

Canadian Inuit and North American Defence Modernization

Background Considerations



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with Peter Kikkert, Ph.D.

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1. Introduction

Russia's unjustifiable and unprovoked full-scale invasion of Ukraine emphasizes the importance of the rules-based international order. Challenges like the security implications of climate change show that the Arctic is not immune to the evolving strategic landscape. Through leadership and meaningful collaboration with our allies and partners, including Indigenous communities, we will ensure the safety, security, and prosperity of the Arctic, and the wellbeing of those who live there.

*The Honourable Anita Anand, Minister of National Defence (May 2022)*²

Infrastructure and equipment that simultaneously supports both military and civilian purposes could transform the Arctic. Deep-water ports, carbon-free energy sources, all-weather roads connecting southern Canada to the Northwest Passage, upgraded airports, reliable broadband internet, and autonomous underwater vehicles tasked with monitoring and mapping the seabed all have a role to play in defending the North while providing greater security to those who live, work and travel there. Such investment could also greatly help the economic potential of the North be realized. In particular, critical minerals that currently lie stranded in landlocked deposits could become extractable under a nation-building Arctic infrastructure program underpinned by defence-focused investments. Efforts to this effect would help Canada and its allies become less reliant on supply chains currently dominated by adversaries (and friends of uncertain loyalty).

*Harry Flaherty, Chair of the Inuit Development Corporation Association,
12 June 2023*³

Since February 2022, Russia's full-scale invasion of Ukraine has sent shockwaves across the Arctic. While Russia has not signalled any similar aspirations for military conquest in neighbouring Arctic countries, the world has witnessed the further spillover of international tensions into circumpolar affairs and the Kremlin has shattered Russia's credibility as a peaceful, law-abiding actor. Although Canada has often adopted language downplaying immediate conventional military risks to its Arctic, Russian aggression in Europe has prompted changes in assessments about the future threat environment. "While the Arctic has long been characterized by stability and cooperation, access to natural resources, impacts on northern Indigenous populations, concerns around national sovereignty and international security, and environmental considerations are intersecting in ways not previously seen," Minister of National Defence Anita Anand noted in May 2022. Maintaining peace and stability in the Arctic, within a world of heightened uncertainty, has forced Canada and its allies and partners to re-evaluate threats, strategic responsibilities, and opportunities for deeper collaboration.

As part of the federal government's commitment to a safe, secure, and well-defended Arctic and North, Canada's *Arctic and Northern Policy Framework* (ANPF, 2019)⁴ provides a strategic vision to guide government policy-making activities and investments over the next decade and beyond. In Budget 2022, the federal government committed to update the country's current defence policy, *Strong, Secure, Engaged* (SSE, 2017), and included more than \$8 billion in new funding over five years to better equip the Canadian Armed Forces and to strengthen Canada's contributions to our core alliances like the North Atlantic Treaty Organization (NATO) and the North American Aerospace Defense Command (NORAD). On the basis of these policy foundations, Ottawa plans to acquire a range of maritime, land, air and space capabilities with Arctic applications; intends to prioritize partnerships, including with Indigenous Peoples and Northerners, to advance shared priorities; to invest in research and development; and to urgently modernize Canada's

contribution to continental defence through NORAD. Announcements over the last year have affirmed that a significant amount of promised investments will have an Arctic dimension. Given that Inuit Nunangat comprises roughly 40% of Canada's land area and 72% of its coastline,⁵ this comes as no surprise.

North American defence modernization activities in Inuit Nunangat must be undertaken with the free, prior, and informed consent of Inuit rightsholders. Article 30 of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) specifies that:

1. Military activities shall not take place in the lands or territories of indigenous peoples, unless justified by a relevant public interest or otherwise freely agreed with or requested by the indigenous peoples concerned.
2. States shall undertake effective consultations with the indigenous peoples concerned, through appropriate procedures and in particular through their representative institutions, prior to using their lands or territories for military activities.

In response, ITK's UNDRIP Action Plan proposes the following:

In order to enable meaningful partnerships with Inuit to advance the safety, security and defense objectives of the Arctic and Northern Policy Framework, the federal government will advance implementation of the Inuit Nunangat Policy by taking the following measures:

- Collaborate with Inuit Treaty Organizations or their designates to co-develop an Inuit Nunangat Chapter in Canada's National Defence Policy;
- Support Inuit self-determination in Inuit Nunangat, that include[s] funding and multi-purpose infrastructure;
- Support Inuit self-determination by applying the Inuit Nunangat approach to Defense program and operations.⁶

This report analyzes intersections between Arctic and Northern defence, security, and safety priorities identified by DND/CAF and Inuit organizations and representatives. It is intended to provide insights and develop a framework to help DND/CAF and its federal partners situate investment opportunities in Whole-of-Society contexts that reflect the identified needs of Inuit and the benefits of supporting community-based solutions to prevent, prepare and respond to security issues. Accordingly, it supports efforts to inform and coordinate investments by DND/CAF and its partners as they co-develop and actualize ANPF and Inuit-Crown Partnership Committee (ICPC) implementation plans.

1.1 The Arctic and Northern Policy Framework (ANPF)

The main chapter of the ANPF lays out the issues, challenges, and opportunities facing Canada's Arctic and Northern regions, and indicates the federal government's primary goals and objectives. It details the impacts of climate change, particularly as it affects social and cultural norms, ways of knowing, and on-the-land activities. It also highlights the broad spectrum of socio-economic challenges facing the North, ranging from the lack of economic opportunity, to mental health challenges, to food insecurity, to gaps in infrastructure, health care, education, skills development, and income equality across the region. The framework notes the opportunities and challenges that stem from the North's youthful population, particularly in Nunavut where the median age is just over 26. In its effort to link existing federal initiatives to the ANPF, examples of how the government is already addressing some of these issues in collaboration with its Indigenous and territorial partners are highlighted throughout the document.

The ANPF's first and primary goal is to create conditions so that **“Canadian Arctic and northern Indigenous peoples are resilient and healthy.”** This priority animates the entire document. To achieve

this, the ANPF pledges to end poverty, eradicate hunger, reduce suicides, close the gap on education outcomes, provide greater access to skills development, adopt culturally appropriate approaches to justice issues, and eliminate the housing crisis in the North. As examples of action already taken, the document notes the government's ongoing efforts to "support better, more relevant and accessible education," funding and skills training for community-led food production projects, updates to Nutrition North, and its investment in new addiction treatment facilities in Nunavut and Nunavik. This broad vision resonates with Government of Canada's strong commitment to reconciliation with Indigenous peoples, captured in the eighth goal: the promise of a future that "supports self-determination and nurtures mutually respectful relationships between Indigenous and non-Indigenous peoples."

Between these two pillars are a broad range of challenges, opportunities, and promises that form a tangled web of unranked priorities. The second goal is **strengthened infrastructure**, including broadband connectivity; multimodal transportation infrastructure; multipurpose communications, energy, and transportation corridors; energy security and sustainability at the community level; and social infrastructure. The ANPF points out that the government has already provided over \$190 million in funding for improvements and expansion of existing local air and marine infrastructure. While these community-focused initiatives are essential to the resilience and well-being of Northerners, the challenge remains how to justify the high costs associated with much larger "**transformative investments in infrastructure.**" More generally, the ANPF is silent on how the government will decide on which infrastructure projects get priority funding.

The framework highlights the need for "**strong, sustainable, diversified, and inclusive local and regional economies,**" particularly through increased Indigenous ownership and participation, the reduction of income inequality, the optimization of resource development, economic diversification (including land-based, traditional economic activities), and the enhancement of trade and investment opportunities. The framework also highlights the idea of a "conservation economy" (which makes conservation an important part of local economies) that the federal government is slowly growing in the Arctic in collaboration with Northern Indigenous stakeholders.

The framework's fourth goal is to ensure that both **Indigenous and scientific knowledge and understanding guide decision-making**, and that Arctic and Northern peoples are included in the knowledge-creation process.

The government's fifth goal focuses on ensuring **healthy, resilient Arctic and Northern ecosystems** and promises action on a wide array of major objectives, ranging from mitigation and adaptation measures to climate change, to sustainable use of the ecosystems and species, and safe and environmentally responsible shipping.

The sixth and seventh goals highlight measures to **strengthen the rules-based international order in the Arctic**. Emphasizing that the region is "well known for its high level of international cooperation on a broad range of issues," and "despite increased interest in the region from both Arctic and non-Arctic states," the ANPF commits to continued multilateral and bilateral cooperation in the Arctic. It confirms the Arctic Council as the "pre-eminent forum for Arctic cooperation" complemented by the "extensive international legal framework [that] applies to the Arctic Ocean." There is also language proclaiming how Canada "is firmly asserting its presence in the North." The overall message projects Canada's domestic priorities into the international sphere, emphasizing the desire for regional peace and stability so that "Arctic and northern peoples thrive economically, socially and environmentally."



Source: Inuit Tapiriit Kanatami

of the trans-Canadian highway or the trans-national railway connected Western and Eastern Canada.” Elaborating on this point, it emphasizes that:

Surging international activity and interest in the Arctic, combined with unacceptable social and economic inequities such as hunger, crowded housing and violence must be met with long-term strategic investments – in physical infrastructure and the Inuit of the region. Investing in infrastructure in Inuit Nunangat achieves a variety of common goals: improving livelihood and economic capacity, health and wellness of Inuit, while creating secure infrastructure for economic development, defence, search and rescue, and emergency preparedness and response. This investment will be revenue neutral, if not saving the government as increased activities in the Arctic rely on dependable *dual purpose* infrastructure that serves the community and Canada (emphasis added).

The reference to “dual purpose” alludes to the benefits of coordinating defence and civilian investments to meet multiple needs.

ITK’s “priorities for action and investment” are predicated on the idea that “Canada’s policy with respect to Inuit should be driven, at the outset, by the existing strategies which Inuit have developed. To advance these strategies the federal government should work with Inuit to co-develop federal action plans.” The first priority is “infrastructure and economic self-reliance,” which is reproduced at length:

Overall objective: Eliminate the infrastructure deficit in Inuit Nunangat

The infrastructure gap between Inuit Nunangat and the rest of Canada is a notorious impediment to the prosperity of Inuit Nunangat residents and contributes to a tremendous lost opportunity cost for the national economy. The ANPF will seek to eliminate the infrastructure deficit in Inuit Nunangat by 2030 through investments in social infrastructure, marine and air infrastructure, and telecommunications.

The ANPF must emphasize the essential role of Inuit as central players in Canadian Arctic diplomacy and *support Inuit infrastructure to support timely and effective mobilization for Search and Rescue, Emergency Preparedness and Response and defense operations*. In doing so, it must also recognize the rights, interests, and decision-making role of Inuit. All governments must understand that Inuit use and occupy Inuit Nunangat – our homeland 12 months of the year, that Inuit are the stewards of the land, and given appropriate infrastructure, will continue as the first responders in Canada’s Arctic sovereignty and security. (emphasis added)

A specific section is dedicated to eliminating the marine and air infrastructure in Inuit Nunangat:

Inuit Nunangat includes 50 percent of Canada’s coastline and represents a geopolitically strategic region, including the Northwest Passage. Yet marine infrastructure throughout the region is impoverished or does not exist compared to other coastal regions of Canada, despite surging international interest and activity in the region that includes increased shipping traffic. These gaps extend to air transportation infrastructure and to training to effectively operate aviation and marine infrastructure. Most airport runways in Inuit Nunangat date from the 1950s and 1960s and are made of compacted gravel. This has a significant impact on emergency travel and the delivery and cost of goods and services not to mention the everyday air travel that so many other Canadians take for granted. In addition, the absence of marine infrastructure results in economic leakage, particularly in the renewable resource sector because fishing vessels operating in Inuit Nunangat must leave the region to offload and to refuel. Finally, the existing marine and air infrastructure gaps impede search and rescue operations, resulting in unacceptably long response times which endanger the health and safety of Inuit and others.

Accordingly, ITK places a strong emphasis on Inuit as “principal players” in Arctic security, and directly connects investments in transportation infrastructure to their ability to perform this role.

ANPF: Nunavut’s Vision

The Government of Nunavut’s chapter also highlights a deficit in transportation infrastructure:

None of Nunavut’s 25 communities are connected to one another or with communities in southern Canada by road or by rail. This means that all basic necessities must be either flown in, or shipped in during the one to four-months period when the ocean is free of ice and there is marine access to communities. Both options are expensive and contribute to the territory’s high cost of living. Most of Nunavut’s airports are also aging. Significant resources are required to provide much-needed updates and repairs that would improve overall safety.

The document also explains how insufficient marine infrastructure (particularly a lack of deep sea ports and small craft harbors) “shortens the period during which cargo ships can deliver to communities, increases the cost of goods and services, hampers search and rescue operations, limits ocean access for Nunavummiut participating in marine hunting and gathering activities, and inhibits economic opportunities that could arise from offshore fisheries and cruise-ship tourism.” Accordingly, it calls for “well-planned investment and collaboration by all partners” to address infrastructure gaps. Section three prioritizes the expansion and

improvement of land, marine, air, and community infrastructure in the territory, including roads, small craft harbors, ports, and airports.

1.1.3 Translating ANPF Objectives into Reality Through Co-Development

The ANPF concludes with a promise that the Government of Canada will have ten years to “translate its goals and objectives into reality,” and advises that federal-territorial-provincial and Indigenous partners will co-develop solutions and new governance mechanisms. As Minister of Crown-Indigenous Relations and Northern Affairs Carolyn Bennett noted after the ANPF’s release, “you begin with the policy and then you work toward implementation ... It’s a matter of us now, as we move through each budget cycle of each government, having a road map for closing these gaps.”²⁵ This represents a window of opportunity for DND/CAF and its federal, territorial, and Indigenous partners to align priorities with implementation plans as they are co-developed through this process.

At the 3rd annual ANPF Leadership Committee meeting in late September 2022, Bryan May, the Parliamentary Secretary to the Minister of National Defence, highlighted the Government of Canada’s commitments to modernize NORAD, conduct a defence policy update, and pursue a distinctions-based, nation-to-nation approach to Indigenous engagement. He reiterated how recently announced NORAD investments will enhance the Canadian Armed Forces’ capabilities to detect, deter and defeat aerospace threats in the Arctic and the North. He also emphasized how these investments will provide new opportunities to deepen National Defence’s northern, territorial, and Indigenous partnerships as the various parties seek to advance shared objectives.⁸

1.2 Inuit Nunangat Policy and the Inuit-Crown Partnership Committee (ICPC)

In February 2017, Prime Minister Justin Trudeau and the leaders of Inuit Tapiriit Kanatami (ITK) and the four Inuit Treaty Organisations signed the *Inuit Nunangat Declaration on Inuit-Crown Partnership* “to collaboratively identify and take action on shared priorities and monitor progress going forward.”⁹ This organization is discussed in more detail in the complementary report prepared by Dr. Andrew Bresnahan on Inuit-Crown Relations in Arctic and Northern Canada.

The Inuit-Crown Co-Development Principles¹⁰ provide guidance for collaborative work undertaken by Inuit and federal partners, including but not restricted to the work of the ICPC, as well as co-development undertaken pursuant to the Inuit Nunangat Policy. This includes the development of content for federal legislation, regulations, policies, programs, services, and initiatives, and monitoring and evaluation criteria. These principles are intended to be read with the guiding principles of the Inuit Nunangat Policy.

The Inuit Nunangat Policy applies to all federal departments and agencies, including those responsible for defence and national security, and is intended to guide them “in the design, development and delivery of all new or renewed federal policies, programs, services, and initiatives that apply in Inuit Nunangat and/or benefit Inuit, including programs of general application, and to support Inuit self-determination.” The policy seeks “to promote prosperity and support community and individual wellbeing throughout Inuit Nunangat with the goal of socio-economic and cultural equity between Inuit and other Canadians.” Section 1.10 stipulates that “nothing in this policy compromises or undermines Canada’s commitments and obligations ... to national security and defence interests.”¹¹

Inuit leaders have indicated that they would like to contribute, together with DND/CAF and other government departments and agencies, to security and sovereignty in Canada’s Arctic through self-determined policies, active participation at various fora, and direct relationships with DND/CAF and other departments in the security and intelligence community. Accordingly, since fall 2021, DND/CAF has

developed relationships at the working, executive and ministerial level with ITK, and the Canadian Security and Intelligence Service (CSIS) has also begun reaching out with the goal of developing strong relationships with the four land claim regions, ITK, and Inuit Circumpolar Council Canada (ICC-C). Accordingly, the ICPC leaders have established a priority area on Sovereignty, Defence, and Security (SDS). Its purpose is to:

- formalize a forum to identify Inuit priority issues;
- discuss potential benefits to Inuit arising from defence investments;
- provide guidance and ensure coordination of activities in support of self-determination and reconciliation in relation to the programs and activities of DND/CAF and other government departments involved in issues of sovereignty, defence, and security in Inuit regions.

Although it is beyond the scope of this report (or the knowledge of its authors) to comment in detail on activities to date under the auspices of the SDS priority area, we offer a few observations that may help to frame and inform expectations about the working group.

In April 2022, Inuit leaders endorsed the new SDS priority area at the ICPC Leaders Meeting in Ottawa. The opening statement by Prime Minister Trudeau reinforced that Indigenous people – the stewards of the land – exercise sovereignty in the Arctic, and that investments in and protection of the Arctic must be done hand-in-hand with Inuit across Inuit Nunangat. Attending virtually, Minister Anand’s message acknowledged the historical suffering and pain caused to communities when the Government of Canada forcibly relocated Inuit families¹² and built defence installations without consultation during the Cold War, as well as environmental damage associated with military activities. She reassured Inuit leaders that these painful memories were not forgotten, and that DND/CAF is working with Indigenous governments, organizations, and communities “in a positive, collaborative and respectful fashion in the spirit of reconciliation.” She thanked Inuit partners who had already engaged and contributed to NORAD modernization efforts, adding that the CAF required significant investments in new capabilities to monitor and respond to emergent challenges in Canada’s northern and maritime approaches. She noted her intent to seek a mandate to upgrade existing NORAD infrastructure and to ensure that Inuit priorities and perspectives are shared when the Government of Canada frames and acts upon its sovereignty and security priorities.¹³

At its June 2022 meeting in Inuvik, ICPC initiated a work plan for the SDS priority area.¹⁴ Appearing virtually, Minister Anand stressed the strong interest on all sides to collaborate on achievable objectives. She highlighted that the work plan includes:

- knowledge and sharing sessions,
- a joint position paper,
- the development of an initial plan to seek opportunities to align DND infrastructure requirements with Inuit infrastructure needs and assessments, and
- the creation of a working group with other federal departments to improve cooperation on other relevant issues.

The minister’s overview on NORAD modernization and continental defence noted infrastructure upgrades at the Inuvik, Iqaluit, and Goose Bay Forward Operating Locations (although the Nunatsiavut representative pointed out that the latter falls outside of Inuit Nunangat). She also explained that need to promote economic benefits and shared priorities for Northerners, including diversifying the federal supply chain, and that the Government of Canada had committed to establish a multi-million dollar fund to support ongoing Indigenous engagement.¹⁵

During the April and June ICPC Leaders' Meeting discussions about defence and security, various Inuit leaders expressed concerns about:

- DND procurement issues;
- the retention of present capacity and assurances to Inuit workers under the new Nasittuq NWT O&M contract;
- the need for the federally-funded expansion of the airstrip in Inuvik;
- what economic opportunities will come to specific Inuit regions;
- economic opportunities and multi-purpose infrastructure, particularly that Inuit be involved in building the infrastructure, are employed after it is built, and the need for a parallel process of capacity building so that Inuit can take advantage of opportunities;
- the consistency of the military presence and opportunities for it to provide different services and to support infrastructure investments;
- support to the Canadian Rangers;
- support for Search and Rescue (SAR) and Hunters and Trappers;
- the infrequency of Cabinet minister visits to the more remote areas in Inuit Nunangat;
- cultural sensitivity and safety issues that would have to be considered, prior to people coming up from the South to work on infrastructure projects, to avoid negative social impacts¹⁶

The ICPC discussions have also begun to clarify that not all issues that Inuit may associate with sovereignty and security fall within the mandates of DND/CAF. For example, ITK has identified Inuit mobility rights across international borders as a priority, but this falls within the competencies of the Canada Border Services Agency (CBSA), Crown Indigenous Relations and Northern Affairs (CIRNAC), Global Affairs Canada (GAC), and Immigration, Refugees and Citizenship Canada (IRCC). Nevertheless, the SDS Working Group offers a forum to flag these issues and forward them to the appropriate federal departments and agencies for consideration pursuant to the Inuit Nunangat Policy.

1.3 Inuit Perspectives on Defence and Security

First and foremost, Arctic sovereignty for Canada is directly related to Inuit land use and occupancy.

Natan Obed, President of ITK, March 2022¹⁷

Territorial figures have agreed to be a unified voice about [Russia's invasion of Ukraine] and how investments in Arctic security and sovereignty should truly support healthy, thriving and resilient communities throughout the North. The best way [for Canada] to promote and enhance its security and safety is to invest in its people who live here.

Nunavut Premier P.J. Akeagok, Iqaluit, 3 October 2022¹⁸

Inuit offer strong views on sovereignty and security through the lens of peoples with rights as members of Arctic states and Indigenous peoples.¹⁹ Academic studies suggest that Inuit understandings of security in Inuit Nunangat identify referent objects of security (what is being secured) within three categories: the natural environment; Indigenous identity and culture; and the maintenance of Inuit political autonomy in the context of the Canadian settler state.²⁰ The ITK volume *Nilliajut: Inuit Perspectives on Sovereignty, Patriotism and Security*, released in 2013, offers important insights into how Inuit conceptualize security and what aspects of it should be prioritized. For example, former ITK president Rosemarie Kuptana adopts an expansive definition of security. "Security is more than about arms build-up," she wrote. "Security is

about ensuring that Inuit are equal members of the human family and have the economic base to ensure a reasonable lifestyle as defined by contemporary Canada.... Security to Inuit was, and is, having food, clothing and shelter.”²¹ Terry Audla, the ITK president at that time, suggested that the relevant question should be: “What dangers do Inuit face in Inuit Nunangat (our traditional Arctic homeland in Canada)?”²²

Mary Simon, former president of ICC and ITK (and now the Governor General of Canada), explained that Inuit “subscribe to the concept that security should be understood in a broad sense. Just as health is more than the absence of disease, so, too, security is more than the absence of military conflict.”²³ Discourse analysis of statements about security by Inuit leaders and organizations over the past two decades affirm this viewpoint. Political scientist Wilfrid Greaves observes how:

Overall, the evidence indicates that Inuit in Canada understand security as a holistic concept that links protecting the Arctic environment from pollution and radical climate change, preserving their identity by maintaining cultural practices, and asserting their political autonomy within the Canadian settler state. These referent objects are not viewed separately, but as inter-related and mutually reinforcing, consistent with other broad conceptions of (in)security that emphasize chronic and abrupt threats to human communities.²⁴

This has shaped the academic discourse, even if Inuit representatives have not been able to successfully “securitize” threats to their continued survival and future well-being as security issues within Canadian public discourse.²⁵ Nicolien van Luijk and her colleagues observe that academic discussions now tend to “decouple” sovereignty and security, which “enables the integration of other dimensions to security such as human, environmental, and economic security concerns,” as well as “the re-introduction of the connection between Arctic security and sovereignty, but with a focus on Indigenous sovereignty, rather than that of the state.”²⁶

Although dated and obviously missing the context of Russia’s War in Ukraine, the Arctic Security Public Opinion Surveys conducted by the Munk-Gordon Arctic security project in 2010 and 2015 provide insights into broad Northern understandings of security. The polling data indicated that more than a third of Northern Canadians (the poll did not distinguish between Inuit and non-Inuit respondents) identified the environment, global warming, and climate change as the most important and significant threats facing the region, followed by housing and community infrastructure, and the economy, jobs and employment.²⁷ More than 91% of respondents considered environmental security to be important, with 90% also identifying social security (health care, education, housing, and community infrastructure), 78% economic security, and 66% cultural and language security. In 2011, Nunavummiut expressed the highest levels of support for economic security (84%) and cultural and language security (74%).²⁸ While national defence and security was not a leading priority, most Northerners deemed it important enough to support expanding the Arctic Council’s mandate to include military security²⁹ (which, ironically, almost certainly would have led to a disbanding of the Council in the past year).

When it comes to instrumentalizing ideas into policy action with the Government of Canada, however, adopting a very broad definition of security and setting up a dichotomy between Canadian and Inuit sovereignty may prove counterproductive. Most Inuit express a strong connection to Canada and do not deny the legitimacy of the federal government, particularly in the national defence and security sphere. Instead, most Inuit leaders emphasize how Inuit activities and their presence as Canadians offer the strongest basis for and expression of Canadian sovereignty. A “use it or lose it” mindset that does not focus, first and foremost, on Inuit rights, occupancy, and use is highly problematic. Nevertheless, seeking to “securitize” the Arctic agenda in ways that do not acknowledge or respect the mandates and authorities of

individual federal departments and agencies (including DND/CAF) may inhibit or preclude access to tangible resources that can advance Inuit priority areas in an efficient and effective manner.

Accordingly, this report adopts a narrower view that seeks to identify alignments between Inuit priorities and defence and security mandates. In this sense, it largely adheres a more traditional definition of security as “freedom from fear” rather than a more expansive “freedom from want.”³⁰ For more holistic perspectives on other sectors or aspects of security, readers are encouraged to consult existing ITK reports on: climate change³¹; marine policy priorities and recommendations³²; water security³³; policing³⁴; missing and murdered Inuit women, girls and 2SLGBTQQIA+ people³⁵; food security³⁶; COVID-19³⁷; suicide prevention;³⁸ and broadband connectivity.³⁹

While Inuit leaders have typically adopted stances against “militarization” of the Arctic,⁴⁰ they have also applauded the roles of the Canadian Rangers and economic and capacity-building benefits associated with some defence projects in Inuit Nunangat.⁴¹ For example, Mary Simon noted as president of ITK in October 2010:

Remembering that the respectful sharing of resources, culture, and life itself with others is a fundamental principle of being Inuit, and is the fabric that holds us together as one people across four countries, it is incumbent upon all Arctic states to work cooperatively with each other, and with Inuit, to settle disputes that may arise with regard to territorial claims and/or natural resources. While we recognise the right of every country to defend its borders we must remain mindful that the military solution... is both unproductive and could potentially be a destructive solution as far as Inuit are concerned. Inuit are not interested to returning to the position of being *the people in the middle of another cold war*.⁴²

The core overarching message is encapsulated in the phrase “sovereignty begins at home,”⁴³ and the need for assurance that Inuit are and will be empowered (including being provided with sufficient resources) to protect their lands and their rights in the spirit of self-determination. Activities pursuant to the 2017 Inuit Nunangat Declaration on Inuit-Crown Partnership recognize Indigenous rights and co-decision-making authority over Arctic lands and waters as essential preconditions to reconciliation, and prioritize the “full and fair implementation of the obligations and objectives of Inuit land claims agreements as foundational for creating prosperity among Inuit which benefits all Canadians.”⁴⁴

Most of the recent ITK statements on Arctic security issues have tended to adopt a maritime focus and tend to advocate for specific investments on the security and safety side of the operational mission spectrum. For example, ITK’s Strategy for 2020-2023 notes that:

Climate change and sea ice melt have led to growing international interest and activity in our homeland. Shipping traffic is increasing as seasonal sea ice cover deteriorates and becomes increasingly mobile. Non-Arctic nation states are actively advancing their own Arctic policies and priorities, potentially to the detriment of Inuit rights and self-determination. These changes are creating risks and opportunities associated with shipping and tourism, security and defense, and resource extraction. Canada’s sovereignty over the Northwest Passage is openly contested by countries that view it as an international strait and transit passage, and who wish to advance their economic and military interests in the region. At the same time, limited coastal management capacity and profound marine infrastructure gaps throughout the region are barriers to effective coastal and marine management. Inuit and Canada must be at the forefront of strategically managing such changes.

