



Joint Agile Basing Airpower Seminar
JABAS

Virtual JABAS - Joint Agile Basing Airpower Seminar 18 February 2021

Arctic SAR/PR, Part II

Prepared by:

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Goal of the JABAS Series – the goal of JABAS, also known as Arctic Airpower Seminars, is to exchange ideas, practical applications, and build relationships that enhance airpower projection and domain awareness in the high north. The quarterly series sits between the strategic and tactical levels, examining operational-level challenges associated with agile basing. Each seminar is dedicated to a deep investigation of a specific element associated with planning, executing and sustaining agile basing solutions in a rapidly changing environment. One key difference between JABAS and other defense fora is that defense and security objectives are viewed through an integrated lens that considers non-defense factors, such as the concerns of indigenous communities, climate science realities, and commercial/economic development.

Context - As more world-wide attention turns to the Arctic, more vessel and aircraft traffic is expected. At the same time, climate change means that more requests for assistance in the Arctic by various levels of government will be made of both the U.S. and Canadian militaries. With these considerations in addition to the background great power competition in which NORAD seeks to project joint airpower into the Arctic, the Canadian and U.S. militaries need agile (moveable) bases/operating locations, and the right equipment and personnel need to be in the right place at the right time.

The aim - Bi-lateral seminar series at the action officer lever (O6 or equivalent). Participants currently include Canadian NORAD Region (CANR) Members, U.S Soldiers, Airmen, CJOC, SJS, JTF-North, and Extreme Cold Industry Innovators, and related stakeholders focus on innovation and proposing multi-domain solutions for projecting joint airpower in an extreme cold environment. This seminar represented the second of two concentrated on civilian search and rescue agencies and community emergency preparation to aid the militaries to train, organize, and equip (TO&E) Arctic SAR/PR discussion for innovative tactical solutions to operational changes.

The BLUF: Search and rescue in Canada’s Arctic is largely dependent on civilian volunteers. While volunteers are highly capable, administrative burdens, inconsistent training schedules and changing federal points of contact are burdensome and can frustrate recruitment, training and operational efforts. **The Canadian Government needs to continue to invest, innovate and sustain SAR efforts in the Arctic.**

Time (CST)	Agenda	Briefer
1330	Welcome Remarks	Brig Gen Vaughan, DComd CANR and Dr. Andrea Charron, CDSS
1335	Canadian Coast Guard: Maritime SAR	Mr. Steve Thompson, Acting Superintendent, Maritime Search and Rescue for the Canadian Coast Guard.
1405	Civilian Air Search and Rescue Association - CASARA	Mr. Terry Nord, CASARA Executive & Operations Director Mr. Dave Taylor, CASARA Director NWT
1435	Community Emergency Preparedness	Dr. Peter Kikkert, Assistant Professor in Public Policy and Governance / Irving Shipbuilding Chair in Arctic Policy at St. Francis Xavier University
1505	Closing comments	Brig Gen Vaughan, DComd CANR Dr. Andrea Charron, CDSS

**Mr. Steve Thompson, Acting Superintendent, Maritime Search and Rescue, Canadian Coast Guard:
Maritime SAR**

[The CCG](#) is a special operating agency of the Department of Fisheries and Oceans Canada and is responsible for ensuring safe, accessible and the sustainable use and development of Canada's oceans and waterways. The CCG is the lead for maritime search and rescue incidents. Coast Guard has observed areas of higher SAR cases, namely areas around: Western Hudson Bay, Gjoa Haven, Labrador coast, Iqaluit and east into Fishing Area 0B and the Beaufort Sea. CCG has a number of volunteer auxiliaries across the Arctic to respond to SAR incidences. Rankin Inlet has a CCG inshore rescue boat station operated during the summer months by indigenous post-secondary students under the supervision of an experienced CCG officer. In 2020, the Canadian Coast Guard Auxiliary responded to 32 incidents, the Inshore Rescue Boat station responded to 6 SAR cases, and the CCG icebreakers to 12. Since 2017, the CCG has awarded vessels under the Oceans Protection Plan to hamlets across the Arctic in recognition of the increased number of SAR incidents, and to support their participation in the Auxiliary.

SAR activity is increasing as vessel traffic increases across the Arctic (especially cruise and commercial activity). The passenger count is increasing significantly to thousands of passengers onboard one ship which means more infrastructure is required to house/shelter/support passengers in an emergency.

