



**Force Multiplier:  
The Role of Canadian Special Operations Forces in Canadian Arctic Operations  
Major Brian Johnson**

**JCSP 50 DL**

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## **Force Multiplier: The Role of Canadian Special Operations Forces in Canadian Arctic Operations**

### **INTRODUCTION**

Climate change has provided a catalyst for renewed international interest in the Arctic. The warming temperatures are increasing the accessibility of natural resources once deemed uneconomical to extract from the expansive arctic territories. Canadian Special Operations Forces (CANSOF) have much to offer in the protection of Canada's Arctic. CANSOF is well-suited to conduct tasks supporting counter-grey zone activities such as covert or overt surveillance using unpiloted aerial systems in highly remote locations. CANSOF skills and capabilities allow them to operate in nearly any environment, provided that they have sufficient communications and supply links. However, CANSOF currently has some deficiencies in operating most efficiently in the Arctic. Working with the Canadian Rangers and Arctic Response Company Groups requires opportunities to improve their arctic proficiencies. As a high-readiness force with advanced skills across the spectrum of warfare, elements of CANSOF should be the lead land force elements in arctic operations, supported by conventional, cyber, and space forces whenever possible.

This paper will explore how CANSOF can be employed in the Arctic to protect Canada's interests. First, the current operational environment, including threats, will be reviewed, followed by a description of the roles of the CAF's components as they relate to Arctic operations. Next, this paper will explore the nature and characteristics of CANSOF and its capabilities. Finally, this paper will address the niche skills that SOF can employ to address the emergent threats in the Canadian Arctic.

### **CANADA'S ARCTIC**

Canada's Arctic covers approximately 21 million square kilometres and comprises 75 per cent of the country's total coastline. It is characterized by vast expanses of forests, lakes, and rock formations. The terrain is far more accessible than during the summer months since freezing temperatures solidify lakes, rivers, and sea passages. With snow coverage, these conditions enable effective ground transportation via snowmobile or dog sled. In the summer, the abundance of water features across the land makes travel challenging and slow, even when using all-terrain vehicles. The considerable distances between communities typically necessitate transit by aircraft. Canada's Arctic is geographically vast, sparsely populated, and open to contest mainly due to climate change. Climate change effects are more pronounced in the Arctic due to a reinforcing feedback loop. Experts estimate that temperatures are increasing three to four times the rate of temperate latitudes. The higher temperatures melt the permanent sea ice, which

reduces the total reflective surface that reflects sunlight into space. All the climate change impacts make the Arctic more accessible for sea travel and potential resource extraction.

Direct threats to the North American Arctic that first arose after World War II increased during and waned after the Cold War have evolved. Following World War II, the threat to the Arctic was mainly from Soviet special forces. Increased Soviet preparations and building of Arctic capability of marine and special forces, along with strategic bombers, were prominent threats during the Cold War.<sup>1</sup> Dr P. Whitney Lackenbauer has characterized current arctic threats into three categories: *through*, *to* and *in* the Arctic.<sup>2</sup> Threats to North America that pass *through* the Arctic are primarily Russian ICBM or hypersonic cruise missiles, which are a NORAD responsibility. Threats *to* the Arctic are mostly grey zone actions that threaten to destabilize northern policy and influence in favour of China's interests. Threats *in* the Arctic are due to the nature of the Arctic itself, such as melting permafrost and longer ice break-up and freeze-up periods, and they tend to have the most impact on the lives of northern residents.

As the most realistic threat to the Arctic, grey zone threats are most problematic for conventional forces. The grey zone threats of concern are dual-purpose state-owned enterprises, such as research and tourism vessels. These activities are near impossible to readily assess within the capabilities and authorities of conventional forces. However, some grey zone threats are less likely to be effective due to the many language dialects spoken in Canada's Arctic and general resistance to influence. The most likely threat in this aspect would be from China.<sup>3</sup>

Although Ukraine is not geographically close to the Arctic, Russia's invasion of Ukraine has directly impacted the geopolitical situation in the Arctic. Russia's actions and consequences have disrupted the Arctic Council, opening opportunities for China to insert itself further into Arctic affairs. The Arctic Council is a group of eight Arctic nations that agree to manage Arctic affairs with the aim of ensuring cooperation on matters of security, safety, and protection of the environment.