As actions, ITK seeks to: “advance Inuit-specific policy guidance for coastal management and marine infrastructure development,” including marine shipping, safety, and search and rescue; “facilitate strategic partnerships between Inuit and federal departments and agencies, and other stakeholders involved in coastal management”; advance the implementation of the Department of Fisheries and Oceans and Canadian Coast Guard’s Arctic Region; and “advocate for the adoption of Inuit-specific policy recommendations to address Inuit Nunangat’s chronically under-developed telecommunications infrastructure” given its importance to bolstering marine safety, search and rescue, and environmental response operations.⁴⁵ While some of these priorities have a national defence and security nexus, this is not spelled out. Furthermore, it is telling that the *National Inuit Climate Change Strategy* highlights food and energy security but makes no direct mention of the national defence or “hard” security implications of climate change in Inuit Nunangat.⁴⁶

1.3.1 The Inuit Circumpolar Council (ICC) and Security

Global policies and actions on climate change, biodiversity, marine conservation, shipping and defence implicate community well-being. ... The actions of Russia in the Ukraine [have affected] Inuit: from our governance at the Arctic Council, to heightened Arctic security concerns, to an absence of communications with our Inuit family in Chukotka.

Lisa Koperqualuk, ICC Canada president, 13 June 2023⁴⁷

Inuit also assert their rights as a transnational people, with Inuit Circumpolar Council (ICC) Canada (ICC-C) working with its counterpart organizations in Alaska, Greenland, and Chukotka to strengthen unity amongst Inuit of the circumpolar region by promoting Inuit rights and interests on an international level.

The longstanding position of ICC, encapsulated in various general assembly resolutions since 1977, insists that the Arctic (and, by definition, Inuit Nunaat) must be used only for peaceful purposes. The declaration of the 14th General Assembly held in July 2022 reaffirmed ICC Resolution 77-11, “recognizing that it is in the interest of all Circumpolar peoples that the Arctic shall continue forever to be used exclusively for peaceful and environmentally safe purposes, and shall not become the scene or object of human conflict or discord.”⁴⁸ This earlier resolution “concerning peaceful and safe uses of the Arctic Circumpolar Zone,” adopted at the first meeting in 1977, states:

RECOGNIZING that it is in the interest of all circumpolar people that the Arctic shall continue forever to be used exclusively for peaceful and environmentally safe purposes and shall not become the scene or object of human conflict or discord; and

ACKNOWLEDGING the emphatic contributions to scientific knowledge resulting from a cooperative spirit in scientific investigations of the Arctic:

NOW, THEREFORE, BE IT RESOLVED:

- (a) that the Arctic shall be used for peaceful and environmentally safe purposes only, and that there shall be prohibited any measure of a military nature such as the establishment of military bases and fortifications, the carrying out of military maneuvers, and the testing of any type of weapon, and/or the disposition of any type of chemical, biological or nuclear waste, and/or other waste. Further, present wastes be removed from the Arctic;
- (b) that a moratorium be called on emplacement of nuclear weapons; and
- (c) that all steps be taken to promote the objectives in the above mentioned.⁴⁹

The ICC “emphatically restate[d] its nuclear position” in 1983, resolving:

1. that the arctic and sub-arctic be used for purposes that are peaceful and environmentally safe;
2. that there shall be no nuclear testing or nuclear devices in the arctic or sub-arctic;
3. that there shall be no nuclear dump-sites in the arctic or subarctic;
4. that exploration and exploitation of uranium, thorium, lithium or other materials related to the nuclear industry in our homeland be prohibited.

FURTHERMORE BE IT RESOLVED that the Canadian government be notified of our opposition to the testing of the Cruise missile in our Canadian homeland and that they be requested to refrain from such tests;

FURTHERMORE BE IT RESOLVED that the United States government be notified of our opposition to the placement of the MX missile in our Alaskan homeland and that they be requested to cease with any such plans;

FURTHERMORE BE IT RESOLVED that the Inuit Circumpolar Conference study and research current international treaties to determine whether or not they comply with the Inuit Circumpolar Conference Arctic Policy;

FURTHERMORE BE IT RESOLVED that the Executive Council of the Inuit Circumpolar Conference lobby the United Nations and various international organizations to encourage members of the United Nations to adopt a policy for a nuclear free zone in the Arctic.⁵⁰

Towards these ends, the ICC’s 2018 Utqiagvik Declaration mandated the organization “to initiate diplomatic talks for the purpose of laying the groundwork for negotiations to declare the Arctic as a Peaceful Zone.”⁵¹ Russia’s War in Ukraine and the spillover effects on Arctic relationships makes this difficult to pursue under present conditions.

The ICC’s position is longstanding and grounded in Inuit values and evolving historical contexts. In a November 2020 panel discussion on “Arctic Voices and Security,” then ICC President Dalee Sambo Dorough provided a robust overview of her organization’s position on regional peace and security that is worth reproducing at length to understand the background and logic behind ICC’s position:⁵²

I think that it is important to acknowledge that the Inuit Circumpolar Council (ICC) was actually organized in the context of the Cold War. Eben Hopson, who is recognized as the founder of the Inuit Circumpolar Council, brought together Inuit from across the circumpolar Arctic to unite our peoples in June of 1977 in Utqiagvik, or formerly known as Barrow, Alaska. And at that conference, of course, he extended an invitation to our blood relations in Chukotka, the easternmost autonomous okrug in Russia. But of course, because of the political climate of the day and the fact that we were in the midst of the Cold War, the then Soviet Union did not allow the Siberian Yupik people, again, our relations on the Russian side, to join us at the organizing conference of the ICC.

At that organizing conference, Eben Hopson stated in his welcoming remarks that we Iñupiat live under four of the five flags of the Arctic Coast and “one of those four flags is badly missed here today.” Of course, he was speaking about the Siberian Yupik people and the then Soviet Union, “but it is generally agreed that we enjoy certain Aboriginal legal rights as Indigenous peoples of the Arctic, and it is important that our governments agree about the status of these rights if they are

to be uniformly respected.” These were important words in terms of the welcoming address that Hopson delivered that day.

At the time, we were not only concerned about our own environmental security in the face of offshore oil and gas development and a host of other issues that were facing the Arctic; we were also cognisant of the military activity taking place around us. So, at the 1977 gathering, the ICC adopted resolution number 11 concerning peaceful and safe uses of the Arctic Circumpolar Zone. I think that, in light of the present conditions, this is still an important resolution. Of course, we have built on that, but the main point is that this resolution called for the peaceful and safe use of our homelands, our traditional territory. If you look at a map offering a circumpolar view of the world, our traditional territory—especially the coastal communities and coastal villages—we occupy just over 40% of the region. The military bases, fortifications, Distant Early Warning (DEW) Line sites, and a host of other hardware, were present in our homelands at that time.

In 1983, because of the continuing issues faced by our communities in the context of security—and, in this case, certainly hard security—we became a little bit more specific about the need for the Arctic to be regarded as a peaceful zone and also the need to protect the Arctic environment. Of course, the emphasis was nuclear testing and nuclear devices, but we got much more specific because of the exercises and activities that were taking place in our homelands. For example, cruise missile testing and the low-level flying exercises were taking place between Canada and the United States, MX missiles were placed in Alaska, and there was continuing interest in and desire for rare earth elements like uranium, thorium, lithium, and other materials. It was also interesting to note that, in our efforts to outreach to our Siberian Yupik relations, dialogue began to take place between our leadership and others across the Arctic. It is my understanding that some of our leadership of the day had an opportunity to outreach specifically to Mikhail Gorbachev. Later in 1987, he made an important speech in Murmansk. Many of you are familiar with his Murmansk speech, but the reference that he made in that speech is quite significant, not only to Inuit, but I think to other Arctic Indigenous Peoples as well as to all peoples globally.

Gorbachev’s interest was to highlight the need for Arctic strategy, as well as indicating that the Arctic is an integral part of the globe and that it ought to become a zone of peace.

In the background, and a continuing effort of the Inuit Circumpolar Council, were significant developments in the context of human rights standard-setting. From 1982 until its final adoption by the UN General Assembly in 2007, a twenty-five-year span of history, Indigenous Peoples, including Inuit, were influencing the content of the UN Declaration on the Rights of Indigenous Peoples (UNDRIP).

The *UN Declaration* is recognized as a universal consensus. It is a comprehensive document that touches upon every element of the day-to-day lives of Inuit: the right of self-determination; the affirmation of our rights to lands, territories and resources; the right to free prior and informed consent; the right to participate in decision making; and, of course, protection from destruction of our culture and the right to security, including food security, cultural security, and environmental security.

I also want to mention the impacts of climate change and the impacts of Arctic shipping, which were raised in the introduction to this session. Not only are our communities being impacted by security, defence and militarization in the Arctic, but the compounding nature of impacts from climate change does not make these matters any easier for us....

Of course, climate change has triggered the interest of the global community. In fact, now the Arctic is central in terms of the geopolitical issues that the whole of the world is facing. And the potential for the deleterious impacts upon our communities is intensified because of these changes. Not only are we having to respond to the rapid and dramatic impacts of climate change, but we are now thrown into a political arena that has tendrils across the globe and not solely within our homelands.

So in 2018 at the ICC General Assembly, where I was fortunate to be elected as the Chair of the Inuit Circumpolar Council, within the *Utqiaġvik Declaration*, under the theme, “Inuit— The Arctic, We Want,” one of the references is to lay the diplomatic foundation or the groundwork for negotiating a formal declaration of the Arctic as a peaceful zone, and so this is an echo of our 1977 objective as far as the Arctic being declared a peaceful zone. We have maintained a consistent position in this regard, and I think that there are numerous opportunities for us to raise this issue within the context of the United Nations, but also at events like this and within the Arctic Council.

So, to sum up, and if we recall the important nature of human rights as being interrelated, interdependent and indivisible, what’s at stake is our cultural security, our environmental security, our economic security, whether it is our traditional economy of hunting, harvesting and fishing, or if it’s in relation to newer forms of economic development and activity, there are a host of different impacts. Our food security and ultimately our overall cultural security as distinct Indigenous Peoples across our homelands – Inuit Nunaat are at risk.

There is no indication that the ICC’s strong statements about peace and the desire for a nuclear-weapons-free-zone in the Arctic precludes support for a modest defence presence in the region, in forms like the Canadian Rangers (see section 4), that draws upon Indigenous knowledge, supports Indigenous communities, and does not threaten to escalate regional or global threat levels. Canadian Inuit leaders’ expressed interests in defence or dual-use infrastructure investments, particularly those that can help to address persistent transportation, energy, and telecommunication infrastructure gaps in Inuit Nunangat, also do not inherently contradict a message of regional peace and stability. Strategies or activities that are overly aggressive or promote rampant militarization of the region would do so.

ICC messaging over the past year acknowledges the challenges for circumpolar and broader international cooperation wrought by Russia’s brutal further invasion of Ukraine in February 2022 and its ongoing war against that sovereign state. The 2022 ICC Declaration recognizes “the increasing competition over the control of the Arctic, and the interrelated issues of climate change, marine vessel traffic, industrialization, militarization, and other activities that continue to threaten the well-being of our environmental, cultural, food, and socio-economic security.”⁵³ As ICC President Sara Olsvig and others have noted, Russian aggression has disrupted the idea of “Arctic exceptionalism” – that the Circumpolar North is particularly conducive to international cooperation and can be managed apart from global geopolitical dynamics.⁵⁴ In her academic work, Olsvig also offers important insights into the internal and external constraints on Greenland’s “action space” imposed by Nuuk’s relationships with Denmark and the US, and how the Greenlandic Government is both testing and learning about the limits of its decision-making powers in an era of rising great power competition.⁵⁵ This line of thinking also applies in the Canadian context, particularly over the past year.

In a speech in Ottawa on 13 June 2023, ICC Canada president Lisa Koperqualuk highlighted that “ICC’s longstanding position for all circumpolar peoples — Indigenous and others — is to ensure the Arctic continues to be used exclusively for peaceful and environmentally safe purposes, and must not become the object of human conflict.” She noted that the like-minded Arctic states’ pause in involvement in Arctic Council activities involving Russia “has raised many questions about the future of peaceful co-operation in

the Arctic. It means no formal work or meetings are being conducted, no projects that should have Russian involvement are presented. ... This is tragic: Russia controls a large part of the Arctic coastline, and continued communication remains an important peaceful means for Russia's return-to-table one day, if and when the conditions are right."⁵⁶

This messaging aligns with that of the Government of Canada, which has committed alongside the other like-minded Arctic member states to consider "the necessary modalities that can allow us to continue the Council's important work." Nevertheless, Russia's ongoing "flagrant violation" in Ukraine of "the core principles of sovereignty and territorial integrity, based on international law, [which] have long underpinned the work of the Arctic Council,"⁵⁷ make any resumption of Arctic Council activities involving Russia difficult, as the regional forum must not be used as a way to legitimize Russia's illegal behaviour elsewhere in the world or indicate that there can be a "return to normal" under current circumstances.

When asked what the right conditions for Russia's return to the Arctic Council would be, Koperqualuk offered "no war" and "human rights are respected."⁵⁸ She explained how ICC Canada strives to maintain informal relationships with Inuit living in the Chukotka region in Russia, who have less presence internationally owing to Russia's war in Ukraine. "We are concerned about what's happening to the Russian Inuit community," she noted. "Even though national allegiances can be different, we will always treat them as family."⁵⁹ Thus, although ICC agrees to the pause in participation in Arctic Council activities in which Russia is involved," that does not prevent or preclude the ICC "from continuing a relationship with ICC Chukotka."⁶⁰

1.3.2 Inuit Development Corporations and Arctic Defence and Security

On 20 June 2022, Minister Anand announced a six-year, \$4.9 billion plan to upgrade Canada's continental defence systems.⁶¹ Her comments also reinforced her "resolute" commitment to work with Indigenous peoples and cooperate "towards meaningful reconciliation" through smart investments that benefit both the Defence Team and Indigenous rightsholders. In the case of continental defence, this includes new infrastructure and economic opportunities that benefit Northern and Indigenous communities. This builds upon Anand's previous announcement, as Minister of Public Services and Procurement in August 2021,⁶² of new measures to increase federal procurement opportunities for Indigenous businesses pursuant to the government's commitment to providing increased economic opportunities to First Nations, Inuit and Métis.

An indication of what this looks like came in January 2022 when DND announced that Nasittuq,⁶³ an Inuit company, had won the seven-year, \$592 million maintenance contract to operate and maintain the current North Warning System.⁶⁴ In the Nunavut legislature on 24 February 2023, Premier P.J. Akeagok "applaud[ed] the incredible work that Nasittuq does," citing the contract as "a true testament of what economic reconciliation could look like." He also promised to "continue to push our federal counterparts to ensure that northerners play a significant role ... through employment opportunities" and to "continue to lobby hard to ensure that any modernization of NORAD includes northerners to be at the decision-making table."⁶⁵

A 12 June 2023 opinion editorial in the *Globe and Mail* by Harry Flaherty, the chair of the Inuit Development Corporation Association, speaks to the high expectations around NORAD modernization as a way to advance socio-economic development in Inuit Nunangat. He suggests that Northern investments can help Canada meet its NATO commitment to spend at least 2% of GDP on defence, citing Minister Anand's announcement of \$38.6-billion in new NORAD spending. Projects with substantial northern footprints include a polar over-the-horizon radar system to be located in the high Arctic (after one is built

in Ontario), as well as “substantial upgrades to four NORAD operating locations in Inuvik, N.W.T., Goose Bay, N.L., Yellowknife and Iqaluit.” Flaherty also suggests that:

As needed as they are, new northern NORAD projects only scratch the surface of the defence requirements for our country and our continent. It is in the North where Canada could make investments that push us toward fulfilling our NATO commitments, while simultaneously supporting the social and economic development of Inuit Nunangat. Infrastructure and equipment that simultaneously supports both military and civilian purposes could transform the Arctic. Deep-water ports, carbon-free energy sources, all-weather roads connecting southern Canada to the Northwest Passage, upgraded airports, reliable broadband internet, and autonomous underwater vehicles tasked with monitoring and mapping the seabed all have a role to play in defending the North while providing greater security to those who live, work and travel there. Such investment could also greatly help the economic potential of the North be realized. In particular, critical minerals that currently lie stranded in landlocked deposits could become extractable under a nation-building Arctic infrastructure program underpinned by defence-focused investments. Efforts to this effect would help Canada and its allies become less reliant on supply chains currently dominated by adversaries (and friends of uncertain loyalty).

In Flaherty’s vision, “Inuit-owned businesses and Inuit workers would be at the heart of a defence-focused infrastructure program. Inuit know the Arctic like no others. We are willing and ready to step up and contribute our traditional knowledge of Inuit Nunangat to the defence of our lands and communities.”⁶⁶

This messaging indicates strong support for defence investments as long as they involve Inuit businesses and advance socio-economic agendas. The Inuit Development Corporation Association (IDCA) explains that the Inuit Land Claim Agreements recognize business development as a way to foster economic well-being and greater self-reliance, with provisions conferring advantages to Inuit-Owned businesses (a status regulated by the respective Inuit Land Claims Authority) that compete for federal government contracts within a land claim settlement area. Inuit-Owned status can result in significant benefits for contracting parties, including participation in “set-aside” competitions and earning “points” for Indigenous Benefits commitments. The regional Inuit authorities of Inuit Nunangat (except Nunavik) have established 100% Inuit-owned Regional Development Corporations (RDCs) that are privately-owned by the Inuit organizations in trust of its Inuit membership to pursue business development opportunities. Their competencies relevant to defence projects include: construction; site services/facilities management; camp services and accommodation; expediting and logistics; transportation; technical services/engineering; and energy. The IDCA sees Inuit commercial participation in NORAD modernization as “a once-in-a-generation opportunity for Canada to promote economic reconciliation with Inuit through equity partnerships, employment, training, and business development,” as well as an important way to promote dual-use’ infrastructure that serves both national defence and civilian purposes.

DND is a signatory to the Inuit Development Corporation-led Amaruq initiative, funded by Indigenous Services Canada’s Strategic Partnerships Initiative,⁶⁷ that seeks to:

- identify defence sector opportunities suitable to Inuit commercial involvement;
- build relationships with defence sector actors and grow business-capacity that helps Inuit participate in contracts related to NORAD modernization and NWS renewal (as well as other possible procurements); and
- increase employment, training, and other economic development opportunities for Inuit communities through involvement in defence contracts

2. Canadian Defence Policy and Arctic Security

Climate change, combined with advancements in technology, is leading to an increasingly accessible Arctic. A decade ago, few states or firms had the ability to operate in the Arctic. Today, state and commercial actors from around the world seek to share in the longer term benefits of an accessible Arctic. Over time, this interest is expected to generate a corresponding rise in commercial interest, research and tourism in and around Canada's northern territory. This rise in activity will also bring increased safety and security demands related to search and rescue and natural or man-made disasters to which Canada must be ready to respond.

Department of National Defence, *Strong, Secure, Engaged* (2017), p.51.

Arctic threat narratives abound in the media. Climate change is reducing the sea ice and disrupting terrestrial ecosystems, simultaneously offering the prospect of more maritime access and threatening to disrupt existing transportation networks and infrastructure. Advances in technology – from communications infrastructure to icebreakers to advanced strategic delivery systems (such as hypersonic cruise missiles and glide vehicles) – also enable access to or through the Arctic for a wider range of state and non-state actors. Coupled with growing international interest in the economic and strategic potential of Canadian Arctic, these dynamics increasingly blur the lines between defence and security, trade, investment, development, economic, and foreign policy. They also justify the need for expanded surveillance in the region, calls for a larger Canadian military presence, and a whole-of-society approach to safety, security, and defence with clear communication, engagement, and partnerships with the local stakeholders and Indigenous rightsholders.

Being “strong at home” requires domain and situational awareness through increased surveillance and monitoring, better information sharing with partners and allies, and more integrated land, air, and maritime capabilities to project force in the region. This logic also explains the current focus on enhancing surveillance and control of aerospace and maritime approaches to North America, as well as Canadian sovereignty territory, waters, and airspace in its Arctic, through an integrated, layered system-of-systems. In this model, several elements – including Arctic and Offshore Patrol Vessels, the Nanisivik refuelling facility, the Canadian Coast Guard, the Canadian Rangers, and fixed- and rotary-wing overflights – contribute to all-domain situational awareness in the Arctic. Flowing from these capabilities, the CAF also plays an important role in reinforcing public confidence that the Government of Canada is trained, equipped, and ready to serve the interests and needs of Canadians (including Inuit) in the region.⁶⁸

This section looks at the intersection between Arctic defence requirements, and particularly the commitment to expand the military's Arctic capabilities and footprint, and the broader Government of Canada's priorities for infrastructure and related investments. While reports frequently make general statements about the “sovereignty” or “security” benefits of transportation, telecommunications, and energy infrastructure, these connections are seldom drawn explicitly.

2.1 Canada's Arctic Military Footprint

Canada has a modest military footprint in the Arctic. There are approximately 300 Canadian Armed Forces personnel stationed in Yellowknife with Joint Task Force North (JTFN) and other units. There are approximately 1400 Canadian Rangers serving in more than 60 communities across the territories with 1st Canadian Ranger Patrol Group (1CRPG, which reports to 3rd Canadian Division), and there is a small Primary Reserve unit in Yellowknife. The Canadian Armed Forces Arctic Training Centre established in Resolute Bay (which is used to train soldiers basic survival techniques and to serve as a hub for High Arctic



exercises) and the deep-water Arctic docking and refueling facility in Nanisivik have no year-round military personnel. The longstanding Canadian Forces Station at Alert, on the northern tip of Ellesmere Island, and the forty-one North Warning System (NWS) radar stations in the three territories, also represent part of the Arctic footprint in Inuit Nunangat. There are also NORAD forward operating locations (FOLs) in Yellowknife, Inuvik, Rankin Inlet, and Iqaluit. HMCS *Harry DeWolf* has an official affiliation with the Qikiqtani region of Nunavut.⁶⁹

Nunavik falls within the area of responsibility (AOR) of Joint Task Force (East) (FOIE in French), headquartered in Montreal. Approximately three hundred active Canadian Rangers serving with 2nd Canadian Ranger Patrol Group (2CRPG, which reports to 2nd Canadian Division) in fourteen patrols across Nunavik represent the most persistent CAF presence in the region. The former commanding officer of 2CRPG notes that “the Canadian Rangers provide a range of specialized services in their geographic area of operation, including responding quickly to emergencies or ground search and rescue operations.”⁷⁰

Nunatsiavut falls within the AOR of Joint Task Force (Atlantic) headquartered in Halifax. There are sixty-eight Canadian Rangers serving with 5th Canadian Ranger Patrol Group (5CRPG, which reports to 5th Canadian Division) in five patrols in Nunatsiavut.⁷¹ There are five North Warning System (NWS) in Nunatsiavut, with another just south in Cartwright.⁷² Although outside of the boundaries of Nunatsiavut, 5 Wing (under the operational command of 1 Canadian Air Division) is located at Canadian Forces Base (CFB) Goose Bay conducts and supports various operations, including both joint and combined training, from a strategic location that supports NORAD operations for the projection of air power on the north and northeast coasts of Canada.⁷³ HMCS *Margaret Brooke* has an official affiliation with the Inuit community of Hopedale.⁷⁴

In *Strong, Secured, Engaged*, National Defence committed to acquiring next generation surveillance aircraft, remotely piloted systems, and all-terrain vehicles, snowmobiles, and larger tracked vehicles for use in the Arctic. National Defence has also announced the following steps to further improve the CAF's presence and ability to operate in the Arctic:

- Construction and deployment of six Arctic Offshore Patrol Ships (AOPS), all of which will be affiliated with regions of the Inuit Nunangat.
- Modernizing CAF capabilities in the Arctic, including through the acquisition for six new Arctic and Offshore Patrol Ships and supporting the modernization of the Inuvik Airport runway.
- Launching the RADARSAT Constellation Mission in 2019, which enhance the CAF's ability to monitor Canada's maritime and northern approaches.
- Investing in a range of space capabilities, such as satellite communications that achieve global coverage, including in the Arctic.
- Launching the All Domain Situational Awareness Science and Technology Program in 2015 and a subsequent science and technology program to help find innovative solutions to address surveillance challenges in the North.

Cumulatively, these military modernization programs combine an element of strategic deterrence (effective on a global scale) and security capabilities designed to protect Arctic resources, disrupt illegal activity, and respond to humanitarian and natural emergencies (on the national and sub-national scale). Canada plays a supporting role – within the contexts of its alliances with the U.S. and NATO more generally – in maintaining global strategic ability by investing in its detection and deterrence capabilities that are based *in or potentially will travel through* the North American Arctic. But these are less about defence *of* the Arctic than about contributions to broader continental defence based *in* the Arctic.

Various DND/CAF documents emphasize that, while there “there is currently no imminent military threat to Canada's security in the North,” growing interest in the economic and strategic potential of the Arctic necessitates increased government surveillance and presence throughout Canadian Arctic. Furthermore, a recent regional operations plan notes that “the security environment will continue to evolve as a result of both climate change and the actions of other international players including Arctic and non-Arctic states.” This acknowledges that new risks and threats may emerge, which means that the CAF must have the capability to project and sustain forces to deal with situations that fall across the entire spectrum of defence,⁷⁵ security,⁷⁶ and safety⁷⁷ operations. While noting enduring responsibilities to defend Canada and North America and deter would-be aggressors, as well as the need to monitor military activities across the Circumpolar Arctic, strategic documents emphasize that most defence and security risks and threats facing Canada's Arctic are unconventional, with the lead management responsibilities falling primarily to other government departments and agencies (i.e. law enforcement agencies for security and emergency measures organizations for safety). The 2020 Canadian Joint Operations Command regional Arctic operations plan also emphasizes that:

the preponderance of CAF activities must consider the safety and security threats that stakeholders living and working in the [Canadian North] face every day. These activities must drive the CAF to build and possess the right balance of dual-purpose infrastructure and defence presence needed in order to deter and defeat threats that may use the Northern approaches to threaten North America while also enabling the conduct of safety and security missions.

