications tools. Participants were able to observe the activation of a Personal Locator Beacon and the initiation of SAR case by JRCC coordinators. JRCC personnel emphasized the need to call early, call often, and build shared situational awareness during SAR operations.

On Monday, 3 March, exchange participants visited 413 Transport and Rescue Squadron at 14 Wing Canadian Forces Base Greenwood. The squadron's commanding officer, Lieutenant-Colonel Mark Norris greeted the Arctic responders. Norris called the relationships and coordination between all SAR partners the "secret sauce" of making search and rescue work:

We understand the urgency and what's at stake, and we move as quickly as possible. We're in uniform, but we're Canadians, working for Canadians every day – like you do. 413 Squadron may be at the top of the heap with assets, but you are all part of the system, the layered approach that supports each other; a powerful and meaningful thing we are dedicated to every day. ... Anytime we're in your communities, come and say 'hi' – we love meeting you, and we wish we could go everywhere in the North. Today is like getting 20 years of visits done to your communities. It's an honour for us to have you here. Take pictures, kick the tires and look at our

equipment, talk to our people. I wish we could all leave here best friends, one-on-one, with a stronger bond.

Norris' greeting was followed by a presentation of the flags of Nunavut and the Kativik Regional Government to the squadron by personnel from Nunavut Emergency Management and Kativik Civil Security.



Kativik Civil Security Director, Craig Lingard, and Manager of Search and Rescue at Nunavut Emergency Management, Calvin Pedersen, make a flag presentation to Lieutenant-Colonel Mark Norris, commanding officer of 413 Transport and Rescue Squadron.

During this introduction, Michael Cameron, a Canadian Ranger Patrol Sergeant, ground and marine SAR coordinator, and Coast Guard Auxiliary director from Salluit, Nunavik, shared a SAR story that encapsulated the value of collaboration and honoured the work of RCAF SAR.

On November 9, 2023, Cameron received a call from Apple Emergency Dispatch relaying a distress alert triggered by an iPhone 14 somewhere offshore: a boat was taking on water with two people aboard.

Cameron knew instantly who it was. “It was my nephew and his son,” he recalled. “The moment they told me where it was, I just knew.”



Salluit SAR responder Michael Cameron shares at Arctic SAR Exchange 2025.

Within minutes, Cameron and his Coast Guard Auxiliary unit launched their fast rescue craft into the Hudson Strait. They faced intense wind and large waves, and ice soon formed on the craft's bow. "It was family – we were going to go," Cameron explained. But conditions were deteriorating rapidly, and they worried the ice forming might capsize the vessel. "We were chipping ice off the boat," Cameron explained. "We had to turn back. It was the hardest thing we had to do."

In the early morning hours, they heard the distant thunder of a Royal Canadian Air Force Hercules flying overhead, heading toward the search area. "It was reassuring," Cameron said. "Just hearing it meant help was coming." Meanwhile, on the water, Cameron's nephew and his son had managed a 50-metre swim through freezing waves to reach the shoreline. Their clothes had frozen stiff. They had

no shelter, no supplies. The father wrapped himself around his young son, using his body heat to keep the boy alive through the night.

At dawn, Cameron received another call from JRCC Trenton: the Hercules needed to depart the search area and refuel. Before leaving, the crew had seen what they identified as the faint flash of the iPhone's light. They had tried to drop communication packages, but wind conditions made it difficult. Cameron made a simple but life-saving request to the JRCC: "Can you have the Herc do one more circuit before heading south?" The aircrew made another pass.



Touring the Hercules during Arctic SAR Exchange 2025.



“That one extra pass saved them,” Cameron said. The boy, half-frozen and exhausted, heard the Hercules fly overhead during that final circuit. He shook his father awake. By 0845, Cameron and his crew had reached the pair. “They needed immediate care,” Cameron explained. They managed to stabilize them and transport them to the nearby Raglan mine for emergency medical assistance.

Reflecting on the rescue, Cameron addressed the SAR Technicians and aircrews in the room who wore “...green and orange. Your work does matter. You don’t always get recognition, but that one little extra bit – that one last circuit – gave them hope. It told them they weren’t left behind. Don’t ever give up hope. Give that hope to the people who are lost or in danger.”

Norris thanked Cameron for sharing the personal connections between subjects of a search and the searchers themselves, and the importance of the relationship between partners. The RCAF SAR crews did not often receive that kind of personal feedback and it “meant a lot.”

After that, exchange participants toured the squadron’s Hercules and Cormorant aircraft, as well as the SAR Technician workshop. Participants received extensive briefings on:

- Response posture: a fully operational aircrew is to be airborne within two hours of the receipt of an alert.
- Cormorant (CH-149): all-weather; heavy-lift; de-icing; long-range (1000 km without refueling); hoist capability; undergoing major upgrades (infrared sensors, radar, increased range).
- Hercules (CC-130): fixed-wing backbone of SAR for decades; large equipment capacity; good range; low and slow; depends on eyeballs for searching; increasingly difficult to maintain.
- Kingfisher (CC-295): incoming fixed-wing replacement; smaller size and speed; less range; less

- equipment capacity; state-of-the-art sensors can pick up people or objects from more than 40 km away, even in low-light conditions.
 - has been tested in Arctic conditions and cold weather, feedback has been positive
 - operates at higher altitude, which minimizes the impact on wildlife
- Cellular Airborne Sensor for Search and Rescue (CASSAR) system: using this technology the aircraft becomes a mobile cell tower – if the aircrew has the search subject's phone number and the person's phone has battery power and is on, the CASSAR system can locate them.