## CAF IN THE ARCTIC

The CAF has limited permanent presence above 60 degrees latitude, which makes it challenging to assert deterrence or active defence of Canada's Arctic. However, there is growing interest and a will to have the CAF conducting pan-domain operations

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<sup>1</sup> Horn, Bernd, "Not an Inconsequential Battlespace: Arctic Threat Streams," In *The Northern Flank*, (Winnipeg, MB: 17 Wing Winnipeg Publishing Office, 2025), 139-174.

<sup>2</sup> Lackenbauer, P. Whitney, "Threats through, to, and in the Arctic: North American Defence and Security through a Canadian Lens," *Canadian Army Journal*, 19.2 (2021): 6.

<sup>3</sup> Horn, "Not an Inconsequential Battlespace," 147.

constantly throughout the year despite having no permanently assigned force. This section will highlight these various CAF components active in Canada's Arctic.

Operation NANOOK is currently in place to effectively synchronize most CAF activities in the Canadian Arctic. Operation NANOOK is supported by several lines of effort focusing on strategic aspects of Canada's Arctic policy. Operation NANOOK-NUNAKPUT is concerned with maintaining situational awareness over the Northwest Passage during the navigable season. Operation NANOOK-TUUGAALIK is a naval interoperability patrol typically with the Danish Navy in the Davis Strait. Op NANOOK-TATIGIIT supports exercising an inter-governmental response to a disaster requiring assistance from the CAF. Operations NANOOK-TAKUNIQ, NANOOK-QIMAAVIVUT, and NANOOK-KATIMAVIK are additions to the NANOOK campaign. Operation NANOOK-TAKUNIQ is an operation that employs Canadian Rangers in a presence and domain awareness role. Operation NANOOK-QIMAAVIVUT is focused on supporting infrastructure, survivability, and mobility capabilities. Operation NANOOK-KATIMAVIK will be a Pan-Domain international exercise with partner nations in Canada's Arctic every two years. Operation NANOOK-NUNALIVUT is a large winter deployment of land forces supported by air power to conduct security and defence tasks in Canada's high Arctic.<sup>4</sup>

The employment of the Army Arctic Response Company Groups (ARCG) is a cornerstone of Operation NANOOK-NUNALIVUT and is often a key consideration for the planning of the operation. The CDS directed the creation of four ARCGs in 2007. These units are ad hoc and expeditionary in nature, based on primary reserve brigades. These company groups regularly train in extreme cold weather and conduct a major exercise in the Arctic on a rotational basis. ARCGs were envisioned to be able to deploy within a relatively short amount of time and operate in the Arctic. Their resident knowledge and experience of operating in the Arctic is generally much higher than that of the regular force Army. Every year, an ARCG supports Operation NANOOK-NUNALIVUT while another conducts a northern exercise (NOREX). These activities are focused on the most challenging aspects of operating in the North, namely during the height of winter.<sup>56</sup> Standard tasks for the ARCG include conducting Human Assistance and Disaster Relief, long-range over-snow sovereignty patrols supporting defence and security and providing general assistance to other governmental departments and agencies.<sup>7</sup>

The most prevalent and persistent CAF presence in Canada's Arctic is the Canadian Rangers. The Canadian Rangers are a component of the CAF reserve force that

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<sup>4</sup> CJOC PowerPoint presentation "Op NANOOK Evolution" 19 Mar 25, J5 Continental Region

<sup>5</sup> Horn, Bernd, "Mostly an After Thought: Canada and the Arctic," In *The Northern Flank*, (Winnipeg, MB: 17 Wing Winnipeg Publishing Office, 2025), 38 and 56-57.