These missions also intersect with priorities identified by Inuit leaders. The vested interests of Inuit in Arctic sovereignty and security span the military, political, economic, societal, and environmental sectors of security. “The inextricable linkages between issues of sovereignty and sovereign rights in the Arctic and Inuit self-determination and other rights require states to accept the presence and role of Inuit as partners in

the conduct of international relations in the Arctic,” ITK explained in its ANPF partner chapter. “The foundation, projection and enjoyment of Arctic sovereignty and sovereign rights all require healthy and sustainable communities in the Arctic.”⁷⁸

2.2 NORAD Modernization

Canada’s most important international relationship is with the United States, with bilateral announcements during the Trudeau-Obama period affirming that the neighbours would remain “premier partners” in the Arctic⁷⁹ and would play a joint leadership role in regional (particularly North American Arctic) affairs. Trudeau and Obama’s Joint Arctic Leaders’ Statement in December 2016 directed concrete actions to ensure “a strong, sustainable and viable Arctic economy and ecosystem, with low-impact shipping, science-based management of marine resources, and free from the risks of offshore oil and gas activity,” that would “set the stage for deeper partnerships with other Arctic nations, including through the Arctic Council.”⁸⁰ Under the Biden administration, the messaging in these 2016 statements is again relevant. Both countries stand to benefit from collaborative efforts on improved marine safety and security systems, transportation and resource infrastructure, and modernization of the North American Aerospace Defense Command (NORAD). The latter was specifically referenced in the first telephone call between Prime Minister Trudeau and President Biden on 22 January 2021, when the two leaders “agreed to expand cooperation on continental defence and in the Arctic, including the need to modernize NORAD.”⁸¹

On 14 August 2021, Minister of National Defence Harjit Sajjan and US Secretary of Defense Lloyd James Austin III approved a Joint Statement “to guide cooperation between Canada and the United States to enhance the ability of the NORAD to execute the missions outlined in the NORAD Agreement while facing evolving threats.” Extolling the long history of North American defence cooperation, the statement explains that “NORAD must be able to detect and identify those threats earlier and respond to them faster and more decisively, including aerospace threats transiting our northern approaches.” The statement identifies the following priority areas for new investments:

- Situational awareness, especially in the northern and maritime approaches to the continent. This includes “fielding new capabilities to complement and eventually replace the North Warning System with more advanced technological solutions as soon as possible, including next-generation over-the-horizon radar systems that can dramatically improve early warning and persistent surveillance of North American airspace and approaches.” The “system-of-systems approach” will ultimately integrate a network of Canadian and U.S. sensors from the sea floor to outer space.
- Modernized command and control systems will “better fuse and integrate data from all-domain sensors into a common, comprehensive operating picture, enabling faster and better-informed decision-making.”
- Capabilities to deter and, if necessary, defeat evolving aerospace threats to North America. “This includes investments to upgrade and modernize the infrastructure required to support robust NORAD operations, including in our Arctic and northern regions.”
- Research, Development, and Innovation.⁸²

With DND and DoD “intend[ing] to move forward deliberately with coordinated investments,” we note the importance of also coordinating these efforts from a Whole of Government standpoint and aligning these investments with identified priorities of civilian departments and agencies, as well as Inuit partners, wherever possible.

On 20 June 2022 at Canadian Forces Base Trenton, Minister Anand made what she extolled as a “once-in-a-generation” defence announcement, committing to a six-year, \$4.9 billion plan to upgrade Canada’s continental defence systems.⁸³ Situating the need for more robust defences to counter “new threats” from strategic competitors like Russia and China, Anand had noted the previous month that “we do live in a world at the present time that appears to be growing darker.” She continued that “in this new world, Canada’s geographic position no longer provides the same protection that it once did. And in this new world, the security environment facing Canada is less secure, less predictable and more chaotic.”⁸⁴ This justified the promise new money over and above the \$8-billion increase in Canada’s defence spending announced in the previous federal budget.⁸⁵

The foundation of the plan is Canada’s ongoing commitment to NORAD – a binational command with the United States which Anand characterized as “our most important ally, our strongest partner, and our closest friend.” Building on the August 2021 joint announcement,⁸⁶ the lion’s share of the promised investments will upgrade technology in support of the command’s roles. This is the first major modernization since the 1980s and the upgrading of the 1950s-era Distant Early Warning (DEW) Line to the current North Warning System. NORAD was founded in 1957 “against the backdrop of the Cold War and the threat of a Soviet-era air attack,” and Anand emphasized that it “has continually adapted and evolved in responses to new threats” that now included a “pressing need” to address hypersonic weapons, advanced cruise missiles, and other means wielded – or soon to be wielded – by strategic competitors who might wish to hold North America hostage. This required “turn[ing] another page and begin NORAD’s next chapter.”

NORAD’s next chapter – and continental defence more generally – is to be oriented around two major components. First, Canadians will be provided with four overlapping layers of situational awareness to detect threats passing through the Arctic on their way to Northern American cities in the south. Investments in a new Northern Approaches Surveillance System will contain three core elements:

- 1) An Arctic over-the-horizon (OTH) radar system to provide early warning and threat tracking across Canada, from the southern border with the United States to the Arctic Circle;
- 2) A Polar OTH radar system to provide an early warning function well past the Canadian Arctic Archipelago far out into the northern most approaches to North America, enabling monitoring of the entirety of the Canadian Air Defence Identification Zone (CADIZ); and
- 3) A new system dubbed “Crossbow” which is a network of other sensors – and their supporting communications infrastructure – distributed across Northern Canada as another layer of detection.

This “state-of-the-art” system will enable a clearer picture of future threats for officials. This new spending will also build on the space-based surveillance project outlined in *SSE* that will use new satellites to provide Canadians with a global intelligence gathering and threat tracking capability, further Canada’s situational awareness.

The tremendous amounts of data these new layers of awareness will generate will be ingested by new “technology-enabled decision-making” capabilities,⁸⁷ the second major component of NORAD modernization. “It is crucial,” Anand declared, “that commanders and policymakers have a comprehensive and accurate operating picture that integrates data from all domain sensors and uses machine learning, quantum and cloud computing, and artificial intelligence.” These technological initiatives include:

1. Modernizing the CAF’s command and control (C2) information systems;
2. Expanding Canada’s contribution to the NORAD Pathfinder initiative that takes advantage of cloud based computing and machine learning “to ensure that NORAD commanders can make informed and rapid decisions.” This also builds upon existing DND/CAF efforts to devise innovative solutions to support the compilation of a consistent common operational picture in

constrained environments⁸⁸ through the efficient exchange and processing of data and information originating from multiple distributed sources.

3. Modernizing the Canadian Combined Air Operations Centre;
4. Constructing a new positioning, navigation, and timing capability to assist with air navigation in remote (northern) areas;
5. Renewing the CAF’s hi and low frequency radio capabilities;
6. Enhancing satellite communications across the Arctic (central to the CAF’s search and rescue and emergency responses to protect Canadians); and
7. Procuring and installing new digital radios and network equipment.

Together the new sensor systems to collect and the machine learning to process data will lead to what NORAD Commander General Glen van Herck has deemed “decision superiority”: making better decisions, quicker, to help limit the threat to North Americans.⁸⁹

Chief of the Defence Staff General Wayne Eyre elaborated that a modernized NORAD will also expand the strategic deterrence that it current provides to Canadians. The binational command was originally built around providing early warning of an incoming Soviet nuclear attack, allowing US strategic forces to respond in kind. This “deterrence by punishment” is about imposing the cost of nuclear annihilation on adversaries. Modern threats like hypersonic glide vehicles can threaten North America below the nuclear threshold, however, thus calling into question the credibility of nuclear punishment. General Eyre explained that developing the “ability to intercept” these threats will grant a “deterrence by denial” capability – to raise the costs of an adversary’s action for attacking. Ultimately, the integration of these two approaches to deterrence will yield a more comprehensive and more credible defence of Canada and of North America.

Overall, Minister Anand said that her announcement represents “the most significant upgrade to NORAD from a Canadian perspective in almost four decades.” This follows on the heels of Prime Minister Trudeau and Anand’s June 2022 meetings with the U.S. Defense Secretary and NORAD officials in Colorado,⁹⁰ and Anand’s anticipation of an “upward trajectory” in Canada’s defence spending during a brief at the Pentagon the month before.⁹¹ In introducing long-awaited commitments to the NORAD modernization process, which will require an estimated \$40 billion in additional spending over the next 20 years, Anand emphasized that this effort will also support the Trudeau Government’s Indigenous agenda by providing new funding to enable Indigenous partners to meaningfully engage and partner with the Government of Canada as it delivers these initiatives.⁹²

The majority of North American defence modernization projects are expected to reach Initial Operational Capability within the next decade. Project timelines are available in the following table:⁹³

Area of Investment: Modernizing our surveillance systems	Scheduled for Definition Phase	Scheduled for Initial Operational Capability	Scheduled for Full Operational Capability
<p>Northern Approaches Surveillance system (NASS) DND will establish a new Northern Approaches Surveillance system (NASS) to significantly expand NORAD and Canadian Armed Forces situational awareness of objects entering Canadian airspace from the North. This will represent a dramatic improvement</p>	-	-	-

Canadian Inuit and North American Defence Modernization

Area of Investment: Modernizing our surveillance systems	Scheduled for Definition Phase	Scheduled for Initial Operational Capability	Scheduled for Full Operational Capability
to Canada's continental defence to supplement the existing 30-year-old North Warning System.			
Arctic Over the Horizon Radar (A-OTHR) NASS will include an Arctic Over-the-Horizon Radar system to provide early warning radar coverage and threat tracking from the Canada-United States border to the Arctic circle.	2024	2028	2031
Polar Over the Horizon Radar (P-OTHR) NASS will also include a Polar Over-the-Horizon Radar system to provide early warning radar coverage over and beyond the northernmost approaches to North America, including the Canadian Arctic Archipelago.	2029	2032	2033
Crossbow Finally, to establish NASS, DND will also work with the United States to develop a complementary network of sensors with classified capabilities, distributed across Northern Canada, as another layer of detection.	2025	2029	2030

Area of Investment: Technology-enabled decision making	Scheduled for Definition Phase	Scheduled for Initial Operational Capability	Scheduled for Full Operational Capability
Position Navigation and Timing Air Navigation (PNT AirNav) We will also advance work on a new Positioning, Navigation, and Timing capability to assist with air navigation in remote areas by integrating an air navigation capability that does not rely solely on Global Positioning System (GPS).	2025	2030	2032
High Frequency/Low Frequency Communications (HFLF) We will upgrade the Canadian Armed Forces' high and low frequency radio capabilities that provide essential command control capabilities for the Canadian Armed Forces and ensure they are maintained and renewed on a continual basis.	2026	2029	2038

Canadian Inuit and North American Defence Modernization

Area of Investment: Technology-enabled decision making	Scheduled for Definition Phase	Scheduled for Initial Operational Capability	Scheduled for Full Operational Capability
<p>Enhanced Satellite Communication – Polar (ESCP-P)</p> <p>DND will enhance satellite communications in the Arctic through additional funding to complete and augment the polar communications project announced in <i>Strong, Secure, Engaged</i>.</p>	2023	2035	2038

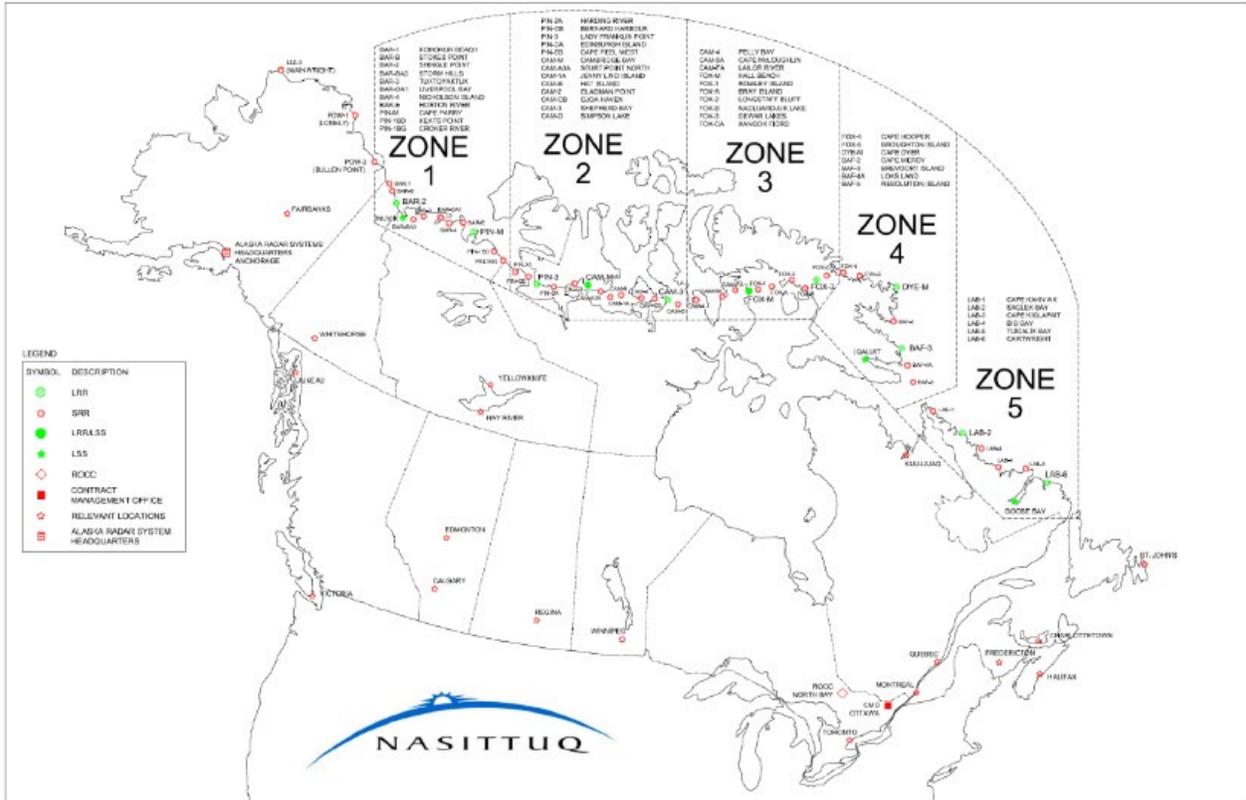
Area of investment: Infrastructure and support capabilities	Scheduled for Definition Phase	Scheduled for Initial Operational Capability	Scheduled for Full Operational Capability
<p>Defence of Canada Fighter Infrastructure Project (DCFI)</p> <p>We will upgrade fighter infrastructure and NORAD Quick Reaction Alert capabilities at bases across Canada to support the arrival of our new fleet of F-35 fighter jets and United States NORAD capabilities.</p>	2022	2029	2032
<p>Northern Basing Infrastructure</p> <p>We will upgrade CAF infrastructure at four Forward Operating Locations in Canada’s North (Inuvik, Yellowknife, Iqaluit, and Goose Bay).</p> <p>The planning process is underway to ensure that this infrastructure will meet NORAD and broader Canadian Armed Forces military requirements, and we will consider multi-purpose opportunities where practical through engagement with Indigenous and Northern governments and partners.</p>	2027	2034	2039

Area of investment: Research and development	Scheduled for Definition Phase	Scheduled for Initial Operational Capability	Scheduled for Full Operational Capability
<p>Investments in DRDC science and technology</p> <p>We will provide funding for Defence Research and Development Canada to invest in science and technology that will assess new and emerging threats, accessing and co-developing technological solutions with the United States.</p>	N/A	N/A	N/A

Criticisms surrounding Minister Anand’s announcement focused on when these new capabilities would become operational, where the money was coming from, and when it would be spent.⁹⁴ None of the initiatives that Anand announced contained any costing nor timelines. Furthermore, Nunavut MP Lori Idlout commented that while her constituents welcome new defence spending in the North, “Northerners should have a say in how the money is spent.”⁹⁵

Without advanced knowledge of when new defence initiatives will begin or where they will be placed, Inuit organizations and governments will find it difficult to incorporate potential “dual-use” investments into their development plans.

Figure 2-1: The North Warning System (NWS)



Source: Nasittuq Corporation

3. Threats Through, To, and In the Canadian Arctic / Inuit Nunangat

The general phrase “Arctic security” often includes a wide range of threats that transcend military, political, economic, societal/cultural, and environmental sectors of security. While a holistic view has benefits in emphasizing the connections between various forms of insecurity, it also can create confusion about what specifically is being threatened, from where, and by whom. It can also confound policymakers and political leaders who must try to align their priorities and partnership proposals with particular mandates and authorities of specific departments, agencies, or funding envelopes.

Differentiating between threats through, to, and in the Arctic can help to categorize security concerns as a first step in discerning what expert tables should be dealing with the threat. As ICC chair Sara Olsvig recently noted, Inuit are affected by all developments in their homelands, including those related to national defence and security, and must be informed and consulted accordingly. Given that ITK, Inuit Treaty Organizations, and Inuit business organizations do not have the resources to be at every table related to national defence and security, adopting this framework may also help Inuit leadership to discern which tables are a priority. For example, Inuit leaders may decide that particular threats (such as hypersonic glide vehicles or cruise missiles) that may pass over Inuit Nunangat are best assessed and managed at the federal level by technical experts, and that Inuit might focus their energies and resources to tables identifying and addressing threats to the Arctic (particularly when these differ from the common threats shared by all Canadians) and threats in Inuit Nunangat.

3.1 Threats Through the Arctic

Threats that pass *through* the Arctic emanate from outside of Canada and pass through or over Canada’s North to strike targets outside of the region.

The North American homeland is no longer a “sanctuary” insulated from global threats. Because of the flight paths of strategic delivery systems that adversaries might launch at North American targets, this makes Inuit Nunangat important to overall continental defence. For example, an advanced cruise missile with conventional warheads launched from Russia would likely pass over the Canadian Arctic before striking at a target in the northern continental United States. Sensor systems to detect the launch and track the missile might be based in Inuit Nunangat, but they are not primarily intended to defend Canada’s North. Nevertheless, these systems can benefit Inuit directly if they leverage investments in dual-use infrastructure and sensor systems that secure “information dominance” for Canada and its allies, while simultaneously helping to address persistent communications, energy, and transportation gaps in the Arctic.

While physical geographical space remains constant, advanced technologies allow would-be adversaries to compress the time that it takes for offensive weapon systems to cross vast distances. “Russia has posed a nuclear threat to North America for over half a century, but has only recently developed and deployed capabilities to threaten the homeland below the nuclear threshold,” the NORAD and USNORTHCOM Commander told a US Senate committee in April 2019. “Russia continues to hone and flex its offensive cyber capabilities, and its new generation of advanced air- and sea-launched cruise missiles feature significantly greater standoff ranges and accuracy than their predecessors, allowing them to strike North America from well outside NORAD radar coverage.”⁹⁶

General Eyre reinforces that a modernized NORAD will expand the strategic deterrence that our continental defence systems provide to Canadians. NORAD was originally built around providing early warning of an

incoming Soviet nuclear attack, which would allow US strategic forces to respond in kind. This “deterrence by punishment” is about imposing the cost of nuclear annihilation on adversaries. Modern threats like hypersonic glide vehicles can threaten North America with conventional weapons below the nuclear threshold, however, thus calling into question the credibility of nuclear punishment. Eyre explains that developing the “ability to intercept” these threats will grant a “deterrence by denial” capability – to raise the costs of an adversary’s action for attacking. Ultimately, the integration of these two approaches to deterrence will yield a more comprehensive and more credible defence of Canada and of North America.

3.2 Threats To the Arctic

Security threats to the Canadian Arctic emanate from outside the region but target or affect the region itself.

Climate change is the primary existential threat to the Arctic – as NATO’s 2030 agenda suggests, it is “the defining interest of our time.”⁹⁷ While Inuit are adapting to the effects of climate change, the mitigation of climate change cannot be accomplished in the Arctic itself. It requires global action. While NATO has stated that it intends to be the leading international organization in understanding and adapting to the impacts of climate change on security, Canada and other countries will pursue most of the action on climate change mitigation through other multilateral channels. There is no desire or benefit to “securitizing” climate change as a threat to Inuit Nunangat by assigning DND/CAF or other security agencies the lead responsibility for addressing its root causes (at least beyond reducing military greenhouse gas emissions). Instead, Inuit leaders, the Government of Canada, and other partners should continue to pursue diplomatic action in international forums with much broader mandates than national defence.⁹⁸

Within the defence and security realm, Arctic threat assessments should clearly explain at what *part* of North America or the Arctic these systems or capabilities are most likely to be directed. For example, geographic proximity means that immediate threats that Russia’s military buildup poses to the Norwegian Arctic do not necessarily threaten the Canadian Arctic.⁹⁹ Accordingly, generalizing about threats to Canada posed by Russia’s “Arctic capabilities” can be problematic, and might distort the appraisal of where and when Canada might be called upon to be a “provider” (rather than a “consumer”) of collective security.

Despite a growing U.S. preoccupation with Chinese icebreakers or even submarines as real or potential capabilities designed to challenge Canada’s Arctic sovereignty or launch attacks against the Arctic states,¹⁰⁰ it is important to remember that the epicentre of China’s strategic competition with the Americans remains the Asia-Pacific region. Ultimately, China’s ability to project military power into Inuit Nunangat remains minimal and is likely to remain so for at least the next decade, given the limited strategic gains that it would realize by doing so compared to commensurate energies dedicated to other parts of the world.¹⁰¹ Nevertheless, domain awareness is essential to ensure that foreign actors are not engaged in illegal behaviour in Inuit Nunangat, which requires a Whole-of-Society effort to identify suspicious activities and pass along relevant information to the appropriate people at the speed of relevance.

While the regional and global threat environments have changed since Russia’s further invasion of Ukraine in February 2022, most threat assessments do not suggest that Russia is more likely to attack the Canadian North using kinetic military forces. Given that any Russian invasion of sovereign Canadian territory would constitute an act of war, and thus lead to the mobilization of our NATO allies (and the American nuclear deterrent), there is little to no likelihood that Russia would risk a general war with the West to try to acquire Canadian Arctic territory or resources. Geography and geostrategic considerations mean there is no simple analogy to what has transpired in Ukraine.

Over the last two decades, Russia has devoted considerable resources to modernizing its fleet of nuclear attack and ballistic missile submarines - despite the serious financial constraints that country faces. This

spending affirms the priority that the Russian government places on this arm of its military, one which has a history of operating in the Arctic Ocean and perhaps even in the Canadian Arctic Archipelago.¹⁰² In spite of these growing capabilities, the challenge lies in inferring Russian intent and deciding what gains Russia perceives that it could secure through military action in the region.

Does Russia pose a maritime threat to or in Canada's Arctic waters? In a polemical March 2016 *Wall Street Journal* article, Scott Borgerson and Michael Byers suggested the threat of "naval vessels from Russia and other unfriendly nations passing through the Northwest Passage, or terrorists and smugglers seeking to enter North America from there.... The sea-ice is melting, foreign ships are coming, and there is little to stop an increasingly assertive Russia from sending a warship through."¹⁰³ This assertion misses the mark on several grounds. First, studies of northern shipping routes and sea-ice dynamics consistently suggest that Canada's Arctic waters are not a safe or reliable sea route for transit shipping and will be less attractive than the Northern Sea Route (which runs north of Russia's coastline) or even a possible transpolar route through the Central Arctic Ocean into the future. Russia is unlikely to risk damaging a billion-dollar warship to sail through Canada's Arctic waters for unclear strategic objectives, and Moscow has no desire to demonstrate the feasibility of a Northwest Passage when it is competing to attract activity in its Northern Sea Route.

Furthermore, the scenario of a Russian "freedom of navigation" voyage through the Northwest Passage overlooks how, for more than seven decades of straightforward self-interest, Russia has passively supported the idea that Canada enjoys control over a "sector" of the Arctic and/or that the Northwest Passage constitutes internal waters. Russia claims sovereignty over the Northern Sea Route on a similar basis, and to challenge Canadian sovereignty by treating the Northwest Passage as an international strait would undermine its own legal position in the Arctic Zone of the Russian Federation. Although transiting the Northwest Passage (by air or sea) in violation of Canada's internal waters position might afford closer launch sites for ballistic or cruise missiles in a war scenario, in a peacetime context this would likely invite an American reciprocal "freedom of navigation" voyage through Arctic waters that Russia claims as internal (and the U.S. consider an international strait). Presumably this would offset any benefits that Russia might gain from challenging Canada's legal position.¹⁰⁴

Instead, Russian activities against the Canadian North are likely to take the form of "grey zone" or hybrid threats, below the threshold of armed conflict, which seek to disrupt systems, undermine democratic institutions, and sow or exacerbate divisions amongst Canadians.¹⁰⁵ The European Centre of Excellence for Countering Hybrid Threats defines these threats as:

An action conducted by state or non-state actors, whose goal is to undermine or harm a target by influencing its decision-making at the local, regional, state or institutional level. Such actions are coordinated and synchronized and deliberately target democratic states' and institutions' vulnerabilities. Activities can take place, for example, in the political, economic, military, civil or information domains. They are conducted using a wide range of means and designed to remain below the threshold of detection and attribution."¹⁰⁶

By combining conventional and unconventional means (such as disinformation and interference in political debates or elections, disrupting or attacking critical infrastructure, cyber operations, and asymmetric military means), hybrid actors use ambiguity and intermediaries (or proxy actors) to make it difficult to attribute responsibility and respond. As a recent report notes, "resilience and defence against hybrid threats in Canada require greater integration of military and non-military discussions on Arctic vulnerabilities to better understand how they interact and expose Canadians to harm caused by adversarial states that seek opportunities to advance their interests in the Arctic to Canada's detriment."¹⁰⁷

Human security threats to Inuit Nunangat that may require a military response include pandemics, with COVID-19 serving as an obvious example. For example, the Canadian Rangers' role in Operation LASER (the military's effort to support the Government of Canada's objectives and requests for assistance in the fight against COVID-19) also showcased their value in assisting health and emergency management agencies. In Nunavik, for example, 2 CRPG was first mandated to assist the Nunavik Regional Board of Health and Social Services on 3 April 2022. The unit responded by deploying approximately one hundred Rangers who are permanent residents of the fourteen affected communities in Nunavik. On the ground, the Rangers performed several tasks in support of the civilian authorities, including the preparation of triage areas to facilitate the work of health personnel. The Rangers also acted as a conduit between their communities and the government agencies involved in responding to potential community outbreaks, with important roles in passing along reliable information about local needs. Their presence as local Inuit community members, wearing their trusted red hoodies, was a comforting show of assurance and grassroots authority. When Operation LASER ended in Nunavik on 15 August 2020, it represented the largest and longest national operation (106 days) in which the Rangers had participated since the creation of the organization in 1947. In total, more than 250 Rangers had mobilized in fourteen communities in Nunavik, providing the Government of Canada with an additional layer of local capacity that it could quickly leverage to enhance its pandemic response efforts.

The following sub-sections identify various other examples of threats to Inuit Nunangat: foreign direct investment, cyber attacks on critical infrastructure, a major maritime disaster, and illegal fishing. It also explains the need for better systems and enhanced relationships that will improve domain awareness in Inuit Nunangat.¹⁰⁸

3.2.1 Foreign Direct Investment

“Despite the distance [from Ottawa] and our (at times questionable) infrastructure, we stand here on the edge of the continent waving our maple leaves at China, at Russia, at the US and at any others who have designs on our Arctic. This is not a rhetoric. We are approached by foreign businesses with foreign ownership that are interested in our resources.

We are proud to stand for Canada. We just hope Canada recognizes it and invests in our ability to continue to do so.”

Duane Smith, Chair of the Inuvialuit Regional Corporation, written brief submitted to the House of Commons Standing Committee on National Defence, October 2018¹⁰⁹

As economic development prospects and perceptions of regional “accessibility” draw more attention to the region, malign foreign actors have more incentives to engage in subversive behaviour. The Canadian Security Intelligence Service (CSIS) notes that both Russia and China have “developed sophisticated information doctrines as part of their strategy...to advance foreign-policy objectives.” Their goals range from short-term economic advantage to undermining the political legitimacy of Canadian institutions over the long-term.¹¹⁰

Given the limited economic activity across much of Inuit Nunangat, and the low levels of investment from Canadian sources, Chinese and other foreign investments in resource or infrastructure development projects may be enticing for territorial and local stake- and rightsholders seeking to attract support for their projects. Nonetheless, foreign investment could provide a Chinese state-owned company with heightened foreign influence over the trajectory of infrastructure development within Canadian communities and regions. Despite concerns over Chinese influence, most experts agree that Canada will require foreign partners and significant private sector investment in addressing its Arctic infrastructure deficit – specifically its dearth

of ports, overland transportation routes, and telecommunications. The challenge will not only entail attracting foreign investors, but also create appropriate systems and measures to manage them and to ensure that they do not undermine national security or broader Canadian security relations with key allies.