The top ten cruise vessel destinations in terms of passenger/crewmember movements account for 50.1% of the movements into/out of hamlets in 2019. They include: Pond Inlet, Beechey Island, Dundas Harbour, Croker Bay, Cambridge Bay, Demarcation Point, Ulukhaktuk, Gjoa Haven, Iqaluit, and Queen's Harbour which is equivalent to 38,552 tourists and crewmembers. (Recall, the population of the Canadian Arctic is approximately 120,000). Cruise vessel transits were banned for the 2020 and 2021 season because of COVID 19. Based on the work being done, and relationships formed, the Coast Guard has found that **there are approximately five times more SAR incidents than are reported to the federal SAR system. At the same time, areas of historical elevated risk are subject to Joint Rescue Coordination Centre (JRCC) notification.** The CCG is targeting these areas for additional CCG auxiliary units.

Total SAR Cases north of 55°

Case Classification	2019	5-year average (2015-2019)
Aeronautical	25	29
Maritime	34	36
Humanitarian	34	30
Unknown/False Alarm	132	111
Outside Canadian AOR	169	182
Total	394	388

The CCG is finding success by assigning the same CCG contacts to the same communities year-after-year and CCG is working to reduce the administrative burden, and provide administrative training, to volunteers compiling claims and compensation reports.

**Mr. Terry Nord, Civilian Air Search and Rescue Association (CASARA) Executive & Operations Director
And Mr. Dave Taylor, CASARA Director NWT**

[The Civil Air Search and Rescue Association \(CASARA\)](#), is a Canada-wide volunteer aviation association dedicated to providing air search support services in downed aircraft, recently more humanitarian efforts, and promotes Canada's Search and Rescue Program across Canada. Our volunteers are on call 24 hours a day, 365 days a year to assist in providing air search assistance to the Royal Canadian Air Force. Despite the name, **their role is to search and REPORT.**

Both Nunavut and the NWT have agreements to assist the RCMP directly. Yellowknife is called 6 to 12 times/year by the RCMP for non-aviation SAR missions, Inuvik about 1/year.

Each of the territories have slightly different operations.

- Nunavut uses commercial aircraft only, usually 6-8 spotters in a Twin Otter. No navigator, but they capture a GPS flight track.
- Yukon currently uses private 4-place aircraft only, very short range. They have cell, inReach and sat phone coms.
- NWT uses charter and private fixed and rotary wing. The most common call is from the RCMP requesting assistance for a missing person. While there are no formal agreements between CASAR and the [Alaskan Civil Air Patrol](#) (paid) US auxiliary counterpart, this is an area to investigate especially as more traffic and activity comes to the Arctic and incidents may occur on the Alaskan/Yukon/BC borders.

CASAR in the Arctic partners with

- 413/424 SQN: Supports Nunavut
- 435 SQN: Supports Northwest Territory
- 442 SQN: Supports Yukon
- Partners: Emergency Management Organizations (EMO), RCMP (Canada's federal policing service), Parks Canada (the largest federal land manager in the Arctic), and Community Admin Officers

Training for spotters and navigators has been temporarily suspended in Nunavut due to COVID 19. CASAR depends almost entirely on volunteers. **A paid coordinator position would help in recruiting, training and liaising with partners and communities and in assisting with the administration** for claims, compensation. CASARA, for example, will cover for breakage of equipment during an incident but volunteers don't always have the time and expertise to navigate the bureaucracy.

Dr. Peter Kikkert, Assistant Professor in Public Policy and Governance / Irving Shipbuilding Chair in Arctic Policy at St. Francis Xavier University: Community Emergency Preparedness

In the Canadian Arctic, community-based Ground Search and Rescue (GSAR) teams, Canadian Coast Guard Auxiliary (CCGA) units, Marine SAR Societies, Civil Air Search and Rescue Association (CASARA) members, Inuit Guardians, Inuit Marine Monitors, and Canadian Rangers play essential roles in search and rescue (SAR). These groups constitute an essential component of the "SAR umbrella" in the

Canadian Arctic, given the distances involved; the paucity of federal and territorial resources in the region; and their intimate knowledge of local geography, sea and ice conditions, potential challenges and risks, and their fellow community members. They face a daunting task: providing 24/7 response capabilities, 365 days a year in an austere and changing operating environment.