Squadron personnel also explained some of their core challenges to the Arctic responders: distances to respond; crew duty cycles; crew time; maintenance schedules; limited infrastructure in Arctic; and weather constraints. These challenges underlined the importance of careful mission planning during Arctic SAR operations.



From left to right: Rosemary Maksagak, Cambridge Bay SAR, Kaviq Kaluraq, Baker Lake SAR, and Gina Paniloo, Clyde River SAR, in the cockpit of a Hercules.





Exchange participants visit Coast Guard facilities in Halifax; responders from Nunavut take a photo in front of a Cormorant.

Operating at the Speed of Trust: Progress Made

During Arctic SAR Exchange 2025, most of the discussion focused on relationships and collaboration. Meetings of the Nunavik and Nunavut SAR Roundtables in 2020 and 2022, along with the 2023 Arctic SAR Exchange, underscored how Arctic SAR operations have long been constrained by limited trust and fragile relationships between community responders, territorial and regional practitioners, and their federal partners. Participants highlighted persistent barriers to effective collaboration:

- Distrust and frustration stemming from past incidents
- Attitude and ignorance of individual practitioners

- Limited past relationship-building initiatives – outreach efforts by federal personnel were often ad hoc and reactive, usually following difficult or high-profile cases
- Limited integration of Indigenous Knowledge during the planning and execution of SAR operations
- Limited capabilities of agencies of jurisdiction and other partners, particularly those responsible for GSAR operations
- Slow response times from federal aerial and marine assets (e.g. fixed- and rotary-wing aircraft based in the South, and icebreakers)
- Friction over the provision of air support for Arctic SAR operations
- Confusion over mandates, jurisdiction, roles, and responsibilities
 - Land-sea ice interface
 - Boundaries between inland and federal waterways
 - Issues tasking CCGA units for GSAR operations – a requirement in the Northern environment
 - Confusion leads to communication issues and the “game of broken telephone” experienced by many Arctic responders when contacting the JRCs and other partners
- Responders fear losing local decision-making authority when working with federal partners
- Inadequate information sharing and poor communication
- Lack of standard operating procedures/guidelines for collaboration
- Limited joint training, experience, and interaction = lack of comfort

Together, these barriers have contributed to a broad lack of trust and reluctance to collaborate among many Arctic responders, who have at times chosen to “go it alone” rather than regularly report SAR cases to their government partners.⁵

At the 2025 Arctic SAR Exchange, participants emphasized the significant improvements in collaboration between Arctic responders – both volunteers and government practitioners – and their federal partners in recent years. A more cooperative SAR environment has emerged, enabling partners to work together more effectively and begin operating at what participants described as the “speed of trust.” This shift has led to stronger communication and coordination during recent SAR incidents.

⁵ For an in-depth description of these challenges and issues, Kikkert and Belton, [*Arctic Search and Rescue Exchange 2023: Working Better Together*](#) (2023).

Participants identified increased reporting of marine SAR incidents and more frequent requests for JRCC assistance during humanitarian cases as tangible evidence of a more collaborative SAR environment. Official maritime SAR cases in the Arctic Region increased from 64 in 2020 to 121 in 2024. While this rise partly reflects growing risk and the expanded presence of local Coast Guard Auxiliary units capable of responding, participants emphasized that it also signals a meaningful shift in practice: Arctic responders now feel more confident and supported in reporting incidents to the JRCCs, rather than managing cases independently.

Both Arctic responders and their government partners noted that regular, structured engagement – particularly through the Nunavut and Nunavik SAR Roundtables and the Arctic SAR Exchange – was a key driver of this progress towards better collaboration. These forums have strengthened relationships and facilitated the sharing of critical operational and governance information. One notable example is how roundtable discussions prompted coordinated efforts by the Joint Rescue Coordination Centres (JRCCs), regional and provincial authorities, and Nunavimmiut responders to clarify jurisdictional boundaries between inland waters and federal waters on several major rivers in Nunavik. This work helped establish when SAR incidents fall under provincial versus federal responsibility and was widely cited by exchange participants as a clear and impactful example of effective Arctic SAR collaboration that would directly improve operations (clarity on jurisdiction would enable faster decision-making and facilitate smoother operational teamwork).



Nunavimmiut responders, Coast Guard, and JRCC personnel commemorate the work done to clarify jurisdictional boundaries in Nunavik.

Exchange participants also highlighted the following initiatives and actions taken by key federal agencies – the CCG, JRCCs, RCAF, and Public Safety Canada – as critical steps towards improving SAR collaboration:

Canadian Coast Guard

- *Relationship-Building Efforts:* CCG Arctic has prioritized community engagement, relationship building, and maintaining long-lasting partnerships with responders, communities, and territorial and regional governments. Exchange participants noted how CCG personnel had increased their presence in Northern communities, offering in-class training, on-water training, community engagement, psychological first aid workshops, and visits by 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. They also explained how having the same people carrying out these face-to-face activities throughout the year (not only during the summer months), and for extended periods of time, has bolstered CCG relationship-building efforts in the Arctic.
- *Generating Deeper Understanding:* 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 RAMSARD Program. “I think they have a much better understand of what we are facing. They are starting to get it,” concluded one exchange participant. This in-depth understanding of the Arctic operating environment and the challenges facing responders is foundational to improved collaboration.
 - An example of this deeper understanding is the Coast Guard’s acknowledgment of the psychological toll of Arctic SAR operations. CCG Arctic SAR personnel understand a defining feature of SAR in the Arctic: the responders almost always know for whom they are searching. SAR in the Arctic is searches for family, best friends, neighbours, and Elders. Almost every responder has found someone close to them deceased from the cold, from accidents, or from self-harm. The toll of this trauma and tragedy on the mental health of community responders is extreme. As one Nunavimmiut responder explained at the exchange: “You can’t collaborate if you don’t have Arctic responders. You can’t collaborate if there’s no one to collaborate with. If something isn’t done about this there won’t be anyone else to work with.” In response, the CCG has embedded mental and psychological health training for emergency responders into its Indigenous SAR training program to assist with Critical Incident Stress Management (CISM), the first region of the CCG to offer this service to responders. The support CCG Arctic SAR personnel provide to the volunteers goes beyond the training and includes regular, informal check-ins and CISM support following difficult cases. This kind of understanding and support is an indication of a good partner – and is critical to sustaining collaboration in Arctic SAR.