Chinese state-owned Shandong Gold Mining's offer to purchase the Hope Bay mine in Nunavut in 2020 highlights how foreign investment in strategic transportation can generate security threats, particularly when resource development is coupled with the development of transportation hubs along strategic corridors.¹¹¹ By securing a footprint at a strategic location adjacent a viable transportation route and building infrastructure to gather intelligence, a foreign company acting in the interests of a non-like-minded state could undermine Canadian interests. On the other hand, foreign investment can generate economic activity, bring jobs to Northerners, and help to facilitate the construction of transportation infrastructure, alleviating the pressure on the federal or territorial governments to do so. If Canadian public or private sector actors are not willing to invest in projects, should Northerners be deprived of the benefits of having investment come in from outside of the country? Managing foreign direct investment in Arctic development projects will require ongoing vigilance that weighs security risks, pursuant to the *Investment Canada Act*, and benefits accrued to local communities and to Canada as a whole.

Conversely, malicious foreign actors may use covert influence campaigns to try to prevent Canada or its allies from investing in mining projects in Inuit Nunangat that would compete with their own interests. The critical minerals sector is a prime example.¹¹² The federal government's *Canadian Critical Minerals Strategy (2022)* commits to increase Canada's supply of responsibly-sourced critical minerals and to support the development of domestic and global value chains that support green and digital economies.¹¹³ These minerals and security are inextricably linked in the circumpolar world, with China – which accounts for roughly 60% of global rare earth element (REE) output and an even greater share of the REE refining process – representing the most significant risk. In light of China's deliberate strategy to control the value chain of REEs, Canada's rich endowment of critical minerals position it to play a pivotal role in the development of secure development supply chains outside of China. By linking critical minerals and national security, Canada's strategy emphasizes that "critical minerals are strategic assets that contribute to Canada's prosperity and national security. They are essential to military and security technology supply chains for national security, as well as other value chains of critical importance to Canada's economic security and prosperity." Accordingly, "reliable market-based access to sustainable sources of critical minerals, especially in northern and remote locations, is a strategic and economic security consideration for Canada and its allies."¹¹⁴ This is a priority not only for Canada but for the United States, its NATO allies, and the coalition of like-minded partners in the Minerals Security Partnership.¹¹⁵

3.2.2 Cyber Attacks on Critical Infrastructure

Despite well documented connectivity gaps in Inuit Nunangat,¹¹⁶ Inuit depend upon a hybrid network of satellite broadband, fibre optic cable networks, and other support infrastructure for internet connectivity and also to enable operational technologies.¹¹⁷ Accordingly, adversaries may use cyber tools to signal displeasure, disrupt services, undermine the credibility of governments or businesses, or cause physical discomfort or harm to people. A cyberattack (an electronic attempt to gain unauthorized access to a computer system, network, or device) can have various goals: in some cases the attackers steal data; in others they lock a use out of their data, encrypt it, and seek ransom to restore access; and in others they might conduct cyber espionage.

Cyber attacks on Greenland and Nunavut over the past few years show the dangers that this threat poses to governments, industry, and citizens. For example, cybercriminals attacked the Government of Nunavut's entire IT system in November 2019, forcing government business units to move into their business

continuity plans to ensure the continuation of essential services for territorial residents. It took six weeks to restore core connectivity and applications in all 25 Nunavut communities, ultimately costing Nunavut's Department of Community and Government Services more than \$5.4 million to fix.¹¹⁸ In another example, Qulliq Energy Corporation (QEC) in Nunavut was targeted in a cyberattack that breached the company's network on 15 January 2023. QEC lost access to some of its IT systems and worked with the Royal Canadian Mounted Police (RCMP), the territorial government's IT team, and outside cybersecurity experts to contain the attack and to investigate what information might have been compromised.¹¹⁹ Fortunately, power plants continued to operate as normal. In June 2023, the Government of Nunavut announced that the severity of the cyberattack prompted the GN to transition Qulliq's IT system to its own network on a permanent basis, with the Community and Government Services Minister emphasizing that "the potential cost of cyberattacks cannot be underestimated."¹²⁰ Had this been a successful malign attack on the networks running the physical energy system, for example, the results could be catastrophic – particularly during extreme weather in the winter or shoulder seasons.

Infrastructure with both civilian and military applications also represents a logical target. For example, the Inuvik Satellite Station Facility (ISSF) is an international, multi-use science and technology facility with an emphasis on Earth Observation that opened in 2010. Situated above the Arctic Circle, the station is ideally positioned to track and receive data in near real-time from polar-orbiting satellites for scientific, mapping, weather, surveillance and other purposes. The ISSF is administered and managed by the Canada Centre for Mapping and Earth Observation (CCMEO, part of Natural Resources Canada) and currently hosts antennas owned by the German Aerospace Centre (DLR), the SSC (Swedish Space Corporation), SSC and Centre national d'études spatiales (CNES), and C-Core – Canadian Research and Development Corporation. NRCan also owns and operates its own infrastructure at the ISSF, including I-CAN1 (a 13-metre diameter antenna providing Reception and Telemetry, Tracking and Control services) that provides satellite support services for RADARSAT-2, NEOSat, SCISAT, M3MSat, and the RADARSAT Constellation Mission (RCM). Given the value of several of these satellite systems for domain awareness, communications, and disaster management,¹²¹ the ISSF is a clear example of dual-use infrastructure that adversaries might seek to disable, more likely through a cyber attack than a kinetic strike.

As foreign adversaries look to the Arctic as a zone of competition, the cyber realm is an obvious vector for influence, intelligence gathering, and disruption. For example, recent threat briefs assess the threat of Russian and Chinese cyber espionage against Greenland as "very high" as both countries seek to "advance their capabilities and interests in the Arctic, potentially at the expense of Greenlandic interests." This has prompted Greenlandic leadership to become more attentive to cyber threats. "The increasing geopolitical interest in the Arctic has great significance for Greenland in several areas – it puts us on the world map, including when it comes to cyber attacks," Greenland's Prime Minister Múte B. Egede explained in March 2023. "In the last few years there has been an increasing number of cyber attacks in Greenland – both cyber espionage and cyber crime. Therefore, this threat assessment is important for Greenland's further work with cyber security."¹²² Inuit leaders should support and encourage similar assessments for Inuit Nunangat and for the Canadian North more broadly, seeking to anticipate and address current and future challenges by building a strong cyber security ecosystem.¹²³

3.2.3 Major Maritime Disaster¹²⁴

On 27 August 2010 at 6:32 pm, the expedition cruise ship *Clipper Adventurer*, with 128 passengers and 69 crew on board, ran aground on a known shoal in Coronation Gulf, approximately 55 nautical miles east of the community of Kugluktuk, Nunavut. With the vessel listing 5° to portside the crew carried out emergency procedures, sounded the tanks, and lowered the lifeboats. The accident caused "extensive damage" to the

hull and holed thirteen double-bottom tanks and compartments, including four full diesel oil tanks. Over the next few hours, passengers carried on with their regular routine while the crew made two unsuccessful attempts to back off the shoal and refloat the ship. The situation could have escalated quickly and dramatically during this critical period. After its investigation into the incident, Canada's Transportation Safety Board found that the vessel's master did not have "sufficient damage stability information to assess whether or not the vessel would be stable once off the shoal" and concluded that without a complete seaworthiness assessment and on-scene search and rescue resources, the refloat attempts could have placed the passengers and crew at great risk.

At 1915 MDT on 27 August, Marine Communications and Traffic Services (MCTS) Inuvik advised Joint Rescue Coordination Centre (JRCC) Trenton of the grounding, which immediately issued an Enhanced Group Calling SafetyNet broadcast with distress priority at a 200-mile radius around the stricken vessel to alert possible vessels of opportunity. At 1932 MDT, JRCC Trenton tasked the Canadian Coast Guard (CCG) icebreaker *Amundsen* to respond to the incident, while preparing a Hercules aircraft with air-droppable search and rescue kits on board to proceed to the scene with an estimated time of arrival (ETA) of 3 hours. The SAR coordinator stood the aircraft down, however, when *Clipper Adventurer's* captain advised that the vessel was not taking on water and was in no immediate danger. *Amundsen* arrived on scene at 1000 MDT on 29 August after transiting 270 nautical miles and conducting hydrographic surveys on the way to ensure its own safety. While all 69 crew members remained on board the cruise ship, *Amundsen* took off the passengers and safely disembarked them in Kugluktuk shortly after midnight on 30 August.

Throughout the two-day incident, the Coast Guard and JRCC provided community leaders and responders in Kugluktuk with minimal information. The community's well organized and effective marine and ground search and rescue (SAR) responders were not mobilized, nor was its Canadian Ranger patrol or other first responders, such as the volunteer fire department. Only a couple of hours before the passengers were offloaded did the Coast Guard inform Kugluktuk's hamlet office that they were in bound. Unfortunately, no one in the office knew where to locate the community's emergency plan, let alone put it into operation. Hamlet officials quickly called Nunavut Emergency Management asking for instruction, particularly on how to handle the sudden influx of passengers given the limited resources available in the community. When the Coast Guard started to barge in the passengers, hastily organized community volunteers used their truck lights to illuminate the landing site, while groups were loaded onto Kugluktuk's commercial bus and taken to the recreational complex. Meanwhile, hamlet officials scrambled to gather blankets and pillows for the passengers and asked the owner of the local Northern store to open to provide food. Fortunately for Kugluktuk's supplies and essential services, the evacuees did not remain in the community for long—that morning a Canadian North charter arrived to take them south.

Looking back on the incident, Kugluktuk's SAR volunteers, Rangers, and other first responders wonder what would have happened if *Clipper Adventurer* had required immediate assistance. What if the weather or sea state had been less than pristine? What if the passengers had been evacuated into zodiacs or lifeboats? What if they had to establish a temporary camp on the land? What if Kugluktuk had to house, feed, and provide medical aid to passengers and crew for an extended period? What would their impact have been on the community's limited fuel, food, and sanitation resources? One community responder described the *Clipper Adventurer* as a "kind of a wake-up call.... If things had worked out differently, those people may have needed a lot of help from us.... We started talking about it more, what we could do, what the community could do, what it would be like."

Subsequent years have brought additional accidents and more vessel traffic to the waters of Inuit Nunangat. Several tanker, resupply, and fishing vessels have run aground, hit ice, or experienced mechanical problems.

In 2018, the research vessel *Akademik Ioffe* grounded on a rocky shoal in the Gulf of Boothia about 78 nautical miles north-northwest of Kugaaruk. While passengers were evacuated and transferred to *Ioffe*'s sister passenger vessel *Akademik Sergey Vavilov*, it was a close call. In its aftermath, residents of Kugaaruk asked the same questions as their counterparts in Kugluktuk, while lamenting the quality of information and communication provided to the community over the course of the incident. These accidents occurred against the backdrop of increased vessel traffic in Inuit Nunangat, which grew 37 percent from 2015 and 2019—a trend that is expected to continue as sea ice conditions improve. Uncharted seabed, the presence of ice hazards, extreme weather, inexperienced operators, and the tendency of expedition cruise vessels to leave well-known shipping routes, all increase the accident risk. While more marine traffic means more vessels of opportunity that could respond during such an event, any mass rescue operation (MRO) in the region would still be incredibly challenging. “I’m not too worried about supply ships that come up every year, even though they could run into trouble,” noted one community responder. “The cruise ships though ... Obviously, we haven’t had them up here the last couple of years because of COVID. But they’ll come back and they might not know what they are doing, or have some bad luck, or go somewhere they shouldn’t. We have to keep on getting ready.”

Community-based Canadian Coast Guard Auxiliary (CCGA) units, Marine SAR Societies, ground search and rescue (GSAR) teams, Canadian Ranger patrols, Inuit Guardians and Marine Monitors, Civil Air Search and Rescue Association members, volunteer fire departments, and other community-based first responders would act as valuable force multipliers both at sea and shoreside during a marine mass rescue operation. Currently, federal and territorial agencies have done little to determine the specific roles and responsibilities these groups could take on. The results of a 2020 mass rescue tabletop exercise involving community responders from the Kitikmeot Region of Nunavut and their government partners elucidate the functions that community-based organizations could perform during a major marine disaster and mass rescue operation in Inuit Nunangat. Targeted investments can better prepare community responders to take on these roles and to ensure that their capabilities are reflected in relevant mass rescue and emergency plans.¹²⁵

3.2.4 Illegal fishing

As global populations increase, so too does demand for fish protein. Unfortunately, weak maritime governance regimes have contributed to serious overfishing both in international waters and within the jurisdiction of some countries, and the global illegal, unreported and unregulated fishing (IUU) problem is serious and growing. Accordingly, fisheries are emerging as a topic of long-term concern in the North American Arctic, as warming waters draw new species of fish northward while many of the world’s longstanding fisheries are being depleted.¹²⁶ For its part, China – with over 60% of its fishing vessels involved in IUU fishing worldwide, making it the “pariah of the world’s oceans”¹²⁷ – emphasizes its rights under international law to fish in the Arctic Ocean. Tracking and regulating these ships is both legally and practically complex, as coastal states have discovered during China’s fishing activities in African, South American and South Asian waters.

Scholar Adam Lajeunesse suggests that it would be difficult for Canada to regulate foreign fishing fleets in the Arctic. “Examples of large-scale Chinese fishing deployments from the Galapagos and elsewhere have seen hundreds of ships without [Automatic Identification System (AIS)] transponders straddling the [Exclusive Economic Zone] (and occasionally crossing into it),” he observes. “This pattern of behaviour takes on a geopolitical edge when the coastal state is willing to push back against environmentally rapacious behaviour.” Canada’s “turbot war” with Spain over North Atlantic fisheries in the mid-1990s shows how fisheries can trigger conflict even amongst allies, and Lajeunesse suggests that it is “not inconceivable that a similar scenario might play out in the Arctic. While China is a signatory of the 2018 Agreement to Prevent

Unregulated High Seas Fisheries in the Central Arctic Ocean, which prevents commercial fishing until at least 2034, Beijing clearly understands that agreement to be a step towards opening Arctic fisheries, rather than an outright ban as many Western observers perceive it.”¹²⁸

Other aggressive or clandestine activities associated with fishing are also worth considering when envisaging possible futures. There is little to no risk of Russian warships intimidating Canadian fishing vessels in the waters of Inuit Nunangat akin to what they have done in the Bering Sea off the coast of Alaska, given that Russia has not undertaken military operations inside Canada’s Exclusive Economic Zone.¹²⁹ Nevertheless, the Soviet Union used fishing trawlers as intelligence gathering platforms during the Cold War, and the U.S. Office of Naval Intelligence believes that Russia continues to use merchant ships (including fishing vessels) to collect and report maritime intelligence. During armed conflict, fishing vessels could be used to conduct reconnaissance and collect intelligence for an adversary, and could actively participate in military deception, jamming, sealift, emergency rescue, and cutting of submarine cables.¹³⁰ The latter not only hold out the promise of addressing acute civilian connectivity gaps in Inuit Nunangat, they also serve as “strategic and intelligence assets that enable countries which control them, or through whose territories they pass, to intercept data, better defend and monitor the global cyberspace, and develop their space industries.”¹³¹

Lajeunesse astutely notes that maritime militias and illegal fishing fleets tend to operate “in areas where response capabilities are limited and the costs of misbehaviour low.” By enforcing Canadian law and regulations in Inuit Nunangat, the Government of Canada “can show that there is no vacuum in the region to exploit and that any attempt to do so will entail risks and political costs exceeding potential gain, going a long way towards preventing the need to conduct that enforcement.” Because these are home waters, Northerners provide the benefits of proximity and an awareness of what is “out of the ordinary” (anomalies), thus making them key partners and enablers in an enhanced domain awareness system that relies on both technology and on people.

3.2.5 The Need for Improved Domain Awareness

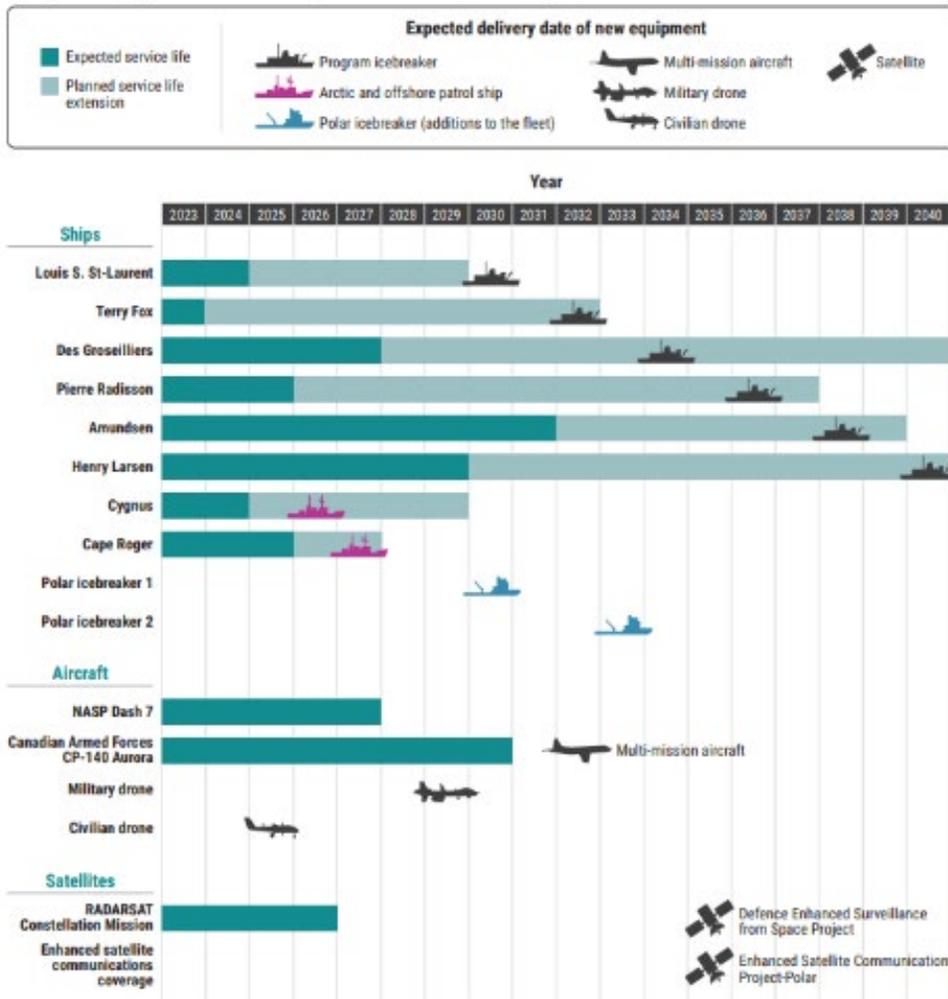
Recent incursions into the Canadian North have illustrated the need for improved domain awareness to detect and enable responses to potential “hybrid threats” that blur the lines between civilian and military capabilities. In fall 2022, the CAF found and retrieved Chinese monitoring buoys in the Arctic, feeding political and media concerns about Beijing’s interventions in Canadian affairs (including interference in federal elections). The buoys were spotted as part of Operation LIMPID, the CAF mission to detect threats to Canada’s security as early as possible through routine watch over Canada’s air, maritime, land, and aerospace domains.¹³² Daniel Le Bouthillier, DND’s head of media relations, noted in a statement that DND/CAF “are fully aware of recent efforts by China to conduct surveillance operations in Canadian airspace and maritime approaches utilizing dual-purpose technologies” which can be used for both civilian and military applications.¹³³

On 4 February 2023, NORAD shot down a high-altitude Chinese surveillance balloon that had crossed North America before it was destroyed off the coast of South Carolina. Reports indicate that three other objects shot down over the weekend of 10-12 February (including one in the Yukon) were benign and connected to research, commercial, or meteorological pursuits. Nevertheless, the incidents showed how unconventional delivery systems could evade radar and other detection systems currently in place. “The spy balloon is the latest symbol for Canada of a more determined China on the world stage,” former national security advisor Vincent Rigby notes. This has affected Canada “in the form of hostage diplomacy (the kidnapping of the Two Michaels), cyberattacks, foreign interference, disinformation, theft of intellectual property, attempted investments in strategic economic sectors like critical minerals, and, as was seen with

the spy balloon, espionage.”¹³⁴ The episode amplified the importance of looking across all domains to discern and anticipate how foreign competitors may collect intelligence about our country.¹³⁵

Numerous recent studies emphasize how emerging security threats to the Arctic require enhanced surveillance of Canadian waters and aerospace. The Office of the Auditor General (OAG) of Canada’s report on *Arctic Waters Surveillance*, released in 2022, notes that the average summer sea-ice coverage in the Canadian Arctic has dropped by about 40% over the last half century which, combined with new technologies, makes the Canadian Arctic “more accessible to ships.”¹³⁶ While the Canadian Coast Guard and Canadian Ice Services caution against simple correlations between a general reduction in sea ice and accessibility (given inter-seasonal variability, non-linearity, and unpredictable sea ice mobility with loose ice clogging previously navigable areas with little warning), the number of voyages in Canadian Arctic waters more than tripled from 1990-2019, including a significant increase in foreign-flagged vessels.¹³⁷ This activity “increases the risk of unauthorized or unregulated vessel transits and illegal activities.” According, the OAG emphasizes that Canada must improve its maritime domain awareness (MDA) and develop a more “comprehensive understanding of all factors associated with the maritime domain that could

Figure 3-1: Equipment in the Arctic that may reach the end of its service life before new or replacement equipment is ready



Source: Auditor General of Canada, *Arctic Waters Surveillance* (Ottawa: Office of the Auditor General of Canada, 2022), 17.

affect security, safety, the economy, or the environment.” This surveillance “involves all levels of government, local and Indigenous communities, and trusted international partners.”¹³⁸ The OAG concluded that:

Overall, the federal government has not taken the required action to address long-standing gaps affecting its surveillance of Canada’s Arctic waters. ... The long-standing issues include incomplete surveillance, insufficient data about vessel traffic in Canada’s Arctic waters, poor means of sharing information on maritime traffic, and outdated equipment. The renewal of vessels, aircraft, satellites, and infrastructure that support monitoring maritime traffic and responding to safety and security incidents has fallen behind to the point where some will likely cease to operate before they can be replaced. For example, the Canadian Coast Guard and Transport Canada risk losing presence in Arctic waters as their aging icebreakers and patrol aircraft near the end of their service lives and are likely to be retired before a new fleet can be launched. Compounding this issue is the useful service life of satellites, which are also nearing their end and currently do not meet the needs of federal organizations. Delays in renewing this equipment coupled with the lack of a contingency plan could significantly compromise these organizations’ presence in Arctic waters.

The report insisted that “action is needed to close gaps and put equipment renewal on a sustainable path to provide a full picture of what happens in the Arctic, which is essential to developing the actions needed to monitor maritime activities and respond to threats and incidents.”¹³⁹

3.3 Threats in Inuit Nunangat

Security and safety threats *in* the Arctic originate within and have primary implications for the region. Community first responders often raise broader emergency-management and community-safety concerns, including the risks posed by prolonged power outages and other critical infrastructure failures, as well as a broad spectrum of natural and human-made hazards created or exacerbated by climate change: tundra fires; unpredictable ice conditions; permafrost thaw risks; severe weather events; erosion, water level and ice flow risks; flooding; and myriad issues raised by increased outside human activity, including environmental pollution and the prospect of a major marine disaster.¹⁴⁰ While DND/CAF and other federal departments have valuable (and sometimes essential) capabilities that can be brought to bear in response to non-military emergencies in Inuit Nunangat, it is important to acknowledge that they are often activated through a request for assistance (RFA) when a local or territorial government has primary responsibility for dealing with a particular threat or emergency.

The temperature is rising in Inuit Nunangat at about three times the global mean warming rate¹⁴¹ (with projections that the temperature will increase from +4.8°C to +8.6°C by the end of the century, compared to now¹⁴²). This creates significant changes to the natural environment that affect the health and well-being of Inuit and their traditional livelihoods, as well as infrastructure and the economy.¹⁴³ Climate change should also be recognized as a threat multiplier across the Inuit homeland. The ANPF observes that “the qualities that make the Canadian Arctic and North such a special place, its size, climate, and small but vibrant and resilient populations, also pose unique security challenges, making it difficult to maintain situational awareness and respond to emergencies or military threats when and where they occur.” Climate change compounds these challenges, reshaping the regional environment and, in some contexts and seasons, facilitating greater access to an increasingly “broad range of actors and interests” (both Canadian and international) in the region. “The effects of climate change are perhaps most pronounced in the Arctic,” the Army’s modernizations strategy notes. “Rising activity levels in Canada’s Arctic by state and commercial actors raise the potential for safety and security-related challenges,” including “search and rescue

operations, response to natural or man-made disasters, and response to actions by states with interests in the Arctic.” The military is cast in a supporting role to other Canadian partners in a comprehensive Whole of Government approach, wherein the CAF assists other government departments and agencies in fulfilling their mandates within the safety and security domains.¹⁴⁴

While most strategic analyses of the Arctic stress the role that climate and environmental change will play in “opening” the region to the broader world, this must be counterbalanced by considerations of the heightened *constraints* that changing and increasingly unpredictable environmental conditions will have on operations in Inuit Nunangat. “Geography and seasonal changes in climate will affect the degree of risk to the integrity of sparse Northern infrastructure such as roads, airfields, port facilities, communications networks, or power plants,” the 2013 Canadian Joint Operations Command Plan for the North noted. “The impacts of climate change are not only being observed from an economic vantage point but the environmental impacts will put enormous strains on how the CAF conducts operations in the north and will require a change in how operations are planned and conducted.”¹⁴⁵ For example, permafrost degradation not only inhibits mobility but also affects physical infrastructure, thus exacerbating sustainment problems. Changes in sea ice not only complicate navigation but affect the mobility offered by over-snow vehicles when the water is in a solid state. The increased frequency and intensity of extreme weather affects operations, while changing sea ice conditions, ocean currents, and temperature complicate acoustic modelling and other operational and strategic planning factors.¹⁴⁶ Climate change is also reducing the number of days when semi-permanent trails on sea ice, lakes, rivers, ocean, and tundra are usable, increasing search and rescue rates owing to more dangerous conditions, and reducing access to traditional foods and healing sites.¹⁴⁷ Consequently, the regional impacts of climate change over the short- to medium-term horizons are likely to exacerbate rather than alleviate operational challenges by increasing the level of uncertainty in Inuit Nunangat.¹⁴⁸

Most federal politicians associate Arctic security, particularly in a domestic context, to Inuit security in light of Ottawa’s political focus on improving Indigenous-Crown relations and promoting reconciliation. Parliamentary committee reports (see appendix C) highlight longstanding inequalities in transportation, energy, communications, employment, community infrastructure, health services, and education that continue to disadvantage Northerners compared to other Canadians. Furthermore, poor socio-economic and health indicators affirm significant gaps between Northern Canadian jurisdictions and their southern counterparts, elucidating higher rates of human insecurity *in* the Canadian Arctic. Although many of these issue areas fall outside of national defence and national security mandates, they should be considered in light of broader nation-to-nation relationships and reconciliation agendas – and can be integrated into compelling justifications for why smart investments in the Arctic can bolster security, safety, and well-being in Inuit Nunangat.