<sup>6</sup> Lackenbauer, "Threats," 13.

<sup>7</sup> Horn, "Mostly an Afterthought," 38.

provides a persistent presence to conduct sovereignty patrols and support domestic CAF operations, including assistance to local government in emergencies. There are approximately 1400 Rangers in Patrols across 64 Arctic communities.<sup>8</sup> Most Ranger patrol members are indigenous. 1<sup>st</sup> Canadian Ranger Patrol Group (1 CRPG) has Patrols in nearly every community across the three territories. Each Patrol is roughly 20 members strong, with its leadership elected by the membership.

The Rangers are an integral component of all CAF, and many Government of Canada (GoC), activities in the Arctic. The current Commanding Officer of 1 Canadian Ranger Patrol Group, LCol Travis Hanes, states, “their regular tasks include surveillance and presence patrols, collecting local data for the CAF, reporting unusual sightings, participating in community events, and assisting with domestic military operations.”<sup>9</sup> More specifically, they conduct security patrols in support of the North American Air Defence (NORAD) North Warning System (NWS) sites and assist in search and rescue (SAR) efforts near their communities. It is important to note that Canadian Rangers are not trained to conduct combat or combat support operations. This does limit their effectiveness for specific tasks, but their actual value is in their knowledge of the land and constant vigilance of their environment. Canadian Rangers bring much capability and are force multipliers. Still, they have other less obvious limitations, such as their availability during hunting seasons, and often the Rangers fill multiple roles within the community that could affect their availability depending on the situation. Therefore, activities planned well in advance are more likely to have the best Ranger support, while emergent situations affecting their communities may draw the Rangers to their primary civil functions.<sup>10</sup>

Opened in 2013, the Canadian Armed Forces Arctic Training Centre is a Canadian Army-operated facility collocated with the Polar Continental Shelf Program in Resolute Bay, NU.<sup>11</sup> It was conceived as a method to reinvigorate Canada’s northern land force operations following an analysis that Canada’s Arctic continues to face threats after a decline of CAF presence following the Cold War. Today, it is a key support node for operations and training conducted annually.

The Royal Canadian Navy has had limited capability to operate in the Arctic until the launch of the Arctic and Offshore Patrol Vessels (AOPV) starting in 2019. Due to its ice-hardened hull, the APOV allows the RCN to patrol through dangerous sea-ice waters. The AOPV can also provide a platform from which to operate land forces and Unmanned Aerial Systems. However, the most underrated yet untapped capability is the ability to act as a Joint C2 node. The APOV can embark a small landing force, equipped for rotary

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<sup>8</sup> Lackenbauer, “Threats,” 13.

<sup>9</sup> Lackenbauer, P. Whitney and Travis Hanes, “The Canadian Rangers: A Critical Enabler for SOF,” In *The Northern Flank*, (Winnipeg, MB: 17 Wing Winnipeg Publishing Office, 2025), 227.

<sup>10</sup> Personal observation by the author

<sup>11</sup> Horn, “Mostly an Afterthought,” 40.

wing operations and is task configurable. Along with these aspects, its communications suite allows the APOV to perform the functions of a mobile C2 for a joint task force operating along the Northwest Passage.<sup>12</sup> The RCN regularly works closely with the Danish Navy and the coast guard during Op TUUGAALIK. The regular training events with international partners and allies increase the RCN's interoperability.

The Royal Canadian Air Force is a regular operator in Canada's Arctic. Namely, it is a key partner in the North American Air Defence (NORAD) alliance. As part of NORAD, the RCAF operates forward operation bases (FOB) in Inuvik and Yellowknife in the Northwest Territories, Iqaluit in Nunavut, and Goose Bay in Newfoundland, where interceptors can be supported in deterrence against any air threat to North America through the Arctic.<sup>13</sup> The RCAF also operates and maintains radar sites as part of NORAD, including CFS Alert, the most northern regularly inhabited facility in the world. The RCAF routinely flies support into CFS Alert and maintains a small transport squadron in Yellowknife. Elements of the RCAF are key components to any CAF activity in the North as they support various functions such as cargo transport, surveillance, and SAR.