- *Strengthening Coast Guard Auxiliary Units:* The Coast Guard and its partners in the Coast Guard Auxiliary have continued their efforts to strengthen Auxiliary units across the Arctic, where there are now 41 CCGA units, with over 500 members and 60 vessels. By refocusing a lot of its programs to support auxiliary units, by the end of 2024 the CCG had almost doubled the number of auxiliary boats in service. These units have been strengthened through the Indigenous Community Boat Volunteer Program, which provides funding for communities to purchase a new SAR vessel, required equipment, and/or storage facilities. Since 2017, this program has funded 27 Arctic Indigenous communities.
- *Training:* While the new vessels bolster community marine SAR capabilities, they would have limited value without the training required to use them effectively. To support these units, the Coast Guard Arctic Region and its Auxiliary partners engage in a robust training and exercise cycle, generally in-community and on the water, with materials and approaches co-developed by Arctic responders. This training often involves placing calls to the Joint Rescue Coordination Centres, which has long been an area of concern for many responders. Inuit responders have also been brought to the CCG base in Parry Sound for advanced operational training. Much of this training has been made possible by the significant growth of the Coast Guard's Indigenous SAR Training Program. "Having them in the community and on the boat with us when they give us training has made a real difference. And it's the same people who have come before or who we've met at the roundtables or at other events. You need trust for training. You also need people who will listen to us and learn from us, that's the attitude that's needed. And we are getting it with Coast Guard," explained one exchange participant.
 - Coast Guard personnel at the exchange highlighted the flexible approach they have taken to providing marine SAR training in the Arctic. Through their community engagement, CCG personnel quickly realized that an Auxiliary unit is not the answer in every community that requires an improved marine SAR capability. The Guardians programs across the North provide another answer. Through the Marine Protected Area Training (MPAT) Project, CCG personnel have worked with the Foxe Basin Kivalliq North Sapujiyiit Society (Chesterfield Inlet, Coral Harbour and Naujaat, NU) and the Aviqtuuq Inuit stewardship program (Taloyoak, NU) to identify community training needs and deliver training in small vessel operations, marine first aid, and collaborative SAR response. By the time the program ended in early 2024, dozens of Guardians had engaged in training opportunities that expanded their operational competencies and brought greater safety to their communities
- *Staffing:* The relationship-building, the training, and the community engagement are effective because it is largely the same Coast Guard personnel who are undertaking these initiatives. The CCG Arctic Region has increased the number of full-time equivalent positions (from the three CCG personnel focused on Arctic SAR in 2015 to seventeen in 2025). In particular, it has made a deliberate effort to hire Northern Indigenous SAR officers, such as Brenda Panipakoocho (Iqaluit), Angulalik Pedersen (Cambridge Bay), and Jeffrey Gordon (Kuujjuaq). Together, these

personnel keep in frequent communication with Auxiliary members, conduct training and exercise activities, and assist with equipment and vessel maintenance.

- *New capabilities:* Exchange participants reviewed the Coast Guard’s extensive construction program, which will bring new capabilities and greater reach for SAR operations. These capabilities will provide new opportunities to collaborate.
 - Current capabilities
 - 2 Heavy Icebreakers
 - 7 Medium Icebreakers
 - 1 Light Icebreaker
 - Fleet of the future in the Arctic
 - 2 Arctic Offshore Patrol ships (2026, 2027)
 - 3 Program Icebreakers (2030+)
 - 1 Offshore Oceanographic Science
 - Vessel - *Naalak Nappaaluk* (2025)
 - 16 multi-purpose vessels (2030+)
 - 2 new Polar Icebreakers (2030, 2032)
 - CCGS *Arpaatuq* & CCGS *Imnaryuaq*
 - Enhanced, year-round capabilities

Joint Rescue Coordination Centres / Royal Canadian Air Force

- *Relationship-Building Efforts:* Roundtable participants explained that collaboration has improved between community responders and the JRCCs and RCAF. Personnel from JRCC Trenton and JRCC Halifax have engaged in all roundtable activities and have participated in community visits with the Coast Guard. Through consistent communication and regular face-to-face engagement, they have helped to create an environment of trust, respect, and collaboration. As one representative from NEM explained, “We have a really good relationship with the JRCCs. They know us. We talk with them a lot. We keep them in the loop. They have visited us in Iqaluit. I think all this has helped us to collaborate. They are great to work with, whether they are providing advice or actually tasking resources to assist.”
 - *Arctic SAR Exchange:* The cooperation of both JRCCs in hosting the Arctic SAR Exchange at Trenton (2023) and Halifax (2025) was very much appreciated, allowing Nunavimmiut responders valuable first-hand insight into JRCC operations and those of the primary SAR squadrons they work with. These exchanges required significant logistical and organizational work by both JRCCs on top of their regular duties and are very much appreciated.
- *Coordinators:* As important is the respectful, patient, and understanding approach adopted by the JRCC SAR coordinators when communicating and working with community responders in Nunavut and Nunavik – an approach that recognizes how intimidating such calls can be and

works to reduce that barrier. Improvements have been guided by feedback provided by Arctic responders at past roundtable events. Participants highlighted that they feel that JRCC personnel are listening to them and respecting their local knowledge and Indigenous Knowledge when planning SAR responses.