3.3.1 Energy Supply Failure

At approximately 1:30 a.m. on 2 April 2015, a fire erupted at the diesel power plant in Pangnirtung, Nunavut. Though crews managed to extinguish the blaze by the early morning, the plant sustained significant damage, and the loss of the generator plunged the community into darkness.¹⁴⁹ The hamlet thus locally declared a state of emergency.¹⁵⁰ Qulliq Energy Corporation (QEC), the territory’s electricity provider, managed to restore partial power to the community later that morning, but the approximate 1,600 residents of Pangnirtung would remain without full power for several days. During this period, QEC rotated power throughout the community on two-hour and subsequently four-hour intervals, and the Attagoyuk Ilisavik School was converted into a warming shelter, with mattresses, blankets, and cots provided by the Royal Canadian Air Cadets’ 795 Iqaluit Squadron.¹⁵¹ The Canadian Rangers served food at the emergency

shelter and travelled between residences to check on citizens, identify those requiring aid, and caution residents on how to safely navigate the outage, including the importance of sufficiently ventilating their homes if using portable heating equipment or camping stoves indoors, given the risk of carbon monoxide poisoning. Residents were requested to refrain from using appliances like dryers, microwaves, and ovens and to instead conserve electricity “for basic necessities” until “a mid-term solution” was found and the power network could be “stabilized” as larger generators came online. Residents were also asked to conserve water, with the exception of regularly running their taps to prevent their pipes from freezing or water pressure from accumulating in the lines.¹⁵²

The Northwest Territories Power Corporation airlifted two mobile generators into Pangnirtung to supplement QEC’s backup generators. Generators also arrived from Nunavut’s Emergency Management division and Northern Property REIT. Full power was finally restored after four days, at 12:50 a.m. on 6 April, following the installation of emergency generators throughout the hamlet, but residents were still cautioned that the power was “very fragile” and that outages and rolling blackouts could only be avoided through the continued avoidance of excessive energy usage.¹⁵³ The use of larger appliances like laundry machines was now permitted, but only “on a rotational basis.”¹⁵⁴ Large generators were still needed to provide Pangnirtung with a longer-term source of full and reliable electricity until the eventual installation of a permanent replacement generator. However, a logistical challenge immediately arose: The community’s 2,900-foot runway measured 300 feet too short to be able to accommodate a Hercules aircraft or the size of transport plane required to deliver the large generators.¹⁵⁵ The territorial government was forced to seek an alternative solution. Thus, when a Boeing 767 delivered the four self-contained generator units, or gensets, to Iqaluit over the weekend of 11/12 April, it was a Sikorsky S-64F Skycrane helicopter, delivered to Iqaluit on 13 April aboard an Antonov AN-124-100 cargo aircraft chartered from the Russian company Volga-Dnepr, that assumed the task of transporting the generators to Pangnirtung. Over the ensuing week, the twin-engine, 70-foot-long helicopter, nicknamed “Bubba,” delivered to Pangnirtung the four generators that offered a “mid-term” resolution to the power crisis until a permanent generator could be installed.¹⁵⁶ With this achieved, the state of emergency was lifted on 1 May, after 29 days.¹⁵⁷ A longer-term solution came two years later, in April 2017, when QEC commissioned a new power plant for the hamlet.¹⁵⁸

The energy crisis in Pangnirtung illuminated the distinct challenges facing off-grid communities in Inuit Nunangat in the event of an energy supply failure. QEC’s website explains this vulnerability:

Nunavut’s energy system is unique to all other provinces and territories in Canada for several reasons. First, Nunavut does not have a shared transmission grid. This means each community relies on independent power plants, where power is generated, and distributed to the local area. Often referred to as “island mode” or micro-grid, it is different from other places in Canada where each city, town, and community are connected to each other on the same energy transmission system.

One implication of not having a transmission grid is that power cannot be shared between communities. This means in the event of a power outage, there is no way to re-route the flow of energy from one community to another in order to back up the power supply to residents. In the Arctic winter any power outage is an emergency situation....¹⁵⁹

The lack of redundancy in off-grid communities’ energy infrastructure makes them vulnerable in the event of a failure at the local power plant, with ramifications for public health, well-being, and safety. In the absence of electricity, residents in Pangnirtung were left without heat, running water, internet, hot food, and reliable phone service.¹⁶⁰ The Nunavut Department of Health was compelled to evacuate 14 patients to the territorial capital to enable their continuing receipt of care.¹⁶¹ Schools were temporarily closed in the

first days of the emergency, as were most Government of Nunavut offices in the hamlet.¹⁶² Even the response to the fire itself was impacted, since the lack of power to run the pumps at the water reservoir limited the amount of water available to the responding fire crews.¹⁶³ Interruptions in electrical service in any off-grid community would cause similar disruptions to integral public services and present similar risks to public well-being.

The siloed nature of the energy supply system in off-grid communities, as well as their geographic remoteness, complicates swift responses to any electrical outage, thereby amplifying the resultant risks posed to community health and welfare. The dearth of road infrastructure connecting remote Northern communities, and the dependency of air travel on fickle weather, makes accessing those communities in an emergency situation difficult – especially in locations like Pangnirtung, where the community’s runway placed restrictions on the types and sizes of aircraft capable of landing.¹⁶⁴ This necessitates the contracting of special aircraft and helicopters, driving up the expense of restoring power and causing weeks-long delays in repairs.¹⁶⁵ In Pangnirtung, it was two weeks before large generators could be flown into the hamlet and another two weeks until those generators could stabilize the power to such an extent that the state of emergency could be dropped.¹⁶⁶ Such operations inevitably come at significant expense, with the Standing Senate Committee on Energy, the Environment and Natural Resources concluding in 2015 that the cost of the operation to restore power in Pangnirtung – not inclusive of the cost of the four generators – was approximately \$3 million.¹⁶⁷ As Nunavut Tunngavik Inc. concluded in October 2022, “11 of the 25 diesel facilities [in Nunavut] are operating near or beyond their lifespan.”¹⁶⁸ Thus, aging energy infrastructure in Inuit Nunangat continues to exacerbate communities’ susceptibility to power outages and the subsequent hazards to public welfare and safety.¹⁶⁹ As Nunavut’s director of protection services, Ed Zebedee, explained during the Pangnirtung crisis of 2015, “loss of power in the community, in the North, in the winter time is a very serious situation.”¹⁷⁰

3.3.2 Iqaluit Water Crisis

Water infrastructure in Inuit communities is often aged and vulnerable to disrepair or failure, contributing to the high number of boil water advisories issued by governments. Furthermore, climate change is contributing to Inuit Nunangat becoming hotter and drier, potentially jeopardizing drinking water sources and drinking water quality.¹⁷¹

On 2 October 2021, complaints from Iqaluit residents began appearing on Facebook. The city’s tap water had a fetid odour, which some correlated to dizziness and headaches. These complaints prompted the city to inspect Iqaluit’s water treatment plant and collect water samples. On 12 October, the territorial Health Department and City of Iqaluit instructed residents to avoid consuming the city’s tap water and placed the city under a do-not-consume order, after city staff reportedly found a “strong smell of gas” in a tank in the water treatment plant. Iqaluit’s city council declared a local state of emergency due to the belief that “some type of petroleum product” had “entered the water system,” making the water unsafe to consume even after filtration or boiling.¹⁷² The Government of Nunavut declared its own state of emergency two days later.¹⁷³ Officials from the territory and its capital confirmed in a joint news conference the following day what many residents had suspected and feared: that “exceedingly high concentrations” of fuel had been located in one of the facility’s water storage tanks, and that the city’s water supply had become contaminated with fuel, likely either kerosene or diesel.¹⁷⁴ While the water was safe for use in cleaning, laundry, and showering, it was not safe, officials warned, for drinking, cooking, the preparation of infant formula, or for bathing purposes for newborns, infants, or pregnant people.¹⁷⁵

Bottled water flew off grocery store shelves and residents gathered water from the Sylvia Grinnell River. Cars waited hours for the arrival of water trucks at the depots the city had established to distribute cases of

water bottles or unfiltered river water (which residents had to boil prior to consumption). Citizens on a trucked water system, or those whose water supply came from tanks in their homes that were filled by water trucks, were asked to drain their tanks so they could be subsequently filled with unfiltered water from the river.¹⁷⁶ The Government of Nunavut arranged the delivery of over 80,000 litres of bottled water from Southern Canada, Agnico Eagle Mines contributed 15,000 litres, and the Qikiqtani Inuit Association distributed a further 30,000 litres. Iqaluit's Qajuqturvik Community Food Centre hired a full-time driver to fill water jugs at the river or city distribution point and deliver them to homes and community groups such as the women's shelter.¹⁷⁷ In late November, the city closed the fitness centre, and shuttered the Arnaitok and Arctic Winter Games arenas during the day, to free additional staff to support the emergency response, even hiring temporary workers to aid in distributing potable water.¹⁷⁸

When the colder temperatures complicated the city's pumping of water from the Sylvia Grinnell River and presented hazards to the water truck pumps and equipment, the Government of Nunavut requested aid from the CAF.¹⁷⁹ Under Operation LENTUS, through which the military responds to emergencies and natural disasters, the CAF was dispatched to support the efforts to provide potable water to residents of Iqaluit. The plan was for the CAF to utilize two portable reverse osmosis water purification units to purify and filter water from the Sylvia Grinnell River, with the purified water to then be transferred to a city water truck for distribution to the water filling depots in Iqaluit.¹⁸⁰ Five military personnel arrived in Iqaluit on 22 October to begin preparations,¹⁸¹ followed by more than twenty personnel that weekend. The CAF began setting up the units at the Sylvia Grinnell River on 1 November, and the units became operational eight days later.¹⁸² Although challenges resulted from "working in a small space at the river," and the fact that the units processed and held more water than the city truck could transport, weather presented the greatest difficulty. It was imperative to ensure that the water and the equipment did not freeze, necessitating heating tents to keep the equipment operable and functional in the dropping temperatures.¹⁸³ Operations proceeded smoothly until 22 November, when a winter storm fractured one of the tent frames being used to heat the site and shelter the system, freezing two of the operation's four water tanks and necessitating repairs.¹⁸⁴ The units were subsequently transferred into the NORAD Forward Operating Location (FOL) at Iqaluit's airport, enabling the CAF to resume its water purification efforts on 6 December.¹⁸⁵

Investigations into the source of the contamination ultimately pointed to a leak from a 1962 fuel storage tank that had seeped into an underground water tank, contaminating the North Clear Well.¹⁸⁶ The water tanks were subsequently scrubbed, new monitors were equipped to detect hydrocarbon contamination, the site of the original contamination was remediated and the fuel tank removed, and new procedures were adopted to forestall any future contamination.¹⁸⁷ A \$100,000 bypass system was constructed to enable the transport of raw water from Lake Geraldine, around the contaminated tanks, through chlorination and ultraviolet (UV) light treatment, to the holding tank for distribution.¹⁸⁸ After several consecutive samples showed the water to be safe for consumption, the do-not-consume order was lifted on 10 December, after almost two months.¹⁸⁹ Their work done, on 16 December, newspapers described the CAF as being "packed up and leaving Iqaluit after six weeks of purifying water for residents," having produced 307,650 litres of purified water for the city. Though it was the first occasion on which the military's reverse osmosis purification units had been deployed for use in Northern communities.¹⁹⁰

The water crisis in Iqaluit was telling for various reasons. The city has been contending with water shortages and the consequent states of emergency since 2018, the product of a combination of low precipitation, leaky infrastructure, and population growth.¹⁹¹ Furthermore, water infrastructure deficits are an endemic and systemic problem in Inuit communities.¹⁹² A 2020 research briefing noted that although "Canada is a water wealthy nation where reliable access to clean drinking water is available to most citizens[,] ... this is not the case for many Inuit households and communities, where community water infrastructure tends to be

aged and in disrepair, trucked water and sewer systems are often unreliable, and boil water advisories are frequently issued.”¹⁹³ Of the 51 Inuit communities in Inuit Nunangat, ITK found that three (Rigolet, Postville, and Makkovik) provide potable water access through Potable Water Dispensing Units, five (Inuvik, Kuujjuarapik, Resolute Bay, Nain, and Hopedale) offer access to potable water solely through the piped water distribution systems, 41 rely entirely on trucked water delivery systems, and two (Rankin Inlet and Iqaluit) utilize a combination of trucked water and piped water distribution systems. In Inuit communities, most water infrastructure “tends to be rudimentary as well as aged and/or vulnerable to disrepair,” with the few piped water distribution systems generally being “decades older than their intended lifespans, and the reliability of trucked water systems ... often [being] compromised by multiple factors, including blizzards and breakdowns.”¹⁹⁴

The ramifications of water crises are multi-faceted and enduring, especially when they are prolonged or recurring. Water crises exacerbate food insecurity, particularly for low-income residents or those with mobility issues, disabilities, or lack of access to transportation.¹⁹⁵ They can erode and deteriorate public trust and confidence in local governments and public bodies.¹⁹⁶ This is an enduring issue in Iqaluit, which continues to see calls for a public inquiry to bring some transparency and accountability.¹⁹⁷ The Government of Canada’s 2022 pledge of \$214 million towards upgrading the city’s water distribution setup and constructing a new reservoir near Lake Geraldine should help to resolve Iqaluit’s water infrastructure deficit.¹⁹⁸ Nevertheless, experts note that climate change will further jeopardize and threaten access to potable water in Inuit Nunangat,¹⁹⁹ thus raising the likelihood for future military operations to support communities facing acute water crises in the region.

3.3.3 Major Air Disaster (MAJAID)

The significant increase in transpolar air traffic since the end of the Cold War compounds longstanding risks of a major air disaster (MAJAID) scenario in the Canadian Arctic. The last quadrennial Search and Rescue (SAR) review, completed in 2013, noted that “Canada has one of the world’s largest areas of responsibility for SAR, covering 18 million square kilometers of land and water, more than 243,800 kilometers of coastline, [and] three oceans.”²⁰⁰ Canada’s obligations under the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue mean that it must be prepared to provide adequate SAR capabilities within Inuit Nunangat. The CAF SAR team maintains major air disaster (MAJAID) kits for up to 320 personnel that are specifically designed to support major airplane crashes. These kits are based in Trenton, Ontario, so it would take a long time for them to arrive on scene at a crash site in Inuit Nunangat. While the capability of MAJAID kits is very useful, the long response time may be too late for some passengers.²⁰¹ Two case studies illustrate the importance of having a responsive military during air disasters.

On 30 October 1991 at approximately 4:40 p.m., Flight 22 of Operation Boxtop (the biannual resupply mission to Canadian Forces Station Alert) was on its final approach to the station from Thule Air Force Base (now Pituffik Space Force Base) in Greenland. As a CC-130 Hercules aircraft from 435 Transport and Rescue Squadron, loaded with 3,400 litres of diesel fuel, began its descent, the pilot flying lost sight of the runway and the plane crashed approximately 16 kilometres south of the station. Four CAF members died in the crash and one perished before help arrived. The crew of another CC-130 Hercules, also bound for Alert, saw the fire and identified the location of the crash. This set in motion the most dramatic air disaster rescue mission undertaken by the Canadian military in the High Arctic, in which thirteen lives were ultimately saved. Hercules aircraft from Edmonton and Greenwood flew in arduous conditions while search and rescue (SAR) technicians formed a ground rescue team at Alert and trekked to the crash site, guided through horrendous weather conditions by one of the Hercules. For their part, the survivors (some soaked

in diesel fuel) endured high winds and frigid temperatures until six SAR technicians parachuted into the site more than 32 hours after the crash. They were soon joined by more SAR technicians, including the ground rescue team which arrived twenty-one hours after it had set out. The responders warmed, treated, and prepared the injured survivors for medical evacuation by a Twin Huey helicopter to Alert, where a MAJAID Hercules had brought a medical team and supplies from Edmonton. US Air Force planes and crews from Elmendorf, Alaska, also assisted with the rescue and evacuation. The casualties were flown to Thule and eventually south to Edmonton, Ottawa and Trenton.²⁰² “Ironically, the wreckage of the aircraft still lies, twisted and broken, on the Arctic tundra,” Lieutenant-General Mike Hood, the Commander of the RCAF, noted at a ceremony commemorating the twenty-fifth anniversary of the tragedy in 2016. “But it’s so well-preserved by the northern climate that you might think the crash had happened only a few months ago. And as we walked the ground from the top of the ridge down to where the tail sits, pieces of aircraft scattered around, we were amazed that anyone could have survived the crash, let alone the horrific hours that followed.”²⁰³

Twelve years ago, a civilian aircraft disaster in the High Arctic showed how a military presence can enable a timely response. At 4:42 pm on 20 August 2011, First Air charter flight 6560 from Yellowknife crashed on its approach to Resolute Bay (Qausuittuq), Nunavut, striking a hill about one nautical mile east of the runway. The aircraft was destroyed by impact forces and an ensuing post-crash fire. Eight passengers and all four crew members died in the crash. The remaining three passengers survived but sustained serious injuries and were rescued by CAF personnel (including Canadian Rangers) who were in Resolute Bay as part of a military exercise. An RCAF Griffon helicopter brought stretchers to the scene and airlifted the survivors directly to the military’s hospital. The survivors were subsequently airlifted out of Resolute Bay on a military CC-177 transport aircraft, and eventually transferred to hospitals in Ottawa via Iqaluit.²⁰⁴

The response to the First Air 6560 crash showed the precarity of local response capabilities and the benefits of CAF assets. Typically, there is no aircraft rescue and firefighting capability located at the Resolute Bay airport. The village volunteer fire department is capable of fighting structural fires, but has no foam capability and is not trained for aircraft firefighting and rescue. As part of Operation NANOOK, the Canadian Military had established a fully staffed fire hall on the airport, equipped with 2 Oshkosh TA 1500C fire trucks, each carrying 750 litres of foam, 6000 litres of water, 225 kilograms of dry chemical, as well as handheld fire extinguishers and self-contained breathing apparatus. As well, a fully staffed medical facility was established on the airport, and several military helicopters (Griffon and Sea King) and a Coast Guard helicopter were situated there at the time of the accident.²⁰⁵ In future MAJAIR cases, there is little probability that response efforts will benefit from “the extraordinary and coincidental presence” of a CAF exercise in the immediate vicinity of a crash.²⁰⁶

3.3.4 Coastal Emergencies

Arctic climate warming amplifies geohazard processes along the coasts which pose a significant threat to coastal communities and built infrastructure. Accelerated coastal erosion rates are associated with diminishing sea-ice extent, longer exposure to storm wave impacts, and thawing coastal permafrost. Recent tsunamis in Alaska and Greenland demonstrate the severity of impacts on coastal environments and communities, which can necessitate community evacuations and a surge of outside emergency response and recovery resources into affected areas. With continued warming causing accelerated permafrost thaw, glacier retreat, and extreme meteorological phenomena, scientists anticipate that tsunamigenic landslides will become more frequent.²⁰⁷

On 17 June 2017, a tsunami in the Karrat Fjord on the west coast of Greenland resulted in severe property damage and casualties in the small fishing village of Nuugaatsiaq. The seismic energy detected prior to the

tsunami was so large that analysts first believed it was the result of a magnitude 4.1 earthquake, but the cause was a massive landslide on a steep slope of the fjord 32 kilometers northeast of the village where millions of cubic meters of rock plunged into the water below. Forty-five out of 94 buildings in Nuugaatsiaq (including eleven houses) were washed away or destroyed, and four people were killed, nine wounded, and countless sled dogs killed. Other consequences of the tsunami included environmental degradation such as leakage of hazardous waste material, further coastal erosion, and social disruption.²⁰⁸ In October 2020, Greenland's Public Safety Commission extended the closure of Nuugaatsiaq indefinitely.²⁰⁹ Similar glacial/fjord slope collapses have been at least partially attributed to melting of ice and rock-ice mixtures that serve to buttress the steep sides of glacial valleys.

Parts of the north shore of Baffin Island bear similarities to the western shore of Greenland, marked by deep fjords and steep slopes cutting inland.²¹⁰ There is a risk that a spontaneous landslide in the region could cause the kind tsunami that devastated Nuugaatsiaq – as could an earthquake. Large swaths of Inuit Nunangat are seismically active, with Nunavut and northern Nunavik amongst the most earthquake prone places in Canada.²¹¹ On 20 November 1933, an earthquake that likely measured 7.3 on the Richter scale hit sea-floor of Baffin Bay, 250 km east of Pond Inlet – a quake of this strength could have damaged buildings and generated large waves, though likely not a destructive tsunami.²¹² In 1989, on Nunavik's Ungava peninsula, an earthquake of 6.3 magnitude “tore open the tundra and shook up surrounding communities. The earthquake shattered stone, partially drained one lake, and created a new lake where none had existed before.”²¹³ In August 2006, after the Danish Navy spotted black smoke and bubbles in the waters of Davis Strait, across from Clyde River, Nunavut Protective Services issued a warning to the communities of Pond Inlet, Qikiqtarjuaq, Clyde River and Pangnirtung as a precautionary measure. Rumours of an imminent tsunami spread, and some Nunavummiut slept in their life-jackets, which subsequently raised concerns about the gaps in Nunavut's early warning system.²¹⁴

The Greenlandic case is illustrative of the need to “expect the unexpected.” The combination of increased sea level rise and loss of ice cover produces destructive wave action on coastal communities in Inuit Nunangat, which will translate to more powerful storm surges, accelerated coastal erosion, and flooding.²¹⁵ The hamlet of Tuktoyaktuk has devised plans to move houses that are threatened by these changing conditions, and recent reports about the erosion of an island that protects the community harbour. “If we lose that island to the weather and climate change, that harbour ... will be gone,” Tuktoyaktuk Elder William Dillon told researchers in December 2022. Resources to expand the community-run climate monitoring will support local efforts to devise ways to protect the hamlet and its population.²¹⁶ Developing an effective alerting system and ensuring that locally-based groups such as the Canadian Rangers have appropriate training and equipment, the right connections to and supports from other government and private sector partners, and receive essential information at the speed of relevance will help to improve disaster resilience in Inuit Nunangat.

3.3.5 Marine Scientific Research

Strategic documents in the United States have elevated China to the status of a primary threat to Arctic security and prosperity (alongside Russia). While the US Department of Defense's 2019 *Arctic Strategy* identifies China's Arctic interests as “primarily focused on access to natural resources and the opportunities offered by the Arctic sea routes for Chinese shipping,” it also notes that it is “increasing its presence through economic outreach, investments in Arctic states' strategic sectors, and scientific activities.”²¹⁷

China sent its first national scientific research expedition to the Arctic in 1999 and has been active over the last two decades in increasing its presence and asserting its interests in the region. From a single icebreaker carrying out seasonal expeditions, to its current multi-domain, persistent observation of the Arctic region,

China has demonstrated a growing capability to promote and autonomously support safe navigation of the Arctic routes and extract regional resources. Cautious engagement and responsible controls are essential with *Xue Long 2* now joining its namesake in plying polar waters, with the intention of pursuing a “science agenda worthy of a great power”²¹⁸ and continuing to lay the foundations for a “Polar Silk Road” that will secure regional access through persistent presence.

China’s scientific activities in the Arctic region have invited less critical scrutiny than one might expect. In November 2019, Danish Defence Intelligence Service chief Lars Findsen suggested that Chinese scientific expeditions in the region serve a “dual purpose,” with an “increasing interest” by the Chinese military in this research. “It is likely that a part of China’s build-up of knowledge about the Arctic and capacity to operate in the Arctic will take place in a collaboration between civilian and military actors,” the report explained.²¹⁹ China has spent a decade testing Arctic sensing systems and deployment systems, including unmanned ice stations, anchored submersibles, and helicopter dropped sea ice drift buoys. These systems can record temperature, sea ice dynamics, water salinity, current speed and flow over an extended period.²²⁰ All of this work is framed in English and Chinese language discussions as legitimate civilian environmental research, designed better understand the Arctic region and a changing global climate. While this justification is legitimate, it does not negate the dual application of this research, given that all of this environmental data would be useful for surface operations and under-ice submarine navigation.²²¹

To date, China appears to have conducted its Arctic icebreaking and associated scientific activities in line with accepted international legal norms. In so doing, under the legitimate premise of conducting climate change science, China has successfully used *Xue Long* to normalize its presence in the Arctic for the world, increasing its regional profile without evoking excessive alarm or aggressive reactions from the Arctic states.²²² Adam Lajeunesse observes that “while marine scientific research (MSR) is governed by the UN Convention on the Law of the Sea, the definition of ‘research’ is ambiguous, as is the precise nature of the coastal states’ rights to permit or deny access to the EEZ.” If Canada chooses to question “the nature and permissibility of China’s MSR,” it will “present a vexing conundrum as Canada and its allies attempt to navigate their rights and obligations under the law of the sea, while enforcing coastal state jurisdiction against a Chinese government that is adamant about its right to conduct research.”²²³

Strong research and data security practices in Inuit Nunangat must support optimal outcomes for Inuit that, in turn, benefit all Canadians. “Inuit recognize the important role research can play in informing actions that create safer, healthier, and more resilient communities,” ITK President Natan Obed explains. “We have long insisted that researchers and research institutions respect Inuit self-determination in research through partnerships that enhance the effectiveness, impact, and usefulness of research for our communities.”²²⁴ Research in Inuit Nunangat must not only comply with federal and territorial regulations, it must also be governed, resourced, conducted, and shared in ways beneficial to Inuit, as per ITK’s *National Inuit Strategy on Research*. Foreign actors must also involve Inuit in decision-making about their research activities, including agenda setting, compliance with guidelines for ethical research, and determining how data and information about our people, wildlife, and environment is collected, stored, used, and shared.²²⁵ In so doing, Inuit experts will be better positioned to assess where foreign research may be serving dual purposes and presenting potential security risks to or in the Inuit Nunangat.

3.3.6 Amplification of Disinformation, Polarization, and Threats to Democratic Processes

In an increasingly globalized information and social media environment, foreign adversaries are likely to use disinformation and misinformation strategies to influence opinion, undermine sources of strength, and complicate decision making in Inuit Nunangat as they are doing elsewhere in Canada and around the world.

This is not primarily about creating “fake news” and trying to sell it to local populations, but about identifying divisive issues and amplifying them to polarize populations and undermine trust in authorities and governance institutions.

In a recent paper, strategic analysts Gaëlle Rivard Piché and Bradley Sylvestre note that:

In the context of the Canadian Arctic, disinformation and influence operations are particularly concerning for several reasons. As noted earlier, the region is well-endowed with natural resources, including rare-earth and other critical minerals. Decisions around their development are often framed as a trade-off between improved economic prospects and the erosion of traditional Indigenous livelihoods and environmental stewardship, a dynamic well illustrated by the case of Baffinland. These projects are inherently subject to public debate and complex governance systems that require effective coordination across multiple levels to ensure societal buy-in. Clandestine influence campaigns and other covert efforts to meddle in already contentious processes directly affect Canada’s national security and economic interests, including its sovereignty over its natural resources. Such hostile activities also undermine ongoing efforts towards Indigenous self-determination by spreading disinformation, skewing local public debate, and eroding trust.²²⁶

As Inuit reimagine and assert sovereignty, self-determination, and autonomy, they challenge existing colonial governance structures. Doing so entails healthy, ongoing discussions and debates about sovereignty, self-determination, and autonomy through Inuit lenses. Around the world, adversaries such as Russia and China are employing various tactics designed to disrupt the social fabric, amplify divisive debates, and sow seeds of disunity amongst people that they wish to influence.²²⁷ It is important for Inuit to have the autonomy to be able to frame and engage in discussions on their own terms, without interference from foreign actors who seek to exploit vulnerabilities and sensitive topics to deepen distrust in Inuit, federal, territorial, local institutions.