The community responders involved in Arctic SAR draw upon a wide array of strengths to provide their life-saving service: incredible dedication, intimate knowledge of the land and local environmental conditions, high levels of skill, and effective leadership. Still, these groups face a wide array of challenges: an increasing case load, new and unpredictable outside activity; training gaps, equipment shortages, volunteer burnout (many community responders are involved in multiple response organizations), administrative burdens (e.g. everything from completing legal society paperwork to preparing damage claims), difficulty coordinating, cooperating, and communicating across the community, territorial, federal levels, and the slow response times from southern-based SAR assets.

[Kitikmeot SAR Project](#) – a community-collaborative effort that seeks to identify and assess existing community-based SAR and emergency management capabilities in the communities of Kugluktuk, Cambridge Bay, Gjoa Haven, Taloyoak, and Kugaaruk – provide two suggestions that might address many of these challenges. First off, people using their personal equipment during authorized SAR training, exercises, and operations could receive compensation according to a SAR Equipment Usage Rate. Such a program would recognize how people use their equipment for the public good – with all the wear and tear that this involves - and provide limited financial compensation for participation in SAR activities. Reflecting on how to improve capabilities, community responders also recommended a paid SAR coordinator position. Having a full-time SAR coordinator position in each community might be difficult sell to government agencies, however, when some communities only conduct a handful of searches each year. **A Community Public Safety Officer (CPSO) position that can function as SAR coordinator while carrying out other public safety and emergency management duties is recommended.** Beyond community SAR operations, past exercises and emergency events have also highlighted the sophistication of community-level understandings of and plans for **marine or air disasters** and reinforced the value of community-level perspectives in planning, preparing for, and executing such a rescue. The local information that community-based groups could provide on geography and environmental conditions would be absolutely vital and could save lives. If used properly, Coast Guard Auxiliary units, community GSAR teams, and/or Ranger patrols could fulfill a wide array of tasks,

- put eyes on the situation;
- provide updates to the JRCC (they can speak the language)
- act as on-scene coordinator;
- provide intelligence on where passengers could be evacuated to on the land;
- shepherd lifeboats or zodiacs to safe havens or to the community;
- help in offloading and tracking passengers;
- search for missing passengers;
- establish a camp to provide warmth and shelter;
- give first aid;
- provide predator control;
- reassure evacuees that the situation is under control;

- assist in setting up accommodations for evacuees in their communities;
- Assist in MAJAID/MAJMAR deployment;
- be the points of contact between evacuees and the community.

Community responders represent a vital part of the rescue umbrella, particularly in the Canadian Arctic. **They must be understood as force multipliers that can contribute to broad range of SAR missions, including the SAR and personnel recovery requirements of NORAD and 1 Canadian Air Division.** Federal and territorial agencies need to keep on strengthening the umbrella by continuing to build community capacity with training and opportunities to exercise, by building strong, sustained relationships with northern communities, by improving interoperability and fostering vertical and horizontal communication and coordination, and by technological innovation, such as an expanded AIS network.

Brig Gen Vaughan, Deputy Commander, CANR

The purpose of JABAS is to engage in practical discussions to glean tactical/operational applied solutions as well as to allow the opportunity for networking. I encourage you to reach out to the presenters as will I.

As I am based in Winnipeg and support Commander 1 CAD/JFACC/CANR, it is important to note that another of his “hats” is SAR operations in the Trenton Search and Rescue Region. [Joint Rescue Coordination Centre \(JRCC\) Trenton](#) leads and directs all SAR operations in the Trenton search and rescue region (SRR), which covers central Canada which includes Hudson's Bay, James Bay and the Canadian portions of the Great Lakes and the Arctic Ocean (approximately 10 million square kilometres). JRCC Trenton receives about 4000 calls for assistance per year. They break down approximately as follows:

- 70 percent of the responses are maritime
- 20 percent air
- 10 percent humanitarian

The Trenton SRR has the following primary CAF SAR squadrons:

- 424 Transport and Rescue Squadron from 8 Wing Trenton, Ontario. The squadron flies CC-130 Hercules tactical transport aircraft and CH-146 Griffon helicopters.
- 435 Transport and Rescue Squadron from 17 Wing Winnipeg, Manitoba. This squadron flies CC-130 Hercules tactical transport aircraft.

CAF assets are tasked to respond to almost 500 SAR missions annually in central Canada.