- *Resources:* Improved communication between community responders and JRCC personnel has led directly to better support during SAR operations. More primary SAR aircraft (Hercules; Cormorant) from the South are being deployed to support response efforts in the Arctic – a welcome development that has been noted by responders.
- *Liaison Position:* 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 Nunavik and other 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.

Public Safety Canada

- *Arctic and Northern Search and Rescue Roundtable:* The National Search and Rescue Secretariat in Public Safety Canada does not have an operational role but strives to improve SAR operations by breaking down barriers and strengthening collaboration between partners. It 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 high-level roundtable will facilitate efforts to improve the SAR system across the North, create synergies between efforts, and improve collaboration.
- Through the roundtable and other platforms, the NSS is spearheading federal efforts to address the jurisdictional confusion caused by the land-ice interface, which can impede effective responses and is a barrier to collaboration. If a hunter goes out to the floe edge on a skidoo, and it breaks away as an ice floe, this is considered a GSAR case. This is a situation in which capabilities do not align with mandate, given that such a case would best be handled as a marine SAR case by the JRCCs and Coast Guard.

Operating at the Speed of Trust: Ongoing Challenges and Concerns

While improvements have been made, exchange participants raised several ongoing challenges and concerns:

- They expressed concern that recent improvements might not be sustained – that the latest wave of Coast Guard support will prove fleeting, the initiatives waylaid by shifting priorities, shrinking budgets, and personnel cuts. If CCG personnel become less engaged, with fewer training and

relationship-building opportunities, responders worry that Auxiliary units will fail and the newfound partnerships with the JRCCs and other partners will be lost.

- Along these lines, CCG Arctic Region personnel explained some of the pressures that had impacted their work in recent years. There has been a decline in the number of CCG Arctic SAR positions in recent years, from a high of 35 to the 28 current full-time equivalent roles. The unit's operating budget has also shrunk. In 2025, it was just \$2.2M with a hard travel cap set at \$757,000 – and this to cover all the communities between Nunatsiavut and the Labrador Seat to the North Slope of Yukon and the Beaufort Sea, including James Bay and Hudson Bay and to operate the Arctic Marine Response Station in Rankin Inlet. To sustain the transformation it has started, CCG Arctic SAR requires secure funding, and the personnel required to truly operate in and with the North.
- Participants worry that the frequent turnover of JRCC personnel (particularly commanding officers that change every couple of years) could disrupt progress made. New commanders may not have the same interest in the Arctic and willingness to work with community responders as previous officers. Participants suggested that the JRCCs establish formal structures, mechanisms, and/or procedures/guidelines to ensure that progress is sustained through personnel changes.
- Other participants noted that the expansion of the Coast Guard Auxiliary and other Coast Guard training opportunities had not benefitted their communities. As a result, many communities do not have an auxiliary unit, marine SAR training, and equipment and continue to struggle to respond to marine incidents. The point was made several times that if community responders do not have the proper tools and training, they will not be able to collaborate effectively during SAR operations.
- Participants highlighted other specific gaps that made operations and collaboration more challenging:
 - Communities that do not have a community SAR vessel or necessary equipment.
 - Lack of suitable boats for responding in inland or river-based regions.
 - Difficulty obtaining trucks/equipment to launch Coast Guard Auxiliary vessels.
 - Lack of secure storage for SAR assets – it is one thing to have a boat, but if a community cannot store it in a safe and secure building it will not last long.
 - Limited communications infrastructure, such as VHF towers, makes communications between partners more difficult during operations.
 - While more training is being provided to responders, additional opportunities are still required, particularly joint exercises with federal partners and specialized skill development (e.g. Critical Incident Stress Management and advanced/wilderness first aid).

- Slow response times from federal aerial and marine assets (e.g. fixed- and rotary-wing aircraft and icebreakers).
- Friction over the provision of federal air support for SAR cases.
 - Responders continue to find it unclear when federal aerial assistance can be requested for humanitarian cases.
 - During some incidents, community SAR teams have not been provided with consistent updates on when air support would arrive on scene or if aircraft have been delayed or cancelled.
 - Participants also noted that when air support is provided for ground and marine SAR operations it is occasionally withdrawn without consulting with community responders (e.g. the decision is made between NEM and the JRCCs).
- Participants were happy to hear that action was being taken to work out jurisdictional issues, but noticed that confusion over mandates, jurisdiction, roles, and responsibilities continues to impede operations.
- Exchange participants noted that it has become more common to task Coast Auxiliary units for GSAR operations – a requirement in the Northern environment – but that this should become even more common.
- When communities can request assistance from the Canadian Rangers for SAR operations needs to be clarified and consistently applied. It is difficult to collaborate with the Canadian Rangers because of a lack of clarity on activation processes (this point was made about 1 and 2 Canadian Ranger Patrol Groups).

Operating at the Speed of Trust: Best Practices

Over the course of the discussions on collaboration, participants raised a wide range of best practices and operating guidelines aimed to facilitate operating at the speed of trust.

When to engage JRCCs?