4. The Canadian Rangers

The Canadian Rangers serve as the “eyes, ears, and voice” of the CAF throughout Inuit Nunangat, providing a military presence in parts of Canada “which cannot conveniently or economically be covered by other elements of the CAF.”²²⁸ They are not intended to act as combat forces and receive no tactical military training. Instead, 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. To facilitate these operations, Rangers share their knowledge and skills with regular members of the CAF, teaching them how to survive and function effectively in Arctic, Subarctic, and rugged coastal environments. They are also heavily involved in leading and mentoring youth in their communities through the Junior Canadian Ranger (JCR) program, a DND initiative that promotes traditional cultures and lifestyles and other developmental activities. Furthermore, Rangers are often called upon to respond to local emergencies and disasters, conduct search and rescue operations, support humanitarian operations, and perform other public safety missions.²²⁹

The Canadian Rangers are a diverse force,²³⁰ and the vast majority of Rangers serving in Inuit Nunangat are Inuit. The Rangers are organized into patrols by community (e.g., the Kugluktuk patrol, the Kangiqsualujjuaq patrol, the Postville patrol), with an average of twenty-five to thirty members and a minimum of eight. Patrols are led by a patrol commander (sergeant) and second-in-command (a master corporal), who are elected into these positions by patrol members, and they are divided into ten-member sections, each commanded by a master corporal. Ranger patrols are separated into five Canadian Ranger Patrol Groups (CRPGs) that encompass distinct geographical regions (see Figure 4-1) and have their own headquarters and a staff to oversee administration, training, and other activities.²³¹ The Department of National Defence spends approximately \$38 million annually to support all five patrol groups.²³²

Inuit who are Canadian citizens can join the Rangers at the age of eighteen if they have not been convicted of a serious offence under the Criminal Code of Canada and if the community-based patrol confirms that they are “knowledgeable and personally equipped to survive and operate on the land.”²³³ There is no retirement age and no operational standard for physical fitness (although they must be physically and mentally able to perform Ranger duties), which allows Elders to participate and share their knowledge with younger members.

While Rangers are expected to be self-sufficient when on the land and to use their own personal gear, snowmobiles, all-terrain vehicles, or boats to conduct their duties (for which they are reimbursed according to nationally established equipment usage rates, which is expected to increase in the near future), the Canadian Army also provides them with modest equipment and training. Each Canadian Ranger is issued a red



hoodie sweatshirt, CADPAT (Canadian Disruptive Pattern) pants, red fleece, a water-resistant shell jacket, combat boots, a baseball cap, a safety vest, navigation aids, and a C-19 bolt-action rifle (for protection against predatory animals, not for military combat). In addition, patrols are generally given a supply of camp stores, including tents and lanterns, two satellite phones, and two Track 24 devices (an Iridium satellite system that facilitates the monitoring and tracking of on-the-land movements). A ten-day Basic Ranger Qualification Course is held for new Rangers, which includes rifle handling, general military knowledge, navigation (map and compass, GPS), first aid, search and rescue (SAR), and communications.

Each year, Rangers are paid for up to twelve days of service, which includes annual patrol training and a field exercise, providing patrols with the opportunity to practice essential skills and work together as a team. Often, members also have the chance to participate in additional non-mandatory training courses, such as advanced SAR. In addition to these training activities, Rangers are paid when activated for official CAF tasks, which include emergency response activities and SAR operations. Importantly, beyond their paid service, Rangers perform their “eyes and ears” function as part of their everyday lives and are always present in and around their communities, ready to respond as required.

Although southern Canadian media commentators sometimes criticize the lack of pay, equipment, and clothing provided to Rangers compared to their Regular and Reserve Force counterparts, extensive conversations with Rangers from across Inuit Nunangat over the last two decades suggest that these criticisms are generally ill-informed or misplaced. Although Rangers are not paid for their year-round service as “eyes and ears” on the land, Rangers are paid for force generation activities such as annual training patrols, local meetings, and leadership workshops, with an average of twelve paid days per year. Furthermore, they are paid when they participate in force employment activities such as Operation NANOOK as well as when they provide support to southern units on Northern training exercises (NOREXs) or are officially tasked to conduct SAR. Although the influx of several thousand dollars into a community at the end of a Ranger patrol or military exercise might appear paltry, this Ranger pay can constitute a substantive part of an Indigenous economy that balances short-term paid labour with traditional harvesting activities, thus supporting a social economy that does not conform to Western models.

The diverse landscapes in which Rangers live and operate in Inuit Nunangat also prescribe different equipment and clothing needs. The philosophy of treating the Rangers as self-sufficient, lightly equipped members of the defence team recognizes this reality, as well as the military’s limited capabilities for providing logistical support and sustainment to community-based patrols distributed across the territorial North. While Rangers are known for their much-publicized “red hoodies,” on operations they are expected to use their own environmentally appropriate clothing, which they deem best suited to local conditions, rather than being assigned standard military gear. While media commentators often dismiss the Rangers as “rag-tag forces” as a result, they fail to observe that this lack of uniformity embodies a respect for diversity, allowing Rangers to make their own decisions about what they should wear to operate comfortably and effectively in their home environments. This same logic extends to transportation and equipment. During training and official taskings, Rangers are paid for the use of their own equipment and vehicles (such as snowmachines, all-terrain vehicles, and boats) according to an established equipment usage rate (EUR). This arrangement provides Rangers with tax-free reimbursements that they can invest in their own equipment and tools, appropriate to their local environment, which they can then use in their everyday lives without having to ask the government for permission to do so. By allowing individuals to invest in their own, privately owned equipment, this approach represents a material contribution to local capacity building.

4.1 Canadian Ranger Enhancement Program

The Rangers' established record of operations, extending back more than 75 years, affirms the interconnectedness between Indigenous and local knowledge, identities, and practices, on the one hand, and the nation's interest in exercising its sovereignty on a continuous basis, on the other. Growing and strengthening the Rangers featured prominently in the Harper government's plans to bolster Arctic sovereignty and enhance the safety and security of Northerners,²³⁴ with the Canadian Rangers reaching an average paid strength of 5,000 in 2013.²³⁵ This number has been sustained since that time. When referencing prospective expansion, it is important to note that all of the communities in Inuit Nunangat already have a Ranger patrol. Expansion could come in the form of increasing the number of Rangers in each patrol, but recommendations along these lines must be respectful of the size of communities and very high rates of Inuit service in the Rangers already.

By consolidating previous growth by strengthening the CRPGs and resourcing them properly, the Government of Canada can improve the effectiveness and sustainability of the Rangers while improving the health and wellness of the military members who support them. Addressing gaps in Rangers' access to the health care (including mental health services) that is available to other CAF members, clarifying the appropriate class of service that Rangers should be on for the tasks they perform, and processing compensation claims for damaged equipment in a timely fashion should help to remove barriers that affect the overall well-being of Rangers and their families.²³⁶

As the Rangers continue to evolve with their communities and with the Arctic security environment, there will be pressures to move along a continuum from a relatively informal, voluntary organization towards more formal and standardized structures. Their community roots mean that any transformations must be carefully monitored to ensure that institutionalization does not corrode the local foundations upon which the Rangers have been built. Long-serving Rangers suggest that intensified administration burden, coupled with escalating expectations and inconsistent support from the Canadian Army, has begun to undermine the indigenous strengths of the force. The danger of overstretch is always a critical consideration. Trust is integral to the entire Ranger organization, as it is to all relationships in the North, and the military must deliver on promises, now and in the future.

Previous publications describe the Rangers' activities in detail, illuminating how the Rangers strike an appropriate balance between their military and community contributions.²³⁷ The combat role originally assigned to the Rangers in 1947 has been removed from their official task list because they are neither trained nor equipped for this role, leading some commentators to declare that they are not a "real military force."²³⁸ This logic is problematic on several levels, revealing a profound misunderstanding of both the Rangers and how they fit within the defence team.

The Rangers' national task list encompasses three broad aspects: conducting and supporting surveillance and presence patrols; conducting and assisting with domestic military operations; and maintaining a Canadian Armed Forces presence in local communities. This includes reporting unusual activities or sightings; collecting local data for the CAF; land-based and maritime patrolling (by snowmachine in winter and by boats in summer); training and guiding Regular and Primary Reserve Force units operating in remote regions; assisting in search and rescue efforts and in local domestic emergencies; and assisting with natural disasters such as forest fires and floods.²³⁹ The Canadian Army considers the Rangers "a mature capability" and "the foundation of the [Canadian Armed Forces'] operational capability across the North for a range of domestic missions."²⁴⁰ In emphasizing their myriad contributions, the Army notes that the "Rangers will remain a critical and enduring presence on the ground, valuable in many roles, including amongst others, the CAF's eyes and ears for routine surveillance purposes, its guides, local cultural advisors, interpreters,

and the core of our liaison capacity in many locations, while remaining immediately available to support local government or other agencies.”²⁴¹

The key Arctic defence documents produced by the Canadian military over the past fifteen years all emphasize integrated defence team and whole-of-government approaches to meet challenges across the mission spectrum. Within these concepts, the Rangers are situated as facilitators or enablers for other military components providing combined response capabilities. Lessons learned or post-exercise reports regularly highlight the benefits of this partnership and the need to leverage the Rangers’ knowledge and capabilities to facilitate operations and further develop Regular and Primary Reserve Force units’ operating skills in remote areas. Rather than dismissing the Rangers for not simply replicating existing army capabilities that reside in southern-based units, these exercises affirm the value of having access to subject-matter experts with extensive experience operating in austere conditions and who are willing to share their local and traditional knowledge about lands and waters and provide practical support for activities in what southerners consider to be “extreme environments.”

As members of their local communities, the Rangers also represent an important source of shared awareness and liaison with community partners²⁴² and, by virtue of their capabilities and location, regularly support other government agencies in responding to the broad spectrum of security and safety issues facing isolated communities. For example, their leadership and training make them the *de facto* lead during states of emergency in their communities – from avalanches, flooding, extreme snowstorms, and power plant shutdowns to water crises (see also section 3.3). Accordingly, they are the CAF’s first responders in most safety and security situations. Rangers are also called upon to assist with search and rescue in their communities both as volunteers who know how to work effectively as a group and, when called upon, as an official military tasking. Their familiarity with local cultures, fluency in Indigenous languages, and vested interest in the welfare of their fellow community members make them valuable, trusted assets.

The Rangers also provide an important outlet for Inuit who wish to serve in the defence of their country without having to leave their communities. Ranger activities also allow Inuit members to practice and share traditional skills, such as living off the land, not only with qallunaat but also across generations within Inuit society. By celebrating Inuit Qaujimajatuqangit and skills while encouraging and enabling community members to go out on the land and share their knowledge and expertise, the Rangers can play an important role in supporting the retention or expansion of core cultural competencies. In turn, the Ranger concept is inherently rooted in the idea that the unique knowledge of Inuit makes important contributions to effective military operations. It is this partnership, rooted in mutual learning and sharing, that has made the Rangers a long-term success on local and national levels.

4.2 Situating the Canadian Rangers

As a bridge between diverse cultures and between the civilian and military realms, the Rangers represent a successful integration of national security and sovereignty agendas with community-based activities and local stewardship. This practical partnership, rooted in traditional knowledge and skills, promotes cooperation, communal and individual empowerment, and cross-cultural understanding. Maintaining the balance between operational and socio-political benefits continues to lie at the heart of sustaining the Rangers as both a diverse military formation and a community-based organization.²⁴³

The Canadian Rangers ensure that Inuit are integrally involved in the defence team when it operates in Inuit Nunangat and that the CAF is developing local capabilities that both reflect and support the interests of local communities. Although commentators often associate military practices (and those of the state more generally) with physical dislocation, environmental degradation, political disruption, and culture shock for

Indigenous peoples,²⁴⁴ the interconnectedness between the military, remote communities, and Canadian society is respected as a constructive force in the case of the Canadian Rangers. It serves as a striking example of what can be achieved when policies and practices are rooted in a spirit of accommodation, trust, and mutual respect.

Promised investments to enhance Ranger capabilities and training can be well directed, as long as they respect the Rangers' longstanding roles and mission and are rooted in a robust awareness of how and why the organization has evolved into its current state. Tensions between commentators who want to convert the Rangers from their current role into a more conventional Primary Reserve mould, as well as those who would seek to expand the Rangers into a work-training program to create more employment for Northern Indigenous communities, threaten to break an organization that is not broken. Seldom do outside proposals display an appreciation for how and why the organization has assumed its unique form or how the Rangers' role, mission, and tasks translate across national, regional, and local scales, addressing both military and local civilian needs. Instead, various stakeholders have pushed to repackage the Rangers into a form that fits their agendas, without recognizing the broader implications for the organization. Canadians must be careful not to set the Rangers up to fail by asking too much of them, unravelling their ties and relevance to the military, or, conversely, trying to over-militarize them to face a theoretical enemy that is unlikely to take kinetic action to challenge Canada's Arctic sovereignty and security in the foreseeable future.²⁴⁵

5. Search and Rescue (SAR) and Emergency Management

In the context of being “strong at home,” *Strong, Secure, Engaged* explains that the Canadian Armed Forces will “maintain a robust capacity to respond to a range of domestic emergencies, including by providing military support to civilian organizations on national security and law enforcement matters when called upon, engaging in rapid disaster response, and contributing to effective search and rescue operations.” Once implemented, Canada’s military “will have improved mobility and reach in Canada’s northernmost territories,” and will have established a “greater presence in the Arctic over the longer-term.” This military presence is neither symbolic nor designed to intimidate would-be adversaries. Instead, the policy statement asserts that “Canadians can be confident that the Canadian Armed Forces will remain ready to act in the service of Canadians – from coast to coast to coast – and sustain a continuous watch over Canada’s land mass and air and sea approaches, an area of more than 10 million square kilometres, ensuring timely and effective response to crises.”

The military is likely to play an increasingly active domestic role in support of civilian authorities in the Canadian Arctic. Accordingly, Canada’s 2017 defence policy places an explicit emphasis on a “Whole of Government” approach to achieve its national security and public safety objectives. “While operating in Canada’s North, we often work in close partnership with other federal, territorial, and local partners,” the statement observes. “As such, we will leverage our new capabilities to help build the capacity of whole-of-government partners to help them deliver their mandates in Canada’s North, and support broader Government of Canada priorities in the Arctic region.” From a military perspective, this means *supporting* the many stakeholders with primary responsibility to address law enforcement challenges (such as upholding Canadian fishing regulations vis-à-vis foreign fishing fleets), environmental threats (such as earthquakes and floods), terrorism, organized crime, foreign (state or non-state) intelligence gathering and counterintelligence operations, attacks on critical infrastructure, and pandemics.

This comprehensive approach to Arctic defence and security has become well entrenched in Canadian defence planning over the last decade. It is also compatible with current efforts to bolster North American defence and security in an era of great power competition, with the Canadian Arctic playing a pivotal role in the proposed layered ecosystem of sensors being created to detect threats to the continent. Accordingly, the discussion about Canada’s defence and security needs should not emphasize a tradeoff or zero-sum equation between “hard” and “soft” security, but a mix of the two based on a refined sense of which investments address which categories of threats.

The ANPF emphasizes that “in today’s increasingly complex Arctic and northern environment, the continued safety and security of the North depends on strengthened emergency management and community safety,” as well as “increasing Search and Rescue reaction and responsiveness to emergencies for Arctic residents and visitors.”²⁴⁶ Inuit have been consistent and clear in their desire for enhanced community resilience and capacity-building in the areas of SAR and emergency management. The Inuit Circumpolar Council, in its 2019 written submission to the Special Senate Committee on the Arctic, asserted that “Inuit are always the first to respond to an emergency, and in doing so with limited training and resources they risk their own safety and security.” Accordingly, it urged the federal government “to enhance search and rescue and emergency protection infrastructure and training in Inuit communities.”²⁴⁷ The ITK partner chapter to the ANPF insists that “Inuit are the stewards of the land, and given appropriate infrastructure, will continue as the principal players and first responders in Canada’s Arctic sovereignty and security.”²⁴⁸ These ideas must animate new approaches to mass rescue that more fully integrate and leverage community capacity throughout the region.

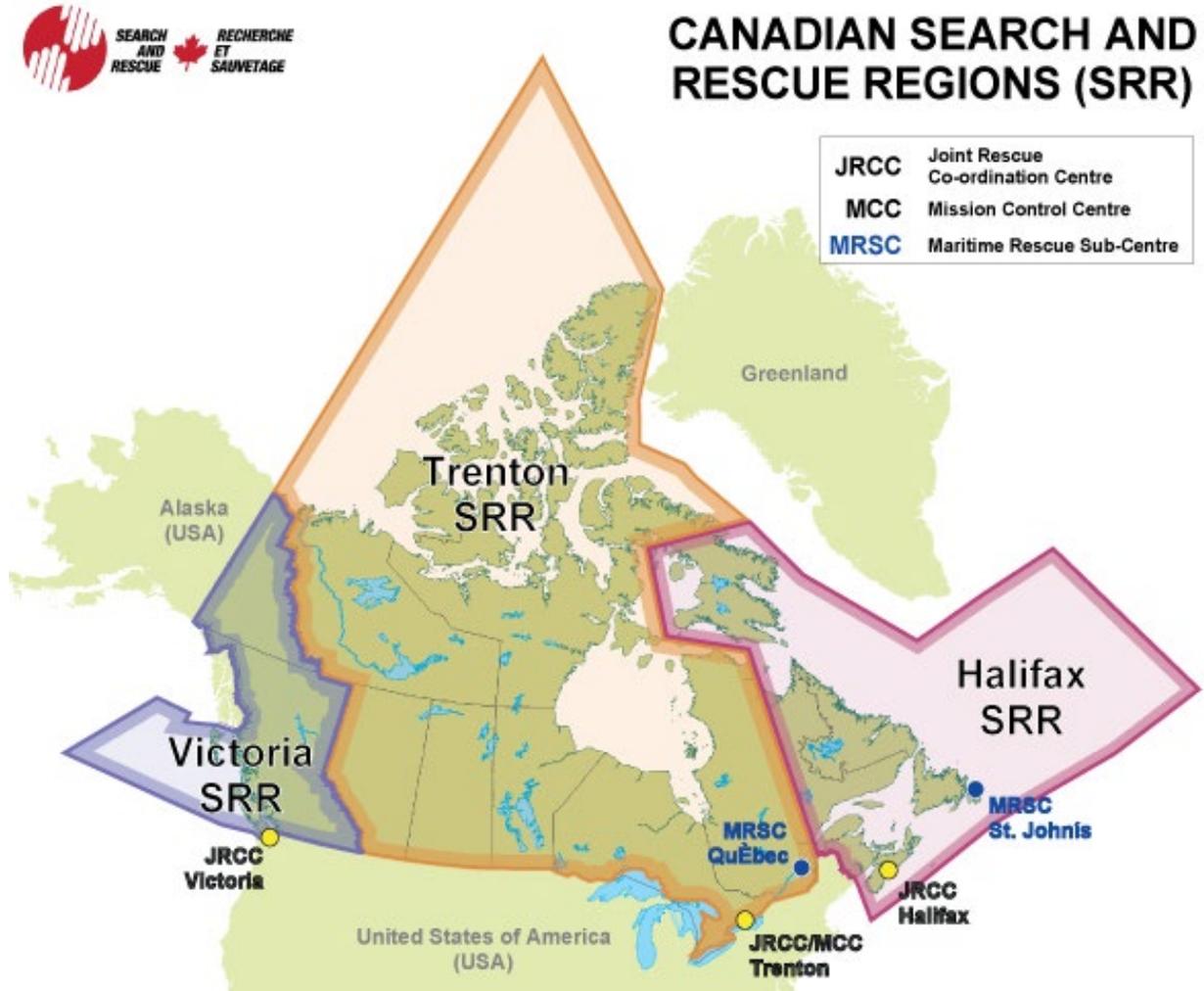
5.1 Search and Rescue (SAR)²⁴⁹

Search and rescue (SAR) operations on the water, land, and ice of Inuit Nunangat are challenging and complex. The austere environment, limited local resources, and close cooperation, coordination, and communication often required between a wide array of actors at the local, regional, provincial, and federal levels, all create unique difficulties. The region's vast size and cold climate combine to make time the enemy of all responders. The substantial distances involved in responding with Canadian Coast Guard (CCG) icebreakers or Royal Canadian Air Force (RCAF) aircraft based in Southern Canada means that the arrival of federal resources on-scene can take significant time.

Search and rescue in Inuit Nunangat is also marked by its intimacy. The burden of search and rescue in the region largely falls on the shoulders of community responders who usually know the people for whom they are searching: brothers searching for brothers, parents for children, children for parents. It is searches for cousins, best friends, neighbours, and Elders. Almost all SAR volunteers have found loved ones deceased – from the cold, from accidents, or self-harm. The toll of this trauma and tragedy on the mental health of community responders is extreme. Most of these volunteers are driven by a deep desire to serve their communities. Others understand that they have the required skills and experience in a limited human power pool. Many, however, are motivated by love – for their family, friends, and neighbours. This is what keeps them going back out, often with limited training, equipment, and support, even as they struggle with burnout, anxiety, and post-traumatic stress disorder. These responders form the cornerstone of search and rescue in Inuit Nunangat – but cracks are forming in this foundation that will only worsen without sustained attention, funding, and support.

Reports covering the Kitikmeot (February 2020 and November 2022), Kivalliq (November 2022), Qikiqtani (November 2022), and Nunavik (December 2022) SAR roundtables provide detailed overviews of the state of search and rescue in Nunavik and Nunavut based on interviews with community and government responders and an extensive review of government documents, media stories, and scholarly literature. These studies assess the core strengths supporting and the challenges hampering effective SAR operations in these Inuit regions, with a particular focus on the perspective of community responders. They also include suggestions for improvement offered by community and government practitioners and policymakers. Commissioner James Igloliorte's November 2021 report of the Government of Newfoundland and Labrador's public inquiry respecting ground SAR for lost and missing persons (a response to the Burton Winters tragedy) provides a comprehensive overview of challenges in Nunatsiavut and recommendations for national, regional, and local enhancements to the system.²⁵⁰ While we were interviewed for a Government of Northwest Territories review of the territorial SAR system, we do not believe that this document has been made public and we are not aware of any other study completed for SAR in the Inuvialuit Settlement Region.

The Nunavik report is illustrative, highlighting the skills, knowledge, and passion of community responders as the greatest asset to SAR operations in Nunavik, followed closely by the willingness of the region's communities to pull together during prolonged searches. These efforts are supported by the innovative funding and programming initiatives developed by the Kativik Regional Government, Makivik Corporation, and the Northern Villages – a remarkable example of regional self-sufficiency, but one that has left these entities bearing more than their fair share of the burden for SAR. The private sector, particularly Air Inuit, also regularly provides support for searches and funding for prevention and preparedness activities, and the Canadian Rangers from 2CRPG bolster community capacity to conduct SAR operations. New initiatives that have improved search and rescue in the region in recent year include stronger Canadian Coast Guard engagement and collaboration; the expansion of the Coast Guard Auxiliary



in the region; the Indigenous Community Volunteer Boat Program; and improved working relationships between SAR partners.²⁵¹

While progress has been made, much work remains to be done across Inuit Nunangat. There are no standard operating procedures at the community level. While a level of flexibility and autonomy is required given the differences in capabilities and assets available to communities, standard operating procedures are required to improve training outcomes and support inter-community cooperation and coordination. Furthermore, Inuit community responders regularly highlight that the mandate of organizations with the lead on ground SAR often does not match actual capabilities. Community responders also consistently emphasize the need for more sustained relationship-building with CCG, JRCC, and RCAF personnel. Further, the effectiveness of SAR prevention, preparedness, and response activities in Inuit Nunangat are being hampered by a wide array of significant challenges including:

- a large and increasing SAR case load
- underreporting of SAR cases
- impact of austere and changing environmental conditions on SAR response
- integration of Inuit knowledge into SAR response
- slow response times from federal assets

- the problems with family searches
- the responsibility placed upon mayors
- limited local air support
- limited understanding of the SAR system
- jurisdictional issues
- the land-ice interface
- coordination, cooperation, and communication difficulties
- need for more SAR prevention initiatives
- infrastructure gaps
- equipment and supply gaps
- training gaps
- responder safety
- lack of public support
- recovery operations
- volunteer burnout
- volunteer recruitment and retention issues
- administrative burden
- lack of consistent funding
- difficulty accessing private sector resources
- mental health challenges

The challenges affecting SAR operations in Inuit Nunangat are multi-faceted, deep-rooted, and dynamic. There are, however, core strengths upon which to build – particularly the skill and determination of Inuit community responders. These volunteers have identified practical ideas for improvement, new approaches, best practices, and lessons learned that can have an immediate positive impact if they are acted upon. These responders also insist that challenges in the SAR system require regional solutions across Inuit Nunangat, and that they would benefit from annual or bi-annual SAR roundtables held in each Inuit region. These gatherings would provide Inuit with opportunities to: work through challenges; share best practices and lessons learned on SAR prevention, preparedness, and response; examine SAR risks facing communities; strengthen relationships; and ensure that Inuit Knowledge / Qaujimaningit is fully integrated into the SAR system across Inuit Nunangat.

Coast Guard Auxiliary units, GSAR teams, Ranger Patrols, CASARA, and other community SAR responders need to be able to work together as effectively as possible. Without the opportunity for joint training and exercises, however, this is difficult, even though responders often wear many “hats” and are members of two or more of these groups. Coordination can be even more challenging when these groups have to work with one another and federal responders. One veteran Inuk responder (a leader of his community’s Auxiliary unit and GSAR team) described the communication and coordination challenges that often emerge during searches:

when we’re working with our local searchers, we’re using one system. Then the Rangers are working on their system, MGRS [military grid reference system]. Then the aircraft, the Hercules or Cormorant are on another setting. I bring this up, because the coordinators in the command posts, we need to know what setting people are using. Sometimes I’ve sent people to the coordinates given to me, but because the GPS settings were different, they were sent to wrong spot. One time with the Hercules on the water, the coordinates they gave us with the settings on the boat was over in China.... We need to familiarize and get one setting that all departments will

coordinate. When we're not told what setting is used, we're sending guys away from people we're trying to save. We should familiarize and get one setting: is it MGRS; NAD 27; WGS 85. We need one that all departments will coordinate in.

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

Relationships constitute the foundation of an effective SAR system, allowing for the multi-level horizontal and vertical coordination and cooperation required for the execution of efficient and effective operations. They encourage mutual understandings of resources and capabilities, SAR risk, and community-specific needs. Relationships rooted in trust and respect also encourage honest dialogue about the challenges and obstacles that weaken the SAR system. When regional, provincial, and federal practitioners and policymakers have made greater efforts at relationship-building in the past, they have improved SAR – but Inuit practitioners noted that these efforts have been too *ad hoc*, intermittent, and short-lived. The re-establishment of the Northern Search and Rescue Roundtable, a high-level working group made up of practitioners and policymakers that ran from 2010-2016, might prove useful to facilitate information sharing and strengthen collaborative relationships.

“It really feels like the clock is ticking,” a community responder explained at the end of the Nunavik Roundtable on SAR. “Change is needed. We need to make this all work better.” They are right. The SAR system in Inuit Nunangat requires attention and further investment. The cases are increasing and the challenges mounting. The demand for SAR services will only intensify in the future. Strong relationships between SAR partners are more important than ever. Community responders need support, and it is time to act to provide it to them.