The CAF, among other initiatives identified in the current defence policy, *Our North, Strong and Free*, plans to establish Northern Operations Support Hubs (NOSH) in key locations to support CAF operations anywhere across Canada's Arctic. These locations are meant to be infrastructure poised to increase readiness in support of major operations through prepositioning critical supplies and equipment. The NOSHs will also support other Whole of Government (WoG) partner missions. Having the NOSHs will allow both CANSOF and conventional forces to more rapidly prepare and deploy to address incidents and issues without having to conduct extensive planning for movements of materiel and equipment.

Although the CAF is working to maintain a near-constant presence throughout the Arctic, there are gaps. The CAF and GoC elements cannot easily counter grey zone threats to the Arctic. The CAF possesses rapid reaction forces that can respond to incidents in the Arctic; however, these units are tasked with various requirements across Canada and often have other primary duties, meaning they are not always available for emergencies that occur. Access to high-security level information promptly. The communications systems available to conventional CAF forces operating in Canada's Arctic are currently insufficient to process and react quickly to intelligence at the highest classification levels. This puts the CAF at a disadvantage when events with strategic implications that rely on high levels of information classification occur.

Finally, the Canadian Special Operations Forces Command (CANSOFCOM) is comprised of five distinct units, each with its own purpose, unified under a joint

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<sup>12</sup> <https://www.canada.ca/en/navy/corporate/fleet-units/surface/harry-dewolf-class/fact-sheet.html>

<sup>13</sup> Horn, "Mostly an Afterthought," 42.

headquarters. These units are as follows: Joint Task Force 2 (JTF 2), Canadian Special Operations Regiment (CSOR), Canadian Joint Incident Response Unit (CJIRU), 427 Special Operations Aviation Squadron (427 SOAS), and Canadian Special Operations Training Centre (CSOTC). JTF 2 is responsible for operations requiring high sensitivity levels and can conduct covert insertions by means such as airborne, air mobile, and fast boat. CSOR can conduct full-spectrum operations in austere environments with little notice. CJIRU is tasked to respond to chemical, biological, radiological, and nuclear threats (CBRN), while 237 SOAS provides aviation support to the command. CSOTC is the schoolhouse that manages CANSOF training and developmental activities.<sup>14</sup>

Early issues in adapting to Arctic operations. SOF's mentality/moto of *We will find a way* is a potential hindrance in the Arctic. The nature of the terrain and weather in the Arctic is such that even a well-planned operation can be adversely affected, and contingencies become a routine component. For example, CANSOF were deployed to search for and recover an object valuable to the Canadian intelligence community. However, the deployed elements did not coordinate well with JTFN, nor heed any of its advice. The result was that CANSOF deployed to the area of interest and was unable to accomplish the mission due to environmental factors that had been previously identified by JTFN staff.<sup>15</sup> The mission was eventually accomplished when the conditions were appropriate.

## **SOF CONSIDERATIONS**

When employing SOF in general, planners and commanders are advised to consider the SOF Truths as described by the USSCOCOM Fact Book 2022:

- a. Humans are more important than hardware;
- b. Quality is better than quantity;
- c. SOF cannot be mass-produced;
- d. Competent SOF cannot be created after emergencies; and
- e. Most special operations require non-SOF support.<sup>16</sup>

These "truths" highlight the sensitivities applicable to the employment of special forces and are equally relevant to most forces operating in the Arctic. Conventional forces operating in the Arctic need to have experience, proper equipment, and supplies, and they are expensive to deploy and maintain. The CAF also cannot deploy unprepared forces without significant risk to their safety, particularly in winter.