- The incident involves a boat or watercraft in the ocean or other federal waterway
- The incident involves aircraft
- The incident involves complex or high-risk situations (e.g. remote locations, hazardous environments, large search areas)
- The scale of the GSAR operation exceeds local or provincial resources
- The available resources (personnel, equipment) are insufficient to continue the search effectively

Notification

- Process of relaying initial information about alert to mobilize action
- Early notification critical given the distances involved in responding with federal assets.
- Approval for JRCC-provided air or maritime support may be required from relevant authorities depending on jurisdictional considerations. If needed, JRCC will request this from higher command.
- The following should be provided in the initial notification, if possible:
 - Name and Phone Number of Alerting Person
 - Date and Time Alert Received
 - Name of subject(s)
 - Contact information for the subject
 - Are you in contact with the subject? If so, how?
 - What was the subject doing?
 - Transportation
 - Date and Time Last Seen
 - Current Location/Point Last Seen/Last Known Point
 - What is the nature of the emergency?
 - If overdue, for how long?
 - Subject experience, equipment, and health

Effective Communication

- Effective collaboration requires clear and consistent communication that creates shared situational awareness/common operating picture
- Ensure reliable communication channels are established (phone, text, email, satellite phone etc)
- Community SAR teams must make sure that you have a clearly identified point of contact – if this changes, they must let partners know
- All partners should check-in regularly with clear situation reports during SAR operation (e.g. every hour or every two hours depending on what is agreed upon)

- Keep communication channels open with all partners involved to provide updates

Sharing Information

- Throughout operation, teams must share as much information as they can with JRCCs and other partners (subject profile, terrain, environmental, historical analyses, clues, condition of missing vessel, potential travel routes, etc)
- Sharing local and Inuit Knowledge is critical
 - Canadian Search and Rescue Planning Program (CANSARP): automated search-planning tool for marine cases that estimates the drift of targets in the ocean to determine search area
 - Accurate modelling depends on accurate and detailed information on local conditions
 - Often limited information available for Arctic
 - JRCCs need local and traditional knowledge on how the currents work, the wind, the unique drifts, the ice-state, and on-scene sea-state and weather
 - Need information on preferred hunting and fishing areas; cabins in which a subject might shelter; high probability areas.
- Teams must provide precise locations for Point Last Seen, Last Known Point, clues, search areas, etc – coordinates, if possible
- All partners must keep on sharing information throughout operation
- All partners must provide frequent updates on the progress and current status of the operation
- JRCCs must provide frequent updates on status of resources they have deployed (e.g. aircraft, icebreakers, and vessels of opportunity)

Documentation and Collaboration

Currently, documentation is inconsistent between community SAR teams and represents a critical gap that must be addressed. The discussion focused on why documentation is so important during SAR operations and how it can support collaboration:

- 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)

Shared Understanding of SAR Activities

- All partners must provide overview of their SAR efforts and results so far, including:
 - areas already searched
 - areas assessed as high probability
 - resources already deployed
 - any clues found so far
 - specific gaps or limitations preventing the execution of a successful search
 - challenges encountered in the search (e.g., weather delays, terrain difficulties, resource constraints)

Shared Understanding of Support Required

- Community SAR teams must share clear explanations of the support required during a SAR operation – the more detail the better
 - What support do you require? Why?
 - What specific assets do you require?

- What, exactly, do you need these assets to do?
- Partners must establish shared objectives during SAR operations
- Community SAR teams can answer these questions in dialogue with NEM or JRCCs

Conducting Joint Operations

- Joint operations require joint planning
- JRCCs will develop air or marine search plans, including search patterns, but input of community SAR teams is critical
- Community SAR coordinators may need to relay directions from the JRCCs to responders
- Must determine how community responders will communicate with partners and work together in the field
- Close coordination required between air (private sector or government) and ground resources during GSAR operations – partners will need to co-develop search priorities and patterns
- If multiple air assets from different partners are being deployed to assist during a SAR operation, effective communication is critical to ensure attention is paid to airspace deconfliction to ensure the safe conduct of air operations

Breakout Groups

During this session, participants rotated between different thematic stations to discuss pressing challenges and requirements for Arctic search and rescue and to ask more specific questions to their partners. There were stations on marine SAR operations, aerial SAR operations; GSAR planning, management, and training requirements; emergency alerting and communications; and reporting and documentation. The information gathered in these breakout groups will be shared in other roundtable products, but a short summary is provided below.

Marine SAR Operations: CCG personnel from JRCC Halifax and Arctic Region discussed plans and priorities for the upcoming year and answered questions from community responders.

Aerial SAR Operations: Coordinators from JRCC Halifax explained their approach to SAR operations and answered questions from community responders. Civil Air Search and Rescue Association members discussed their Remotely Piloted Aircraft Systems program and provided a briefing on drone capabilities.

GSAR planning, management, and training requirements: Researchers provided an update on the work they are doing around GSAR planning and management, including lost person behaviour analysis and

aerial response time modelling, and asked for guidance on training materials that should be developed. Community responders highlighted the need for:

- A coordinator course tailored to SAR in Nunavut and Nunavik that reflects the best practices gathered at previous roundtable events. None of the coordinators at the exchange – many of whom had been in the role for years – had never received formal training. They provided detailed feedback on what they thought should and should not be included in this course.
- SAR coordinator guidebooks must be developed to supplement these courses, with easy-to-use checklists to guide activities.
- Accessible and relevant training materials must be developed for use by SAR teams so that they can conduct their own regular training activities.
- Simple, accessible virtual training materials should be developed to support responders in preparing for SAR operations while also reinforcing essential on-the-land skills that contribute to SAR prevention. These materials could cover practical topics such as what to bring when travelling on the land, how to assess weather and ice conditions, and how to use devices like inReach. Delivered online, these resources would provide SAR teams with ongoing, on-demand access to foundational training and would complement – not replace – the more formal, in-person training opportunities offered by Nunavut Emergency Management and Kativik Civil Security.
- A training course focused on teaching Arctic responders and their partners how to best work together during SAR operations.
- Critical Incident Stress Management training.
- Training programs need to avoid any rigid training requirements that might exclude Elders and knowledge holders, who possess deep land-based expertise but may face language or literacy barriers.