5.2 Emergency and Disaster Management²⁵²

It is not hyperbole to suggest that Inuit communities and the external organizations responsible for assisting them in times of crisis require lessons learned on disaster prevention, preparation, response, and recovery more than ever before. Over the last two decades, communities in Inuit Nunangat have experienced plane crashes, marine emergencies, environmental disasters, infrastructure failures, floods, forest and tundra fires, avalanches, and a range of other emergencies. The threats posed by natural and man-made hazards are amplified by the presence of remote and isolated communities, limited physical and human infrastructure, and the vast distances involved that limit access to rapid external assistance – factors that often allow emergency events to cascade into more profound situations.

Robust emergency management capabilities must be a central component of climate change response plans in Inuit Nunangat. From flooding to the expansion of cruise tourism, the affects and results of climate change continue to exacerbate the risks posed by a broad spectrum of natural and human-made hazards throughout the region. The risks are amplified by the presence of remote and isolated communities in austere environments, with small populations, vulnerable and ageing infrastructure, limited emergency resources, and minimal access to rapid external assistance. Reducing vulnerabilities to these risks requires investment across the disaster and emergency management spectrum of prevention/mitigation, preparedness, response, and recovery. While significant progress has been made to improve these capabilities from the local to the federal levels, critical gaps remain.

Through various funding programs and cost sharing agreements,²⁵³ the federal, territorial, Indigenous, and municipal governments have made headway on regional and local prevention, mitigation, and preparedness

measures. On the response side, every year the CAF leads Operation NANOOK-TATIGIIT, a whole-of-government exercise that practices cooperation and collaboration among key partners involved in northern disaster and emergency management – training that, in 2021, facilitated the CAF’s response to the water crisis in Iqaluit (see section 3.3.2). The CAF also bolsters local response and relief capabilities through the Canadian Rangers, who, given their presence, capabilities, and the relationships they enjoy within their communities, regularly support other government agencies during local emergencies and disasters (see section 4). Meanwhile, the Canadian Coast Guard has made significant improvements to marine safety in the North by expanding the CCG Auxiliary in the Arctic, establishing an Arctic Marine Response Station (AMRS) in Rankin Inlet, extending the operational season of its icebreakers, and engaging with Arctic expeditionary cruise stakeholders to better prepare for potential emergencies. Territorial, regional, municipal, and Inuit governments have also taken important steps to improve their emergency management capabilities through the development of regional and community emergency plans, public awareness activities, hazard mapping, and the development of new EM organizations.

Inuit Nunangat lacks a disaster work force. While the CAF (both through Canadian Ranger patrols and southern-based units) provide an effective response, the military does not do mitigation or recovery work and may not be able to meet all response requirements. Accordingly, Inuit political leadership might – through a differentiated Inuit Nunangat program or through the provincial/territorial governments – follow the lead of other jurisdictions and establishing a full- or part-time disaster work force that could conduct prevention and mitigation measures year-round, while providing a surge capacity of human-power during emergencies and recovery operations.²⁵⁴

Previous studies have highlighted significant gaps and challenges to effective disaster/emergency management in the North and have suggested an array of resilience-building measures, ranging from greater access to training and equipment to enhance local capabilities, to stronger emphasis on hazard analysis and mitigation measures, to improvements in vertical and horizontal coordination, collaboration, and communication. Action on all of these issues should be rooted in lessons learned and effective lessons management processes that can ensure continuous learning. Policymakers, federal and territorial practitioners, and community responders involved in recent roundtables have highlighted the need to collect and assess lessons to improve operational readiness, with some questioning the capacity that exists to accomplish this essential task and others criticizing the lack of information sharing with communities.

The management of disasters and emergencies in Inuit Nunangat involves multiple levels of government and many agencies and organizations. Depending on the size, scope, and location of an emergency/disaster event or exercise, official lessons observed might be collected by territorial emergency management organizations and departments of health, Inuit governments and associations, the RCMP, Public Safety Canada, the National Search and Rescue Secretariat, CAF, CCG, Transport Canada, Natural Resources Canada, Environment Canada, Public Health Agency of Canada, Parks Canada, and even Global Affairs Canada. Further effort can be made to produce and share after-action reports relevant to Inuit, translate them into practical action, and adapt institutional perspectives and practices so that they better accommodate Inuit realities.

In short, while much is being done to address the unique challenges climate change poses to the North, the scope and frequency of the hazards faced by remote communities requires sustained attention, new and equitable approaches, and, ultimately, government dollars.

5.3 A Holistic Solution: A Proposed Inuit Nunangat Community Public Safety Officer Program²⁵⁵

Community-based emergency management positions are rare throughout the Canadian North – a major issue given the risks faced by Inuit communities. A tailor-made Inuit Nunangat community public safety officer (CPSO) program, modelled off the original Alaska Village Public Safety Officer program launched in 1979, could provide all communities with two or more full-time public safety officers responsible for SAR, all-hazards emergency management, fire prevention, land and marine safety, and emergency medical services, if required. Such a program would build off Inuit Qaujimagatuqangit, existing skills, and the community relationships of the officers, while providing space for the development of new capabilities. A tailor-made training program or academy would ensure that the officers have shared competencies and skillsets.

While specific roles for community public safety officers will need to be co-developed with all interested parties, proponents envisage various tasks that would keep them busy year-round. On the SAR side, CPSOs could lead prevention, training and preparation, administration, response and after-action activities, alleviating some of the burden on volunteer community SAR co-ordinators and responders, and strengthening the safety net that Inuit need to move, live and work safely on the land, water and ice. With the number of SAR cases increasing across much of Inuit Nunangat, these services will become more important moving forward.

Officers could also be engaged in every part of the emergency-management continuum: prevention and mitigation, preparedness, response, and recovery. They could facilitate a whole-of-community approach to emergency planning, ensuring that plans are living documents that reflect local realities, are updated regularly, and are tested through exercises – rather than generic forms collecting dust in a filing cabinet.

Officers could also perform hazard, risk and vulnerability assessments, map out local resources and assets that could be mobilized during a crisis, prepare evacuation procedures, and organize localized training to increase community capacity. During emergencies and disasters, officers could direct the response – their efforts aided by their knowledge of who is most vulnerable, where support and assistance might be required, and how to work with outside organizations. If a vessel plying the Northwest Passage runs into trouble and its passengers must be evacuated to a community, the CPSOs could mobilize and co-ordinate shoreside operations, which are always complex and demanding.

Marine safety, fire prevention and emergency medical services would be important day-to-day roles. The CPSOs could work with fire-marshall offices, other government agencies and volunteer fire departments to promote fire safety, while providing instruction on safe and responsible boating practices. Officers could also work with the existing volunteer ambulance services in communities to provide immediate care during emergency medical calls and to transport critically ill patients.

Through all these activities, CPSOs would be a central point of contact between their communities and outside agencies (including DND/CAF), facilitating the relationship-building that is absolutely vital during emergencies and disasters. Given its broad safety focus, a CPSO program would break down the silos of responsibility that currently exist across the agencies responsible for community safety and security in the North, and would foster a more holistic and co-operative approach.

CPSOs could be located in community resilience hubs – multi-purpose buildings that could function as centres for community safety activities, ranging from serving as emergency operations centres to storing the equipment of ground SAR teams, Coast Guard Auxiliary units, Canadian Ranger patrols and other

community organizations, and to providing a safe space for vulnerable community members during emergency events.

Possible models exist: the public safety officers in place in many Cree communities of Eeyou Istchee; the public safety and fire prevention technician positions that currently exist under the Kativik civil security department in Nunavik; the village public safety officer program in Alaska that has inspired similar approaches in the Yukon and the Northwest Territories (although we do not believe that CPSOs in Inuit Nunangat should take on the law-enforcement/crime-prevention components built into these programs because they would be busy enough with their safety, SAR and emergency-management roles). An Inuit Nunangat CPSO program could take best practices and lessons learned from these models to create a strong foundation from the start – and, in time, perhaps offer a framework for other regions in the North.

The benefits of a CPSO program would extend from the local to the federal level. These officers would make invaluable contributions to the safety of their communities. They would also facilitate the kind of whole-of-society emergency management envisioned by the ANPF – capabilities that are key to the exercise and expression of Canada’s sovereignty.

Critics will no doubt highlight the cost of such a government-funded program, but imagine the savings these officers would generate if they could prevent even a few SAR cases requiring an aerial response from the South, or reduce the number of building fires in the region, to say nothing of the lives they might save.

The federal government has shown its willingness to invest in innovative programming such as Inuit Guardians initiatives, which allow communities to exercise their rights and protect their lands and people, while creating new jobs.²⁵⁶ An Inuit Nunangat CPSO program would be a similarly novel and equitable solution to the unique emergency-management challenges facing the region, providing protection for the communities and answering repeated Inuit calls for greater response training and resources.²⁵⁷ It would be a great way to implement many of the safety commitments in the ANPF, the disaster-resilience component of the national adaptation strategy,²⁵⁸ and the commitment to develop innovative approaches that support community and individual wellbeing throughout Inuit Nunangat.

This initiative would also fit with the commitment to develop new approaches to fund and administer federal policies, programs, services, and initiatives that “support community and individual wellbeing throughout Inuit Nunangat.” The Inuit Nunangat Policy highlights how this geographic, cultural, and political region includes more than half of Canada’s coastline “and major marine areas, including land fast sea ice, inland waters and offshore areas.” Co-managing safety and security programs through a CPSO model would affirm Canada’s respect for Inuit rights and co-management, support Inuit self-determination within the context of specific program and policy areas, and promote greater self-reliance throughout Inuit Nunangat.²⁵⁹

5.4 Transportation Infrastructure and Emergency Response

Northern transportation infrastructure development can support stronger local- and regional-based responses to SAR and emergency response. This infrastructure would also improve the ability of security providers, such as the Canadian Armed Forces, Royal Canadian Mounted Police (RCMP), and Canadian Border Services Agency (CBSA), to respond to exigencies. This can bolster the safety and prosperity of Northern peoples and communities, as long as relationships reflect partnerships that are attentive to Northerners’ concerns. Given that Inuit organizations and territorial governments link infrastructure deficits with security and safety challenges, it is important to highlight the benefits of infrastructure for community- and regional-level security and safety.

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, and the Canadian Rangers play essential roles in SAR, given the distances involved, the paucity of federal and territorial resources in the region, and residents' intimate knowledge of local geography, sea and ice conditions. The results of the Nunavut and Nunavik SAR Projects suggest that this task is becoming more difficult owing to climate change, the erosion of traditional skills, and increased activity in the region.²⁶⁰ If transportation infrastructure investments bring heightened activity to the Arctic, with attendant increases in SAR incidents, this may require further investment and fresh approaches tailored to unique Arctic contexts.

Deep-water ports may also reduce risks associated with northern shipping and increase Canada's capacity to respond to marine incidents. As the Arctic seaways become more accessible and new shipping opportunities emerge, there will be an increased likelihood that ships in need of assistance (damaged ships) will require a place of refuge along Canadian shorelines. In the event of a ship in distress, the damaged vessel may not be able to reach a place of refuge, which is a sheltered berth that allows the vessel to stabilize its condition.²⁶¹ Thus, the absence of deep-sea ports may result in a once salvageable situation escalating into a disaster that requires costly evacuations. For example, in 2016, a 220-foot Canadian fishing vessel struck an iceberg off Iqaluit and began taking on water. The Danish Navy was first on the scene and was forced to escort the sinking vessel to the closest deep-water port in Nuuk, Greenland, almost 500 miles from the initial impact in Canadian waters.²⁶² As this example highlights, the development of deep-water ports, such as the Port of Iqaluit, may help to reduce the severity of a marine accident and prevent unnecessary loss of life.

Royal Canadian Air Force (RCAF) responses to Northern SAR incidents (outside of community-based Canadian Ranger support) are resource-intensive, costly, and often dangerous. For example, in 2013, an access to information request revealed through an internal military memo that the average hourly cost of operating a Hercules aircraft was \$30,792 which, once adjusted for inflation, is approx. \$39,249 an hour in today's dollars. The significant costs associated with Arctic SAR operations amass quickly and can take a bite out of CAF operating budgets. In the summer of 2013, for instance, CAF was tasked with supporting civil authorities when a group of international tourists and Inuit tour guides were stranded atop an ice flow that had drifted away from Arctic Bay near Baffin Island. That SAR incident cost the CAF an astounding \$2.7 million dollars, which does not include costs to RCMP, CCG, or any other local emergency responders.²⁶³

Reducing the number of preventable transport-related accidents benefits communities and the CAF. Furthermore, infrastructure modernization efforts that reduce the likelihood of climate-change induced infrastructure failures are obviously positive, mitigating the need to expend resources in responding to preventable emergencies.

Transportation infrastructure also enables Canada to meet its international legal obligations. The International Maritime Organization (IMO) has divided Arctic waters into SAR coordination and responsibility areas, with Canada bearing responsibility for providing meteorological information, traffic services, and coordination of the eastern part of the Bering Strait, the northern slope of Alaska and the Northwest Passage.²⁶⁴ Furthermore, the Arctic Search and Rescue Agreement (ratified by the members of the Arctic Council in 2013) coordinates international SAR responses in the Arctic.²⁶⁵

By 2018 the responsibility for SAR was moved from the oversight of DND to Public Safety Canada and Emergency Preparedness Canada. Public Safety describes Canada's new approach to SAR as a "Canada-wide horizontal program that integrates organization and resources."²⁶⁶ The National Search and Rescue

Secretariat (NSS) serves as a central coordinator for the National SAR Program which works with federal, provincial/territorial governments as well as air, ground, and marine volunteer SAR organizations. This change puts a greater emphasis on local governments, the coast guard, and volunteer organizations. From a federal transportation planning standpoint, there is merit in developing the capabilities of northern SAR responders located in major northern centers.

In short, infrastructure projects can also bolster the capacity of security providers to manage crises. The ANPF notes that “the continued safety and security of the North depends on strengthened emergency management and community safety, including the enhanced presence and ability to respond of security providers.”¹²⁶ Inadequate or insufficient infrastructure limits redundancy that can be essential to move people and goods into a region in a crisis response situation.¹²⁷ Proper development and maintenance of transport infrastructure is a fundamental requirement for crisis logistics, and a core component of the nation’s emergency management and disaster risk reduction.

Figure 5-1: Map of Infrastructure Assets in Inuit Nunangat and the Canadian North



Source: Library of Parliament, Ottawa, 2019

6. Conclusion: Alignments between Inuit and Defence Team Priorities

As has been the case since the Cold War, the geographic position of Inuit Nunangat makes it an integral part of the defence of Canada and continental defence system. While most Canadian analysts rightly downplay the idea that Canadian or Inuit sovereignty is on “thinning ice,” we need to understand, monitor, and react to changing global dynamics and regional activities that affect security in Inuit Nunangat.

The prioritization of these issues in the new Inuit-Crown Partnership Committee (ICPC) priority area on Security, Sovereignty and Defence has created a new Department of National Defence (DND)-Inuit Tapiriit Kanatami (ITK) working dynamic that intersects with longstanding Inuit priorities. All partners recognize that aligning federal investments with existing Inuit priorities can bring net benefit.

Canada’s defence and security policies and practices must align with its broader national strategy for the Canadian Arctic and the Circumpolar North, which promotes “a shared vision of the future where northern and Arctic people are thriving, strong and safe.”²⁶⁷ Towards this end, implementation of the Arctic and Northern Policy Framework (ANPF), released in 2019, remains a work in progress. While promising “an opportunity for Arctic and northern people, and their institutions, municipalities, organizations and governments, to come together with the federal government to shape and direct change toward better outcomes,” co-implementation plans have been stymied or delayed by the COVID-19 pandemic and other factors. The general ideas offered in the Framework also invite more sophisticated reflection on how to synchronize different strategic priorities with core partners, particularly Inuit rightsholder organizations.

The ANPF promises to address “the need for transformative investments in infrastructure, rather than a remedial approach that only perpetuates a state of crisis.” Inuit leaders have been arguing this for years. Housing, reliable broadband access, transportation hubs and nodes, and energy infrastructure are amongst the highest priorities. The Framework also highlights the imperative to identify and address emerging defence, security, and safety challenges in the face of climate change, technological innovation, and resurgent strategic competition. This echoes Canada’s 2017 defence policy, which describes the Arctic as an “important international crossroads where issues of climate change, international trade, and global security meet.” In *Strong, Secure, Engaged* and other key statements, the federal government pledges to increase Canada’s military presence in the Arctic, improve situational awareness, and support non-conventional security and safety missions such as humanitarian and environmental disaster response.

This begins with more carefully identifying the nature of Arctic threats and the types of investments needed to build or enhance the infrastructure and capabilities to meet them.

There are threats that emanate from outside of the Arctic and pass through or over Inuit Nunangat to strike targets outside of the region. For example, an advanced cruise missile with conventional warheads launched from Russia would likely pass over the Canadian Arctic before striking at a target in the northern continental United States. Sensor systems to detect the launch and track the missile might be based in the Arctic, but they are not primarily intended to defend Canada’s North. Nevertheless, investments in these systems can benefit Inuit – if the Government Canada and Inuit leaders discern opportunities to leverage investments in dual-use infrastructure and sensor systems that secure “information dominance” for Canada and its allies, while simultaneously helping to address persistent communications and transportation gaps in Inuit Nunangat.

In short, the need for surveillance and defence infrastructure in the Arctic invites coordinated investments in “dual-use” capabilities that serve both military and civilian purposes. These include investments in Northern airfields and associated infrastructure, surveillance systems monitoring maritime approaches/internal waters and aerospace, communications infrastructure, enhanced information sharing, and improved navigation safety.

A rapidly warming Arctic and perceptions of greater accessibility have brought surging interests and both an increase in - and new patterns of activities - in Inuit Nunangat such as shipping, destination tourism, and natural resource extraction. While providing benefits to northern economies, such activities bring increased risks, include the possibility of a nautical disaster, air accident, or malign foreign influence.

Threats to the Canadian Arctic emanate from outside the region but target or affect the region itself. Examples could include a cyber attack on critical infrastructure, a foreign vessel running aground, a pandemic, or a company owned and controlled by a non-like-minded state acquiring a port or airfield at a strategic location. Threats in the Arctic include permafrost degradation threatening critical infrastructure, or the failure of a diesel-electric generator powering a community. Investments in Arctic infrastructure must factor in these risks and hazards. This inherently requires coordinated planning and investments amongst all levels of government, Inuit leadership, and Inuit rightholders.

Inuit continue to serve proudly as part of the Defence Team. This includes high rates of service in the Canadian Rangers in communities throughout Inuit Nunangat. The Rangers are not “combat capable” in a conventional sense, and therefore only represent a piece in the larger puzzle of Canadian defence, but they must be recognized and better supported as a stable, integral part of a comprehensive means of detection and control over Canadian lands and waters. For more than seventy-five years, the Rangers have supported the CAF’s domestic operational tasks in a cost-effective and highly practical way, demonstrating how a partnership rooted in mutual respect can assert sovereignty and security without causing “insecurity” for Northern peoples.

Other smart investments at the regional and community levels will be instrumental to realize Canada’s commitment “to empower people and communities to work together for a vibrant, prosperous and sustainable region.” This speaks to the important of resilience. We identify various needs related to search and rescue (SAR) and emergency management that must be addressed for Inuit to feel secure and safe in their homeland. A local level of analysis also invites us to rethink common assumptions about ideas like “accessibility.” The loss of multi-year sea ice in the Arctic Ocean, increasingly variable weather, and the damage to critical infrastructure such as roads and airstrips due to coastal erosion and permafrost thawing may serve to reduce accessibility to many isolated Arctic communities. Constraints on the ability of Inuit to travel safely over the land, sea, and ice may amplify a sense of inaccessibility in the Arctic, further isolating Inuit from service centres located in the south and inhibiting mobility *within* Inuit Nunangat. More robust or resilient infrastructure can help to ensure that vital supply chains and lines of support remain open year-round. Investments in defence capabilities in Inuit Nunangat can also ensure that the CAF and other federal departments and agencies have the ability to respond to emergencies, across the entire continuum of defence-security-safety threats, in a timely and effective manner.

This report reaffirms how the Government of Canada should more explicitly weigh and prioritize defence and security needs, and the investment options to address them, within broader Whole-of-Government and Whole-of-Society contexts. Wherever possible, investments should reflect the identified needs of Inuit, and the benefits of supporting community-based solutions to prevent, prepare and respond to defence and security issues. Clarity of mandates and direction from DND leadership are essential for ensuring internal alignment and reliability as a partner. Joint briefing notes and workplans support this alignment, and these

will benefit from clear mandates from leadership, identification of responsible staff, and shared agreement on measurable indicators of progress over time.

6.1 ANPF and ICPC Tables

In 2013, Rosemarie Kuptana deemed Canada's "failure to consult Inuit on all matters affecting Inuit, including sovereignty and security," as illegal. "Inuit are suffering from a want of dialogue even though this dialogue is constitutionally mandated," she explained. "This manner of governing is not working for Inuit in Canada, particularly on the issue of Arctic sovereignty and security."²⁶⁸

The ANPF and ICPC tables represent mechanisms for Inuit organizations and governments to come together with the federal government to shape and direct change toward better outcomes. The intersection of security and defence with longstanding Inuit priorities means that ITK and Inuit land claim organizations and governments already have familiarity with aspects of this domain. Nonetheless, the opportunity space must be managed appropriately, with due respect for administrative capacity and learning curves, to support regional engagement on a priority area that adds new dimensions to the Inuit-Crown relationship.

The ANPF concludes with a promise that the government will have ten years to "translate its goals and objectives into reality" and advises that federal-territorial-provincial and Indigenous partners will co-develop solutions and new governance mechanisms. Without advanced knowledge of when new defence initiatives will begin or where they will be placed, Inuit leaders will find it difficult to incorporate potential "dual-use" investments in their development plans. When Inuit leaders receiving briefings from the Minister of National Defence and senior officials, it is essential that the information provided be more than Inuit organizations can already glean from previous political statements.

It is important to remember that DND/CAF and other departments and agencies are constrained by their authorities and mandates. Expecting and demanding that the military should address human or environmental security requirements that fall within the jurisdiction of other governments and departments or agencies is unlikely to yield tangible results. Instead, Inuit leadership can craft compelling narratives of how investments in an enhanced national defence and security presence in Inuit Nunangat can also support broader human and environmental security identified in the ANFP and other federal policies, particularly if these are factored into planning and implementation through proactive engagement and grounded in Inuit Nunangat policy. Longer-term, the Government of Canada requires a cultural change to break down departmental silos and better synchronize investment plans in Inuit Nunangat so that it can better serve the holistic security visions articulated by Inuit leadership.

6.2 Indigenous Reconciliation Program

ITK released the *National Inuit Strategy on Research* in March 2018 and its companion Implementation Plan in August 2018. The Strategy articulates Inuit expectations for research, defines Inuit-preferred approaches to building research partnerships, and identifies the actions needed to enhance the effectiveness, impact, and usefulness of research occurring in Inuit Nunangat for Inuit. The Strategy outlines five priority areas: advance Inuit governance in research; enhance the ethical conduct of research; align funding with Inuit research priorities; ensure Inuit access, ownership and control over data and information; build capacity in Inuit Nunangat research.

On 31 May 2023, Defence minister Anita Anand announced the launch of DND's Indigenous Reconciliation Program (IRP), a program that funds opportunities for dialogue between Indigenous partners and National Defence and demonstrates a commitment "to ensuring that First Nations, Inuit, and Métis Peoples are able to provide input on defence issues, and that our institution respects and values the rights

enshrined in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).” This program makes available up to \$1.5 million annually to Indigenous governments and organizations, including local, regional and national representative organizations, in support of engagement, consultation, and information sharing projects and activities, on subjects such as:

- CAF exercises, their impacts on Indigenous Peoples, and opportunities for Indigenous involvement and benefits;
- infrastructure projects, including impacts on and opportunities for Indigenous communities, real property transactions;
- policy research, including on subjects related to the security of Indigenous and Northern communities.²⁶⁹

This funding envelop offers opportunities for ITK, Inuit land claim organizations and governments, Inuit communities, and individual Inuit researchers to participate in defence and security conversations and to conduct additional policy research on Inuit perspectives on and priorities these issues. For example, a systematic study of all statements by Canadian Inuit leaders over the past decade on security priorities would yield additional insights into alignments and points of divergence with federal and territorial/provincial leaders on opportunities, priorities, and concerns related to national defence and security in Inuit Nunangat.

Appendix A: Provisions in Treaties and Inuit Land Claim Agreements About National Defence and Security

Treaty 11 (1921 and adhesion 1922)

Report of Commissioners for Treaty No. 11

Ottawa, Ontario, October 12, 1921.

“They also seemed afraid that they would be liable for military service if the treaty was signed, that they would be confined on the reserves, but, when told that they were exempt from military service, and that the reserves mentioned in the treaty would be of their own choosing, for their own use, and not for the white people, and that they would be free to come and go as they pleased, they were satisfied.”²⁷⁰

Inuvialuit Final Agreement (1984)

7. (16) Agents or employees of governments shall have the right to enter on and cross Inuvialuit lands for legitimate government purposes relating to the management of their programs or enforcement of their laws, and such access, where applicable, shall be in accordance with appropriate laws or approved procedures.
7. (17) Without restricting the generality of subsection (16) and without limiting the authority to enter on lands given to the Department of National Defence by the National Defence Act, access to Inuvialuit lands for military exercises conducted by the Department of National Defence shall take place on the conclusion of arrangements with the Inuvialuit relating to contact persons, areas, timing and appropriate compensation. Agreement by the Inuvialuit shall not be unreasonably withheld.²⁷¹

James Bay & Northern Quebec Agreement (1975)

Various provisions with respect to the Economic and Social Review Panel and development projects note that portions of impact statements “may by exception be ordered withheld by the responsible Minister for reasons of national defence, national security or other justified reasons,” and that “nothing ... shall prejudice the right of the Federal and Provincial authorities to withhold information, the disclosure of which would be contrary to any existing law and regulation or to the interests of national security.”

24.3.12 The right to harvest shall include the right to possess and use all equipment reasonably needed to exercise that right with the exception of the following: explosives, poisons, firearms connected to traps and remote controls, automatic weapons, tracer bullets, non-expanding ball ammunition, air-guns, and other similar equipment, as may from time to time be prohibited by regulations passed upon recommendation by the Coordinating Committee, the whole subject to applicable laws and regulations of general application concerning weapon control, where such control is directed to public security and not to harvesting activity.

Nunavut Agreement (1993)

Right of Access by Inuit

5.7.16 Subject to Section 5.7.18, all Inuit shall have the free and unrestricted right of access for the purpose of harvesting to all lands, water and marine areas within the Nunavut Settlement Area, except the lands described in Section 5.7.17, and without limiting the generality of the foregoing, the said right of access shall extend to all Crown lands, including, for greater certainty, Parks and Conservation Areas, and, to all lands vested in a municipal corporation.

Lands Not Subject to Right of Access

5.7.17 The rights of access granted by Section 5.7.16 shall not extend to:
(a) lands that are
(i) dedicated to military or national security purposes or being temporarily used for such purposes under the National Defence Act ...

Geographic Application

12.12.1 This Article shall apply to Inuit Owned Lands.
12.12.2 This Article shall apply to both land and marine areas within the Nunavut Settlement Area and to the Outer Land Fast Ice Zone. ...
12.12.3 This Article applies to the installations, facilities and activities required for the purpose of national defence. However, such installations, facilities and activities will be exempted from these provisions on an exceptional basis upon certification by the Minister of National Defence that an exemption is required in the interests of national security for reasons of confidentiality or urgency.

