Arctic Pan-Domain Employment Workshop (APDEW24)
Concepts and Context

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Aim: Pursuant to Canada's April 2024 defence policy update *Our North, Strong and Free* (*ONSF*), APDEW24 was co-hosted by CJOC, JTFN, and the North American and Arctic Defence and Security Network (NAADSN) from 10-11 June 2024 to establish a CAF pan-domain community of practice to facilitate the development of future regional CAF planning and develop broad consensus on the domain effects desired in the Arctic.

Context: *ONSF* articulates a clear policy focus on the Arctic, sending a clear message to DND/CAF:

> "To address new threats through, to and in the Arctic and North, we will prioritize detecting and understanding threats across all military domains, increasing our military's presence, mobility and responsiveness in the Arctic, and robustly responding to threats when and where they materialize. This will also help address challenges to the safety and security of Indigenous and northern communities."

Following the *Pan-Domain Force Employment Concept* (*PDFEC*), campaigning and a pan-domain approach are key to deter and deny competitors and adversaries. The workshop highlighted how developing a common operating picture across DND/CAF is an essential precondition for GoC to leverage all instruments of national power (whole of government and whole of nation). The participants highlighted the value of bringing together SMEs to inculcate an Arctic community of practice, and indicated a desire to convene a similar event on an annual basis. Complementing the ASWG, participants also recommended convening an APDEW-like event with OGDAs to clarify and synchronize Whole-of-Government (WOG) needs and effects.

In terms of timelines, this requires thinking on timelines: 5-10 year window, 10-20 year window. If we face threats in the next five years, what capabilities can we have in place from NORAD modernization and ONSF.

APDEW24 began with detailed briefs by Dr. Whitney Lackenbauer to set the context and to offer a framework to categorize Arctic threats. Key concepts that he introduced to frame subsequent workshop discussions included:

- pan-domain
- sectors of security
- assumptions about "accessibility" across various domains
- levels of analysis
- threats through, to, and in the Arctic
- "Nothing about us, without us"

NAADSN
North American and Arctic Defence and Security Network

A Pan-Domain Approach

The PDFEC articulates the CAF's approach to compete with, contest, confront, and - when necessary – combat Canada's adversaries who "are challenging us in the cyber and space domains as well as in the land, maritime, and air domains. They use information to sow confusion, mask their intentions, oppose our actions, and gain advantage over us. We must meet these challenges across domains and in the information environment."

This approach also recognizes that military power alone is insufficient to deter and defeat the aggressive actions of Canada's adversaries. Accordingly, the military instrument must coordinate more closely with other instruments of national power."

Lackenbauer provided an overview of the five imperatives listed in the PDFEC, as well as the fourteen elements of the strategic-operational environment. In particular, he highlighted:

- **Integrated Operational Approach**, including conventional and irregular forms of warfare as well as military and non-military actions, all applied in diverse combinations, in a non-linear manner, with great fluidity. This requires sound policy providing for suitable authorities, responsibilities, and accountabilities. Often CAF will not have the lead role in GoC actions, so it must be prepared to support actions of other instruments of national power and advise on GoC responses to competition and conflict.
- **Conscious Action**: Every CAF action or inaction sends a message, whether intentional or not, to allies, partners, adversaries, Canadians, and CAF members. Accordingly, leaders must be able to convey the right messages and present a coherent approach, message, and narrative to allies, partners, and adversaries based on robust assessment of the security environment and a deep understanding of international and domestic trends.
- **Pan-Domain Integration**: Our adversaries challenge us, often simultaneously, across the land, maritime, air, cyber and space domains and in the information environment. Consequently, we must discern how to integrate effects across domains (physically, organizationally, and cognitively) and produce converged solutions that are pan-domain from the onset. This requires a comprehensive understanding of each domain's characteristics and how effects converge. This does not mean that every CAF force element must have a full range of pan-domain capabilities, but that each has access to pan-domain situational understanding and effects.
- **Enhanced WoG Collaboration** is a means to break down information stovepipes and close seams that adversaries who are targeting Canada's essential social, political, and economic fabric can exploit. This requires closer horizontal coordination rooted in a shared understanding of the principal threats and Canada's national interests, enabling concerted responses incorporating Canada's diplomatic, informational, military, and economic resources.