Emergency alerting and communications: Participants discussed current trends and innovations in emergency alerting and communications. They focused on barriers to the use of satellite communication devices and personal locator beacons by Northerners.

Reporting and documentation: Members of the research team from the University of Strathclyde are working with Kativik Civil Security to create a new online reporting



Research team members from the University of Strathclyde display a new reporting system to Nunavimmiut responders.

platform for SAR teams in Nunavik. They tested the beta version of this reporting platform with Nunavimmiut responders at the exchange, soliciting feedback aimed at improving the system.

SAR prevention: Participants highlighted the need for the development of culturally grounded and environmentally relevant SAR prevention materials tailored to Arctic conditions. They also emphasized the importance of research to assess which past SAR prevention initiatives have been effective in reducing SAR incidents in the North.

Participants made the following key points:

- SIKU, the Indigenous Knowledge app, was identified as a valuable tool for sharing information, strengthening situational awareness, and promoting on-the-land safety.
- SmartICE was widely recognized as an important risk-reduction tool that has already contributed to preventing incidents in many communities.
- All community members should have access to education on safe travel on the land and water, the risks of going out unprepared, and appropriate responses when difficulties arise.
- Additional initiatives are needed to promote on-the-land skills, vessel safety, and a strong boating safety culture. Several participants emphasized that foundational survival and travel skills should be incorporated into school curricula.
- Kativik Civil Security and Nunavut Emergency Management currently provide SPOT units and other satellite communication devices to communities for free loan. Awareness and use of these programs are, however, inconsistent. These initiatives require improved promotion and, where necessary, redesign to encourage greater uptake.
- Improved access to timely and accurate weather and environmental data was identified as essential for reducing risk, particularly in a rapidly changing Arctic environment.
- Participants suggested examining the feasibility of providing personal locator beacons (PLBs) to individuals who regularly travel on the land or water in Nunavut and Nunavik. Because PLBs have no annual subscription fees and can transmit an SOS signal and location directly to rescue agencies, participants noted that the investment could quickly pay for itself by “taking the search out of search and rescue.”

Participants also proposed the development of the following SAR prevention materials:

- Infographics demonstrating how to load small boats for maximum stability during harvesting, cultural, and economic activities (e.g., transporting beluga, caribou, or soapstone).
- Videos featuring experienced harvesters discussing preparation, decision-making, and safety considerations when travelling on the land.

- Instructional videos and infographics on the use of inReach, SPOT, and other satellite communication devices, paired with messaging that promotes routine use.
- Lessons and stories from past SAR incidents that illustrate how routine trips can escalate into emergencies and how such situations might be prevented.
- Development of a “Hug Your Skidoo” SAR prevention initiative, modelled on the southern “Hug a Tree” program, to reinforce the importance of staying with one’s machine when stranded. The machine is almost always located first during SAR operations.

Women in Arctic SAR

A dedicated lunch during the exchange provided a candid space for women involved in Arctic SAR – researchers, responders, administrators – to reflect on their experiences, challenges, and aspirations. The discussion revealed both the persistent structural and cultural barriers women face in Arctic SAR and the powerful leadership, resilience, and community impact women are already demonstrating across the region.



From front left to front right: Lorna Netser, Rankin Inlet SAR; Rosemary Maksagak, Cambridge Bay SAR; Maryam Ilgun, Quaqtuq SAR; Erin Pigott, CCG Arctic; Gina Paniloo, Clyde River SAR; Kerri-Ann Ennis, Memorial University; Kaviq Kaluraq, Baker Lake SAR; Rory Jakubec, StFX; Claire Morrison, StFX; Jessica Cucinelli, CCG Arctic; Susan Peter, Nunavut Emergency Management; Mona Hakimipannah, Dalhousie University; Mahroo Mohammadi, Dalhousie University; Eva Grey, Aupaluk SAR.

Participants spoke openly about experiences of sexism, dismissal, and exclusion, particularly in male-dominated SAR environments where long-standing norms have made it difficult for women to access training, take on operational roles, advance into leadership positions, or have their expertise recognized. Several women described being questioned about their competence, excluded from callouts, or openly discouraged from participating. In some cases, women were removed from volunteer lists or leadership positions altogether – only to be reinstated after community pressure or collective action by other team members.

Despite these challenges, the lunch was marked by strong themes of resilience, solidarity, and leadership. Many participants emphasized that progress often comes not from waiting for formal policy change, but from ground-up action – speaking up, asserting authority, mentoring others, and visibly occupying leadership roles. Several women described how resistance lessened once they asserted themselves or when their teams publicly supported them, underscoring the importance of allyship and organizational backing.

A recurring theme was the impact of visibility. Participants spoke with pride about how young girls and even other women respond when they see women as front line responders, leading SAR teams, or coordinating operations. They shared stories of children approaching them to say they wanted to “do that too” and of high school students beginning to see SAR as a real and attainable path. As one participant noted, “When the men are giving me a hard time, it’s the little girls that keep me going.” Many framed this as a responsibility to “open the door behind you” once you have gained a foothold.