Core capability sets allow special forces to achieve a disproportional impact relative to their size, thus providing a strategic impact. This ability to work in a pan-

<sup>14</sup> <https://www.canada.ca/en/special-operations-forces-command.html>

<sup>15</sup> Personal experience recollection of the author.

<sup>16</sup> <https://www.socom.mil/FactBook/2022%20Fact%20Book.pdf>, p.38



domain environment, integrating with and supporting Indigenous forces, makes special forces a useful application of state power, particularly in remote areas where small efforts have significant effects.<sup>17</sup>

## **CANSOF'S ROLE IN THE ARCTIC**

CANSOF can be best employed to address grey zone activities as they are well suited to conducting long-range patrols, training with indigenous organizations, and rapid planning, mobilization, and deployment in response to strategic incidents. These are all the essential capabilities to ensure the strategic dominance over Canada's Arctic. The ability to assess and identify weak points that an adversary's special forces can exploit is also of value, despite the low likelihood of occurrence. CANSOF's expertise in operating UAS and directing aircraft from the ground, conducting long-range overt or covert reconnaissance and surveillance, are also key tactical skills that enable the CAF to maintain security and safety along with GoC partners across the Canadian Arctic.

With Operation NANOOK-NUNALIVUT, there is plenty of opportunity for CANSOF to integrate with conventional forces and Canadian Rangers to improve their arctic knowledge and experience. During the long-range patrols over land and sea ice, the Rangers would assist CANSOF by teaching them techniques for survival. Small elements of CANSOF are already involved in researching and developing extreme cold weather capabilities. As operations during the winter in the Arctic are the most complex, the experience would be the most valuable in terms of force development for CANSOF.

CANSOF elements would be highly effective when employed in a surveillance and reconnaissance role in remote locations along the NWP during Operation NANOOK-NUNAKPUT. CSOR or JTF 2's ability to be rapidly inserted ahead of expected sea vessel traffic to observe and report will help the CAF efficiently observe and report any overt and 'below-the-threshold' threats. While assisting CANSOF in improving their arctic proficiency, the Canadian Rangers would benefit from learning some advanced patrolling and observation techniques from CANSOF. As with Operation NANOOK-NUNALIVUT, this partnership would significantly improve Canadian Rangers and CANSOF's overall effectiveness.

As an enabler conditioned to operate in a joint and pan-domain environment, CANSOF has more direct access to cyber and space domain support than the current capabilities of the CAF's conventional forces. This means that CANSOF can observe, orient, decide, and (re)act more quickly than the under-resourced operational headquarters in the North, JTFN. CANSOF can also collaborate with allied Arctic special forces and with international partners on capability research and development. International Cooperative Program for Polar Research (ICE-PPR). Lessons learned from

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<sup>17</sup> Day, D. Michael, "SOF Adaptation to Operating in the Arctic: Why and How," In *The Northern Flank*, (Winnipeg, MB: 17 Wing Winnipeg Publishing Office, 2025), 61-72.

allies and research will increase interoperability and effectiveness should CANSOF need to support allies in their arctic areas of operation, or vice versa.

## **CONCLUSION**

The Arctic region remains a contested, albeit not openly so, in most cases. Most threats to the Canadian Arctic lie in the realm of sub-threshold kinetic activities of the grey zone, such as cyber attacks affecting infrastructure and influence activities like disinformation and misinformation aimed at garnering support for Canada's adversaries' interests. Threats to Canada within the Arctic are also prevalent, which can cause disasters and potentially directly affect the populations throughout the region. Within this operational environment, the CAF is currently woefully lacking and can benefit from employing rapidly deployable forces such as those found within CANSOFCOM. Although CANSOF will require consistent exposure to and training in the Arctic environment to maintain proficiency, they can provide strategic niche capabilities until a more robust conventional pan-domain force is developed for sustained operations in Canada's Arctic. CANSOF should be employed whenever possible, in roles that help identify and mitigate grey zone threats using all its specialized capacities to ensure Canada's Arctic remains safe and secure.

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