Part 5: Government Access

21.5.10 The Department of National Defence (DND) shall have no greater rights to conduct military manoeuvres, including exercises and movements, on Inuit Owned Lands than it has with respect to other non-public lands under generally applicable legislation. For greater certainty, this section shall prevail over Sections 21.5.11 and 21.5.12.
21.5.11 The Minister of National Defence may authorize access to Inuit Owned Lands and water on Inuit Owned Lands for the execution of manoeuvres by the Canadian Forces pursuant to Section 257 of the *National Defence Act* and with the exception of Section 21.5.10 nothing in this Article applies to or affects such access authorized by the Minister of National Defence.
21.5.12 Other than access for those manoeuvres referred to in Section 21.5.11, access onto and across Inuit Owned Lands and water on Inuit Owned Lands for each manoeuvre shall only occur after the negotiation and conclusion of an agreement with the DIO dealing with contact persons, consultation mechanisms and timing thereof and compensation for damages, which agreement may be amended from time to time. Land use fees shall not be charged.
21.5.13 Reasonable advance notice, in Inuktitut, of military manoeuvres shall be given by DND to the inhabitants of any area affected.²⁷²

Nunatsiavut Agreement (2005)

- 4.15.24 Canadian Forces personnel may enter, cross or remain on Labrador Inuit Lands to carry out activities related to national defence and security in accordance with the *National Defence Act*. Canada shall provide the Nunatsiavut Government with advance notice of any activities related to national defence and security in the Labrador Inuit Settlement Area, when it is reasonable to do so.
- 4.15.25 Notwithstanding section 4.15.24:
- (a) the Department of National Defence and Canadian Forces personnel have no greater rights to conduct military manoeuvres on Labrador Inuit Lands than they have with respect to other privately owned lands under Laws of General Application; and
 - (b) access to Labrador Inuit Lands for manoeuvres other than those under section 257 of the National Defence Act shall occur only after the conclusion of an agreement with the Nunatsiavut Government respecting timing, notice to Persons in the area affected, compensation for damages and other matters relating to the manoeuvres.
- 4.15.26 Employees, contractors and agents of the Province, Canada and Crown corporations, and Canadian Forces personnel may enter, cross and remain on Labrador Inuit Lands and, subject to the Agreement, use resources incidental to that access to:
- (a) deliver public programs and projects; ...
 - (e) respond to emergencies; and
 - (f) carry out the terms of the Agreement.
- 4.15.27 Notwithstanding section 4.15.29, if a Person referred to in section 4.15.22, 4.15.23, 4.15.24 or 4.15.26 requires the continuous use and occupancy of Labrador Inuit Lands for more than two years for a purpose stated in those sections, that Person shall obtain a permit or other interest in the land from the Nunatsiavut Government and pay the applicable fee, charge or rent.
- 12.13.1 Subject to sections 12.13.3 and 12.13.4, and for purposes of the Inuit Domestic Harvest, Inuit and their transferees under sections 12.3.15 and 12.3.17 have a free and unrestricted right of access to all lands, Waters and Tidal Waters within the Labrador Inuit Settlement Area outside Labrador Inuit Lands, including National Parks, National Parks Reserves, National Marine Conservation Areas, National Marine Conservation Area Reserves, Marine Protected Areas, Protected Areas, lands vested in municipal corporations, Community Lands and lands belonging to the Crown or over which Canada or the Province has a power of disposal. This access shall not interfere with other authorized uses or the ability of the Crown to authorize uses or dispose of Crown land.
- 12.13.4 The right of access referred to in section 12.13.1 shall not extend
- (a) to lands dedicated to military or national security purposes or being temporarily used by Canadian Forces for those purposes under the National Defence Act;²⁷³

Appendix B: Ministerial Mandate Letters

Prime Minister Trudeau's mandate letters to his Cabinet ministers on 13 December 2019, January 2021 (supplemental), and 16 December 2021 include various directives that relate to Arctic and Northern development, relationships with Northern Indigenous peoples, green infrastructure, and connectivity. Relevant sections directly related to this study include:

Minister of National Defence

- with the Minister of Foreign Affairs, the Minister of Northern Affairs and partners: “work through the Arctic and Northern Policy Framework to develop better surveillance (including by renewing the North Warning System), defence and rapid-response capabilities in the North and in the maritime and air approaches to Canada, to strengthen continental defence, protect Canada's rights and sovereignty and demonstrate international leadership with respect to the navigation of Arctic waters.” (2019)
- Ensure the Canadian Armed Forces have the capabilities and equipment required to uphold their responsibilities through continued implementation of *Strong, Secure, Engaged*, including new procurement, continued investment in infrastructure improvement and planned funding increases. (supp. 2021)
- Work with the United States to expand cooperation on continental defence and Arctic security, including by modernizing NORAD through:
 - Replacing the North Warning System;
 - Deploying new technological solutions to improve surveillance and monitoring of northern and maritime approaches;
 - Modernizing CAF and NORAD command and control systems to deter and defeat aerospace threats to North America; and
 - Investing in infrastructure and capabilities to support operations in the North. (2021)
- Work with the Minister of Foreign Affairs, the Minister of Northern Affairs and partners to defend Arctic sovereignty and implement the Arctic and Northern Policy Framework to create a future where Canada's Northern and Arctic residents, especially Indigenous Peoples, are thriving, strong and safe. You will ensure that Indigenous and Northern communities are meaningfully consulted on its development and benefit from this work. (2021)

Minister of Transport

- Work with the Minister of Public Safety, President of the Queen's Privy Council for Canada and Minister of Emergency Preparedness, Minister of Fisheries, Oceans and the Canadian Coast Guard and Minister of Health, among other colleagues, to ensure the Government of Canada continues to be prepared to proactively mitigate and respond to emerging incidents and hazards. (2021)
- Continue the implementation of the Transportation 2030 strategic plan:
 - Work with the Minister of Fisheries, Oceans and the Canadian Coast Guard to implement the Oceans Protection Plan to deliver 24/7 emergency response for incident management, to increase on-scene environmental response capacity, and to develop near real-time information on marine traffic with Indigenous and coastal communities. (2019)
- In partnership with Indigenous Peoples, continue to implement commitments made under the Oceans Protection Plan, and with the support of the Minister of Fisheries, Oceans and the Canadian Coast Guard, work to launch the next phase of the Oceans Protection Plan to continue efforts to deliver world-leading marine safety systems, increase protection for marine species and ecosystems and create stronger partnerships with Indigenous and other coastal communities, while strengthening marine research and science. (2021)
- With the support of the Minister of Intergovernmental Affairs, Infrastructure and Communities and the Minister of Innovation, Science and Industry, work to reduce and prevent supply chain

bottlenecks in Canada's transportation networks through the National Trade Corridors Fund and legislative and regulatory authorities. Your efforts will complement the work led by the Minister of International Trade, Export Promotion, Small Business and Economic Development and the Minister of Innovation, Science and Industry to strengthen and secure supply chains. (2021)

- Work with partners to begin a process to design and introduce programs that support making Canada's major ports among the most efficient and cleanest in the world. (2019)

Minister of Fisheries, Oceans and the Canadian Coast Guard

- Lead, with the support of the Minister of Transport, the Minister of Innovation, Science and Industry, the Minister of Economic Development and Official Languages and the Minister of Natural Resources, and in consultation with provinces and territories, Indigenous Peoples and business stakeholders, in developing a comprehensive blue economy strategy to help guide future government actions and investments that enable Canada to grow its oceans economy to create good middle class jobs and opportunity for coastal communities while advancing our conservation objectives. (2019; supp. 2021)
- Work with the Minister of Public Safety, President of the Queen's Privy Council for Canada and Minister of Emergency Preparedness, Minister of Fisheries, Oceans and the Canadian Coast Guard and Minister of Health, among other colleagues, to ensure the Government of Canada continues to be prepared to proactively mitigate and respond to emerging incidents and hazards. (2021)
- In partnership with Indigenous Peoples, continue to implement commitments made under the Oceans Protection Plan, and with the support of the Minister of Fisheries, Oceans and the Canadian Coast Guard, work to launch the next phase of the Oceans Protection Plan to continue efforts to deliver world-leading marine safety systems, increase protection for marine species and ecosystems and create stronger partnerships with Indigenous and other coastal communities, while strengthening marine research and science. (2021)
- Increase investments in small craft harbours and work with communities to develop local economic development plans so that harbours better serve the needs of the fishing industry and local residents. (2019)

Minister of Northern Affairs

- Work with the Minister of National Defence, the Minister of Foreign Affairs and partners to defend Arctic sovereignty and implement the Arctic and Northern Policy Framework to create a future where Canada's Northern and Arctic residents, especially Indigenous Peoples are thriving, strong and safe. You will ensure that Indigenous Peoples and Northern communities are meaningfully consulted on its development and benefit from this work. (2021)
- With the Minister of Crown-Indigenous Relations, Minister of Indigenous Services, Minister of Housing and Diversity and Inclusion and Minister of Intergovernmental Affairs, Infrastructure and Communities, and in partnership with First Nations, Inuit and Métis communities, continue to make immediate and long term investments to support ongoing work to close the infrastructure gap by 2030, with a particular focus on expediting investments in Indigenous housing.... (2021)
- In close collaboration with the Minister of Indigenous Services, Minister of Crown-Indigenous Relations and the President of the Queen's Privy Council and Minister of Emergency Preparedness, work with First Nations and provincial and territorial government partners to strengthen the governance and service delivery for First Nations emergency preparedness, management and recovery. (2021)

Minister of Crown-Indigenous Relations

- Work with Inuit to finalize a co-developed Inuit Nunangat Policy and accelerate its implementation, continue work to fully implement Inuit land claim agreements and, as set out in our permanent bilateral process, meet regularly through the Inuit-Crown Partnership Committee to make progress on Inuit priorities. (2021)

- Continue to support Indigenous-led processes for rebuilding and reconstituting their nations and advancing self-determination, and work in partnership on the implementation of the spirit and intent of treaties, and land claim and self-government agreements with appropriate oversight mechanisms to hold the federal government accountable. (2021)
- Support the Minister of Justice and Attorney General of Canada in fully implementing the *United Nations Declaration on the Rights of Indigenous Peoples Act* across government. (2021)

Minister of Indigenous Services

- Supported by the Minister of Infrastructure and Communities, work to co-develop and invest in distinctions-based community infrastructure plans and move forward with addressing critical needs including ... all-weather roads ... in First Nations, Inuit and Métis communities by 2030. These plans should also include new investments to support the operation and maintenance of this infrastructure. (2019)
- Renew and strengthen Canada's relationship with First Nations, Inuit, and Métis communities to advance self-determination through strong economic recovery and growth, including ensuring accessibility of Indigenous business supports:
 - ... Work with other ministers to analyze and, as appropriate, adjust eligibility criteria to ensure that programs are as inclusive as possible. (2021)
- In close collaboration with the Minister of Crown-Indigenous Relations, the Minister of Northern Affairs and the President of the Queen's Privy Council and Minister of Emergency Preparedness, work with First Nations and provincial and territorial government partners to strengthen the governance and service delivery for First Nations emergency preparedness, management and recovery. (2021)

Minister of Infrastructure and Communities

- Require that all provinces and territories identify and approve all of their long-term infrastructure priorities within the next two years and according to the signed bilateral agreements. (2019)
- Launch a new call for proposals under the Disaster Mitigation and Adaptation Fund to address the impacts of climate change, adjusting the program as required to ensure that the most impactful projects are supported, including those related to natural infrastructure, whether they are from small, rural and Indigenous communities or large urban centres. (2019)
- Work with international partners to share best practices around the leveraging of infrastructure to contribute to innovation, resilience and a low-carbon future, supporting the creation of Canadian jobs and attracting infrastructure investment into Canada. (2019)
- As part of Canada's climate plan, conduct Canada's first-ever national infrastructure assessment to help identify needs and priorities in the built environment, and undertake long-term planning toward a net-zero emissions future. (supp. 2021)

Minister of Emergency Preparedness

- Strengthen governance, coordination and integration across all hazards, recognizing emergency management is a whole of society priority, and continue to engage with provinces, territories and Indigenous partners to implement the Federal-Provincial-Territorial Action Plan for emergency management and advance initiatives to enhance Canada's resilience. (2021)
- Work with the Minister of Public Safety, Minister of Fisheries, Oceans and the Canadian Coast Guard, Minister of Transport and Minister of Health, among other colleagues, to ensure the Government of Canada continues to be prepared to proactively mitigate and respond to emerging incidents and hazards. (2021)
- In consultation with Indigenous communities, experts, provinces, territories and municipalities, develop a whole-of-government planning and preparedness strategy to ensure the Government of Canada is fully prepared to protect lives and livelihoods from the catastrophic impacts of climate change. (2021)

- In close collaboration with the Ministers of Indigenous Services, Crown-Indigenous Relations and Minister of Northern Affairs, work with First Nations and provincial and territorial government partners to strengthen the governance and service delivery for First Nations emergency preparedness, management and recovery. (2021)
- Support the Minister of Intergovernmental Affairs, Infrastructure and Communities to build on the foundation of the Disaster Mitigation and Adaptation Fund and continue seeking opportunities to scale the construction of climate-resilient infrastructure across Canada, with a particular emphasis on communities most at risk. (2021)

Minister of Public Safety

- Contribute to broader efforts to promote economic security and combat foreign interference by:
 - Introducing legislation to safeguard Canada's critical infrastructure, including our 5G networks to preserve the integrity and security of our telecommunications systems;
 - Expanding collaboration and information and intelligence sharing with Canadian partners and all orders of government to address security risks in foreign research and investment partnerships ... (2021)

Minister of Environment and Climate Change

- In close collaboration with all colleagues, implement the government-wide climate plan to exceed Canada's 2030 climate goal, *A Healthy Environment and a Healthy Economy*. Work with provinces and territories, Indigenous Peoples and stakeholders on advancing climate action. (supp. 2021)
- Legislate Canada's goal of net-zero emissions by 2050. (supp. 2021)
- As part of Canada's climate plan, work with the Minister of Public Safety and Emergency Preparedness, the Minister of Infrastructure and Communities and the Minister of Natural Resources, and with the support of the Special Representative for the Prairies, to develop a national climate change adaptation strategy and invest in reducing the impact of climate-related disasters, like floods and wildfires, to make communities safer and more resilient. (supp. 2021)
- Finalize Canada's first National Adaptation Strategy in 2022, setting clear goals and indicators to measure progress and strengthen the business case for adaptation. (2021)
- In collaboration with the Minister of Crown-Indigenous Relations and the Minister of Indigenous Services, continue to work in partnership with First Nations, Inuit and the Métis Nation to address climate change and its impacts, and chart collaborative strategies. (2021)
- Invest in the Meteorological Service of Canada to upgrade infrastructure, including information technology, to ensure it continues to effectively perform its vital functions of monitoring changes in the weather, climate, water, ice and air quality, and predicting weather and environmental conditions. (2021)

Minister of Economic Development

- With support from the Minister of Northern Affairs, enhance the Canadian Northern Economic Development Agency's economic development programming with a focus on IDEANorth to allow the Agency to support a wider range of initiatives, including the development of foundational economic infrastructure, such as roads and visitor centres. (2019)
- Recognizing that Canada's air travel network is a key enabler of economic development and opportunity, work with the Minister of Transport and with local communities on measures for the air travel sector that sustain regional air infrastructure, support regional economic development and enable growth in other key sectors such as tourism. (supp. 2021)

Minister of Foreign Affairs

- Work with the Minister of National Defence, the Minister of Northern Affairs and partners to defend Arctic sovereignty and implement the Arctic and Northern Policy Framework to create a future where Canada's Northern and Arctic residents, especially Indigenous Peoples, are thriving,

strong and safe. You will ensure that Indigenous and Northern communities are meaningfully consulted on its development and benefit from this work. (2021)

- Work with me [the Prime Minister], and in close collaboration with other ministers, to further strengthen our partnership with our closest ally, the United States. (2021)
- Work with the Minister of National Defence and the Minister of International Development to expand Canada's engagement with allies, partners and international organizations in order to promote peace and security, provide humanitarian assistance and support international emergency responses. (2021)

Appendix C: Parliamentary Committee Reports

We have conducted a thorough survey of federal parliamentary committee hearings and reports on Northern Affairs, with a focus on national defence, security, and infrastructure.

In June 2019, the Special Senate Committee on the Arctic released its report titled *Northern Lights: A Wake-Up Call for The Future of Canada*. Written as the Government of Canada prepared its new policy framework for the Arctic, this study recommended federal policy changes in areas such as Canada's sovereignty and safety, devolution of federal programs and services, and investments in infrastructure to support the well-being and future prosperity of Arctic communities. In terms of sovereignty, the report cited how:

Arctic residents keenly observed other countries' interest in the region's natural resources and the Northwest Passage. The committee recommends that the Government of Canada ensure the Canadian Arctic security and safety and assert and protect Canada's sovereignty in the Arctic. In the committee's view, actions ensuring prosperous, sustainable and safe Arctic communities are vital to enhance Canada's ability to project its Arctic foreign policy, including sovereignty in the region.²⁷⁴

A section in the report emphasized how "Arctic growth depends on infrastructure development," repeating many of the same general points raised in most government reports. The report made several recommendations with respect to infrastructure (including that the Government of Canada, in partnership with Indigenous and territorial governments, establish an Arctic Infrastructure Bank) but no specific ones with respect to transportation, instead focusing primarily on housing and the need for an action plan to mitigate the effects of climate change on existing and new infrastructure.

Relevant recommendations include:

- That the Government of Canada enhance maritime and aerial situational awareness of the Canadian Arctic, including improving the icebreaking capacity of the Canadian Coast Guard, and equipping the Canadian Rangers with marine capabilities.
- That the Government of Canada address the urgent need to enhance search and rescue and emergency protection infrastructure in the Arctic, and ensure Arctic Indigenous communities are involved in the management of this infrastructure.
- That the Government of Canada, on an immediate basis, establish a robust governance regime to regulate activities in Canada's Arctic waters, including shipping corridors, and bonding and insurance requirements. Such a regulatory regime must include the active involvement and participation of Arctic Indigenous governing bodies and communities.

Many of the recommendations in *Nation-Building at Home, Vigilance Beyond: Preparing for the Coming Decades in the Arctic* (Report of the Standing Committee on Foreign Affairs and International Development, 2019) are focused on ensuring that the government is able to assert (now and in the future) exclusive and effective control over Canada's Arctic waters and territory through domain awareness, regulation, stewardship, and enforcement, all of which can be solidified through meaningful partnerships with Canada's Arctic inhabitants. Relevant recommendations include:

- In close collaboration with territorial governments, as well as Indigenous organizations and Indigenous development corporations, the Government of Canada should work to close the infrastructure gap between Canada's northern and southern communities, with a particular focus on transportation and connectivity. Funding mechanisms should be sufficiently ambitious in scale

as to allow proponents to apply for federal support toward the realization of nation-building projects.

- Whenever there is investment in defence-related infrastructure in the Canadian Arctic, the Government of Canada should conduct an analysis of civilian needs in the surrounding area with the view to ensuring the greatest possible benefit to Northern communities from defence spending.
- The Government of Canada should set a time-bound goal to complete its mapping, according to modern standards, of the most frequently used marine corridors in the Canadian Arctic.
- The Government of Canada should review search and rescue needs on an ongoing basis and in concert with its territorial partners to determine whether air assets should be deployed in the North on either a seasonal or a full-time basis. Should a needs assessment indicate, at any point, that such a forward-deployed capability is required in the North, the government should provide additional funding to the Canadian Armed Forces so that search and rescue services are in no way diminished in southern Canada.
- The Government of Canada should review the forward operating locations used by Canada's fighter jets to determine whether any infrastructure enhancements are required at the existing sites to enable an effective and sustained presence, and whether there should be any new sites in the Canadian Arctic, with the objective of advancing the line of North American defence as far out as possible.
- The Government of Canada should ensure climate change risks are taken into consideration as part of all federally supported infrastructure programs in the North.
- The Government of Canada should work with territorial, Indigenous and local governments to help secure locally driven solutions to the challenges of clean, reliable and affordable energy in the Canadian Arctic.
- The Government of Canada should ensure that federal decisions affecting economic development in the Canadian North reflect meaningful consultations with territorial governments and Indigenous organizations, including with respect to the future development of offshore oil and gas.

A Path to Growth: Investing in the North (Report of the Standing Committee on Indigenous and Northern Affairs, 2019) outlined the lack of basic infrastructure in the Canadian Arctic that affects the region's residents, concluding that "due to the lack of transportation infrastructure, northerners pay substantially more for their goods and services such as food. The electricity rates they pay are also the highest in the country, as they rely mostly on expensive fuel to heat their homes and to operate their businesses. Furthermore, northern communities are facing a housing crisis and are still mostly underconnected – or even unserved – by digital infrastructure. Together, these factors significantly hinder socio-economic development." Relevant recommendations include:

- That the Government of Canada include in its forthcoming Arctic Policy Framework a co-developed process to ensure local and Indigenous perspectives are taken into account in the development and maintenance of northern infrastructure.
- That the Government of Canada consider distinct and northern-specific infrastructure funding; that funding criteria and disbursement mechanisms reflect the realities of the Arctic, such as higher construction and shipping costs, the smaller size and remoteness of communities, and the need to improve the pace of funding decisions; and that this funding and its parameters support the goals of local, territorial and Indigenous governments.
- That the Government of Canada, in partnership with its local, territorial and Indigenous partners, ensure the sustainability and climate resiliency of northern infrastructure by requiring that climate vulnerability assessments be carried out on northern infrastructure projects; and that the results of

these assessments serve to inform adaptation actions that address potential risks associated with a changing climate.

- That the Government of Canada, recognizing that building accessible infrastructure is essential to providing equal opportunities for all northerners, ensure that accessibility assessments are carried out on northern infrastructure projects.

The House of Commons Standing Committee on National Defence (NDDN) *Interim Report on the Defence of Canada in a Rapidly Changing Threat Environment*, released in June 2022, dealt extensively with Arctic defence issues.²⁷⁵ The witnesses (none of whom were Northerners and several of whom do not have a particular expertise in Arctic issues) showed varying degrees of understanding of the issues and offered myriad proposals, the committee offered the following recommendations:

- Recommendation 5: That the Government of Canada continue to invest in modernization of the North American Aerospace Defense Command. As well, on an expeditious basis, the Government should make investments designed to replace the North Warning System.
- Recommendation 6: That the Government of Canada enhance Canada's Arctic and maritime domain awareness by investing in research and development and acquisition of advanced and innovative surveillance technologies. The focus of these efforts could include drones, satellites and other space-based assets, surface and underwater sensors, underwater autonomous vehicles and modern ground-based radar systems. The Government of Canada procure the capabilities that the Canadian Armed Forces needs to ensure Canada's security, sovereignty, and multi-domain awareness in the Arctic and in all of its maritime approaches.
- Recommendation 7: That the Government of Canada strengthen Arctic security and sovereignty by expanding and enhancing equipment, training and logistical support to the Canadian Rangers.
- Recommendation 8: That the Government of Canada increase the presence of the Canadian Armed Forces, both Regular and Reserve, in Canada's North, and invest in the infrastructure required to support this increased presence; and that the Government explore the establishment of additional Reserve units in Canada's three territories. These efforts should be undertaken in consultation with relevant Indigenous peoples and communities.

The Government of Canada's response to the NDDN's report on 17 October 2022²⁷⁶ generally agreed with these recommendations. It noted that "in the context of a rapidly changing threat environment, increased impacts of climate change, and military modernization by Canada's competitors, there is a pressing need to modernize Canada's NORAD capabilities." Furthermore, the Government of Canada committed to improve Canada's aerospace and maritime domain awareness, including ships, key investments to bolster research and development, maritime and underwater surveillance capabilities, procurement of a Remotely Piloted Aircraft System, and (in close coordination with the United States) investments in a "system of systems" to provide NORAD with better situational awareness, including ground-based radar capabilities to enable early warning and tracking of threats, space-based surveillance capabilities, and "enhanced satellite communications, and infrastructure projects, which will be delivered working closely with provinces, territories and Indigenous and Northern communities." The statement emphasized that:

the intent is for these initiatives to support the advancement of Canada's Arctic and Northern Policy Framework, which was co-developed with Indigenous, territorial and provincial partners and reflects their priorities, including the need for greater communication technologies and critical infrastructure investments. One of the Framework's objectives is to ensure that Canada and its Northern and Arctic residents are safe, secure and well-defended, to which modernizing NORAD will contribute. In this context, Canada's intelligence

community, including CSE, assists the Government of Canada in managing the increasingly complex Arctic and Northern threat environment, including by providing intelligence related to Arctic security. National Defence will also work to align implementation of NORAD modernization investments with the Inuit Nunangat Policy.²⁷⁷

The federal government committed to ensuring that “the Canadian Rangers have the support they need to accomplish their mandate,” including “working to update or streamline internal policies and administration to better enable the Canadian Rangers in conducting their tasks.” It noted that “the Canadian Rangers are much-admired for the work they do and the professionalism they demonstrate,” but “they are not soldiers—and training them to become soldiers would fundamentally alter the character of their role and the benefit they provide to Canada and the CAF.” More broadly, efforts to increase the CAF’s presence in the North (particularly in the context of NORAD modernization) would be done “in consultation with Northern provinces, territories, and Northern and Arctic Indigenous governments and organizations.” Infrastructure improvements will include: upgrades to the four forward operating locations (FOLs) in the North; improved fighter infrastructure and NORAD Quick Reaction Alert capabilities at bases across Canada; and additional air-to-air refuelling aircraft to support operations across Canada, including in the North. The federal government’s response explained that:

To ensure that new infrastructure fulfills the needs of the CAF and maximizes broader benefits for Canadians, the Government will deliver these initiatives working closely with provinces, territories and Indigenous and Northern governments and communities. DND/CAF has conducted preliminary engagements with territorial and Northern Indigenous governments, including through the Arctic and Northern Policy Framework, to build relationships, learn about their priorities, and identify opportunities to leverage defence investments to create economic opportunities and finance multi-purpose infrastructure where possible. In addition, a work plan has been developed between Inuit leaders and National Defence through the permanent bilateral mechanism with the Inuit, the Inuit-Crown Partnership Committee as part of the new Sovereignty, Defence and Security priority area.²⁷⁸

The report did not support establishing additional Primary Reserve Units in Northern communities, given that they “do not have a population density nor the infrastructure required to support” these units, and 1st Canadian Ranger Patrol Group already facilitates a military presence across the territories.

Notes

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¹ Kikkert contributed to sections focused on hazards, emergency and disaster management, and search and rescue, particularly sections 3.2, 3.3, and 5.

² DND News Release, “Defence Minister Anand hosts virtual Arctic Security and Defence Dialogue,” 16 May 2022, <https://www.canada.ca/en/department-national-defence/news/2022/05/defence-minister-anand-hosts-virtual-arctic-security-and-defence-dialogue.html>.

³ Harry Flaherty, “Canada can reach its 2-per-cent NATO spending target by investing in the Arctic,” *Globe and Mail*, 12 June 2023.

⁴ Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC), “Arctic and Northern Policy Framework” (2019), <https://www.rcaanc-cirnac.gc.ca/eng/1560523306861/1560523330587>.

⁵ ITK, “Inuit Nunangat Land Area and Coastline,” <https://www.itk.ca/inuit-land-area-and-coastline/>.

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