Looking forward, women identified several concrete opportunities for change and growth. These included developing mentorship pathways for young women and girls; increasing the visibility of women in SAR promotional materials and storytelling; and creating new recruitment pathways. Participants also saw strong potential in linking SAR to STEM outreach initiatives, including roles such as drone operators, communications specialists, and technical responders – pathways that could attract young women who may not initially see themselves in traditional SAR roles.

There was also enthusiasm for practical initiatives such as newsletters or short videos showcasing women’s contributions to Arctic SAR, opportunities for youth to observe or shadow SAR activities in safe ways, and targeted outreach through programs such as Connected North. Participants welcomed early discussions within the Coast Guard about programs focused on young women and emphasized the importance of continuing these conversations with Northern communities at the centre.

Overall, the women’s lunch underscored that women are not newcomers to Arctic SAR – they are already leaders, responders, mentors, and innovators. While barriers remain, participants expressed optimism that through visibility, mentorship, and sustained support, Arctic SAR can become more inclusive, resilient, and reflective of the communities it serves.

Exchange Wrap-Up

The exchange concluded with an open group discussion in which participants were encouraged to reflect on the last few days. One of the benefits of the exchange, noted one participant, was that it created space for participants to speak openly about the emotional weight of SAR work – the losses endured, memories carried, and the profound responsibility borne by community responders. Many spoke of people they had searched for and never recovered, and of the deep cultural and emotional implications of unresolved loss. One participant described carrying the names and memories of every person he had failed to bring home; another described the trauma of losing multiple family members to the water. Yet, they also spoke of SAR as a source of purpose, identity, and community pride. Above all, the exchange showcased the extraordinary dedication of Nunavut and Nunavik’s SAR responders and their partners in the Coast Guard, the Air Force, and other agencies – men and women who coordinate difficult operations, search in blizzards, travel through shifting ice, follow faint tracks across the tundra, and carry with them both the pride of rescues and the weight of losses. Elders and experienced responders reminded the group: rescuers, too, need rescuing, and spaces like the exchange help lift some of the weight.

Participants also repeatedly returned to one defining feature of Arctic search and rescue: a deep mutual respect among those involved. Federal, territorial, and regional practitioners – from the JRCCs, the Royal Canadian Air Force, the Canadian Coast Guard, NEM, and KCS – spoke openly about the central role played by community responders, whose intimate knowledge of the land, weather, and people of their communities often determines whether a search succeeds. These responders are not seen as peripheral volunteers, but as the foundation of Arctic SAR and essential members of the broader SAR team. That respect flows in both directions. Arctic responders shared their reflections on the professionalism and courage of JRCC personnel, RCAF aircrews, SAR Technicians, and Coast Guard personnel. Many knew family members, friends, or neighbours who were alive because an aircraft flew one more circuit, a helicopter landed in difficult conditions, or SAR Technicians jumped into a storm or onto shifting ice. While significant policy, operational, and training challenges remain, participants agreed that these shared experiences have forged a bond of mutual trust and respect between responders.

Arctic SAR Exchange 2025 demonstrated that Arctic SAR is not simply an operational system – it is a complex network of relationships, knowledge, and shared responsibility. Participants reaffirmed that while improvements have been made, much work remains to be done to strengthen the relationships and collaboration required for effective SAR operations. Moving forward, participants committed to continuing this work, nurturing the relationships built here, and ensuring that the SAR system serves the communities of the North. A recurring phrase echoed through the final session: “We proceed at the speed of trust.” This exchange strengthened that trust – between communities, between North and South, and between different agencies that must work together so that others may live.

About the Author

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.

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 - National Research Council of Canada



Public Safety
Canada

Sécurité publique
Canada



Appendix I: Agenda and Participant List

Arctic SAR Exchange 2025: Operating at the Speed of Trust

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 – how do we 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? We will try to answer these questions in Arctic SAR Exchange 2025, but a great place to start is simply getting SAR partners together to meet face to face and get to know each other over coffee and conversation – these informal, personal discussions are as important as anything else we will do during the Exchange.

At the same time, while we have this group of experienced SAR responders and researchers together, we will take time to work through areas for improvement, share best practices and lessons learned, and co-develop tools that can help make SAR operations more effective. We will also explore best practices and critical requirements for SAR training, planning, and management. But remember, this is your

Exchange. Do you have questions you want answered? Any concerns you wish to raise? Any

suggestions you want to make? This Exchange provides the time and space to do so.

On Sunday and Monday, we will tour Joint Rescue Coordination Centre Halifax, the Canadian Coast Guard facilities in Halifax, and 413 Transport and Rescue Squadron at Canadian Forces Base Greenwood. On Saturday and Tuesday, we will meet at the Marriot Harbourfront Hotel, spending most of the time in small, breakout groups to discuss key issues. To encourage free flowing and candid conversations, the Exchange will follow 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.

If, at any point, discussions become exhausting or triggering, participants are encouraged to step away from the roundtable. Roundtable organizers can provide information on mental health and critical incident stress supports available to all participants.

This Exchange would have been impossible without the enthusiastic support of Major Chris Simm, the officer-in-command of Joint Rescue Coordination Centre Halifax. He took the lead on arranging our visits to the JRCC, the CCG facilities, and the CFB Greenwood. We would also like express our sincere appreciation to the

personnel from the Coast Guard and 413 Squadron for their willingness to ‘open their doors’ and showcase their side of the SAR system to Arctic responders.

Two weeks ago, one of the responders scheduled to attend this Exchange passed away. Junior Lingard was a skilled, dedicated, and experienced SAR responder, who was always willing to risk life and limb to help his fellow community members. He worked hard to improve SAR and was a regular participant in Nunavik SAR Roundtable activities. He lived our motto: That Others May Live. This exchange is dedicated to his memory.

Schedule

27/28 February

Arrival of participants in Halifax

1 March - Marriott Harbourfront Hotel

1000-1015: Welcome to Arctic SAR Exchange

1015-11:15: Participant Introductions and Expectations

1115-1200: Progress Made and Ongoing Challenges – Recap and Results of Arctic SAR Exchange 2023 and Nunavik and Nunavut SAR Roundtables

1200-1300: Lunch (provided)

1300-1430: Working Through Challenges and Opportunities: Breakout Groups

During these sessions, participants will rotate among different thematic stations where they will discuss pressing challenges and opportunities for search and rescue in the Arctic or engage with their SAR partners (a great chance to ask questions and seek information in a smaller setting).

1430-1445: Break (coffee and snacks provided)

1445-1700: Working Through Challenges and Opportunities: Breakout Groups

2 March – JRCC Halifax and Coast Guard Facilities

*Please remember to bring government issued photo ID with you

0830: Departure from Marriot Harbourfront Hotel to JRCC Halifax at CFB Halifax

0900-1130: JRCC Halifax Briefing and Tour

1130-1200: Transport to Canadian Coast Guard facilities

1200-1300: Lunch (provided)

1300-1600: Canadian Coast Guard Briefings and Tours

1600: Transport back to Marriot Harbourfront Hotel

3 March – Canadian Forces Base Greenwood

*Please remember to bring government issued photo ID with you

0800-1000: Transport from Marriot Harbourfront Hotel to CFB Greenwood

1000-1030: Sign-in, Checkpoint Charlie, 14 Wing

1030-1130: Group address by Commanding Officer, 413 Squadron, LCol Mark Norris

*Please note that box lunches will be provided to the group, which you can eat at your leisure

1130-1430: Split into three groups, touring CC130 Hercules, CH149 Cormorant, and SAR Tech Shop

1430-1630: Transport back to Marriot Harbourfront Hotel

4 March (Marriott Harbourfront Hotel) (lunch will be provided)

0930-1030: Operating at the Speed of Trust: Major Lessons from Sunday and Monday

1030-1045: Break (coffee and snacks provided)

1045-1200: Working Through Challenges and Opportunities: Breakout Groups

1200-1300: Lunch (provided)

1300-1500: Working Through Challenges and Opportunities: Breakout Groups
 1430: Working Break (coffee and snacks provided)
 1500-1530: Wrap-up and Next Steps

5 March

Departure of participants from Halifax

Participants

Nunavut Community SAR Responders

Neil Kigutaq	Iqaluit SAR
Robert Bourassa	Iqaluit SAR
Rosie Akavak	Kimmirut SAR
Adamie Nuna	Kinngait SAR
Julai Alikatuktuk	Pangnirtung SAR
Mark Kilabuk	Pangnirtung SAR
Gina Paniloo	Clyde River SAR
Sandy Simon Kautaq	Clyde River SAR
April Taqtu	Arctic Bay SAR
Steven Taqtu	Arctic Bay SAR
Lorna Netser	Rankin Inlet SAR
Peter Kadlak	Rankin Inlet SAR
Daniel Kablutsiak	Arviat SAR
Barnie Aggark	Chesterfield Inlet SAR
Kaviq Kaluraq	Baker Lake SAR
Angulalik Pedersen	Cambridge Bay SAR
Savanna Moore	Cambridge Bay SAR
Rosemary Maksagak	Cambridge Bay SAR
Baba Pedersen	Kugluktuk SAR
Roger Hitkolok	Kugluktuk SAR
Ryan Nivingalok	Kugluktuk SAR
Jack Himiak	Kugluktuk SAR

Nunavik Responders

Tony Annanack	Kangiqsualujuaq SAR
Sandy Kooktook	Kangiqsualujuaq SAR
George Kauki	Kuuujuaq SAR (virtual)
Bryan York	Kuuujuaq SAR
Justin Lingard	Kuuujuaq SAR
Billy Dan May	Tasiujaq SAR

Eva Grey	Aupaluk SAR
Martin Scott	Aupaluk SAR
Zebedee Annahatak	Kangirsuk SAR
Tommy Kudluk	Kangirsuk SAR
Maryam Ilgun	Quaqtuq SAR
Naalak Mifsud	Kangiqsujuaq SAR
Quppia Jaaka	Kangiqsujuaq SAR
Michael Cameron	Salluit SAR / Zone 6
	Director CCGA
Putulik Cameron	Salluit SAR

Kativik Civil Security

Craig Lingard	Director
Mitch Vail	KCS Coordinator
Kris Tukkiapik	KCS Technician
Steven Walker	KCS Technician
Jordan Jones	KCS Technician

Nunavut Emergency Management

Calvin Pedersen	Manager, SAR
Susan Peter	Office Manager / Duty Officer, SAR

Canadian Armed Forces

Major Chris Simm	Officer-in-Command
	JRCC Halifax
Cpt. Stephen MacFadgen	JRCC Halifax

Coast Guard and Coast Guard Auxiliary

Serge Jacques	Arctic Director, CCGA
	Quebec
Erin Pigott	A/Supt. Maritime SAR,
	CCG Arctic Region
Jeff Gordon	CCG Arctic Region
Stuart Thibert	CCG Arctic Region
Jessica Cucinelli	CCG Arctic Region

Civil Air Search and Rescue Association

Samantha Grant	National RPAS Training Officer
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John Vander velde Director, CASARA
Nunavut

Liam Smith STFX
Robert Brown Marine Institute,
Memorial University

Public Safety Canada

Steve Nason National Search and
Rescue Secretariat

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