“The Most Urgent and Important Task”: Arctic Sovereignty, Security, and *ONSF*

Lackenbauer began with a brief overview of Canada’s Northern Territories and Inuit Nunangat:

- Canada’s three territories account for nearly 40 percent of the country's land mass and have a coastline that is twice as long as the Atlantic and Pacific coasts combined
- About 118,000 Canadians live in the three territories (2021 census), with many living in the territorial capitals of Iqaluit, Yellowknife and Whitehorse
- Indigenous peoples make up 86%of the population of Nunavut, 51% in the Northwest Territories and 23% in Yukon
- **Economic Context:** The region is rich in resource wealth but faces significant growth barriers; the public sector is the largest employer, and the territories are heavily reliant on federal fiscal transfers; uneven availability & distribution of income & employment; and high operating/living costs and diseconomies of scale
- **Political Context:** Governance systems in each territory are unique; Territories and Indigenous Peoples have unique status in the Canadian federation; ongoing devolution / shared jurisdiction with territorial and Indigenous governments
- **Geographic Context:** Vast distances between communities and to southern Canada; limited marine, rail, road, and broadband links, with heavy reliance on air travel; harsh weather conditions and fragile ecosystems that are disproportionately affected by climate change
- **Environmental Context:** Traditional food sources are under pressure; effects of climate change impacting health, safety, and critical infrastructure; health risks associated with contaminated sites and external contaminants/pollutants
- **Socio-Cultural Context:** High rates of poverty, overcrowded housing, crime, negative lifestyle behaviours, and food insecurity; young and growing Indigenous population; cultures in rapid transition
- **Global and Technological Contexts:** Renewed geopolitical interest in Arctic; perceptions of increasing accessibility; global economic and environmental change drivers; increased “connectivity” with the rest of the world (from internet to cell phones) bringing new opportunities and threats

Inuit Nunangat is the Inuit homeland encompassing the four Inuit land claim regions, including the land and water/ice. This region covers more than a third of Canada’s land mass and half of its coastline. In its 2017 Inuit Nunangat Policy, the Government of Canada (GoC) recognizes Inuit Nunangat as a distinct geographic, cultural and political region and supports an Inuit Nunangat

approach to developing, funding, and/or administering federal policies, programs, services and initiatives that apply in the region and/or that support Inuit to whom this policy applies.

Canada's 2017 defence policy, *Strong, Secure, Engaged*, described the Arctic as "an important international crossroads where issues of climate change, international trade, and global security meet." Reiterating longstanding narratives about the Arctic as a region undergoing massive change in an unpredictable and complex security environment, the federal government committed to "increase [the military's] presence in the Arctic over the long-term and work cooperatively with Arctic partners." Rather than promoting a storyline of inherent competition or impending conflict, however, the policy emphasized that "Arctic states have long cooperated on economic, environmental, and safety issues, particularly through the Arctic Council, the premier body for cooperation in the region. All Arctic states have an enduring interest in continuing this productive collaboration"

This emphasis on regional cooperation and "soft" security and safety issues has shifted, particularly since Russia's unprovoked full invasion of Ukraine in February 2024. *ONSF* notes changing threats to Canadian security prompted by three general drivers:

- Climate change, which is "increasing the accessibility of the Arctic" (although this sweeping characterization was later challenged);
- Russia and China as disruptive actors threatening the international order; and
- Disruptive technologies that are redefining conflict and what is required to keep Canada safe and secure.

ONSF places an unprecedented focus on the Arctic – and particularly on Canada's Arctic (DND 2024). Never before has Arctic sovereignty and security factored so prominently in a Canadian defence statement. Even *Defence in the '70s*, which shared the overarching idea that the top priority of the Canadian Armed Forces is the defence of Canada and Canadians, did not confer on the Arctic the idea that it was "the most urgent and important task" for the Canadian military. Neither did the 1987 White Paper on defence, with its three polar projection maps and its emphasis on a new Arctic defence imperative to deter the Soviet Union. Like these previous iterations of intensified Arctic security attention, however, the Department of National Defence has again produced a vision that conflates sovereignty, security, and the need for an expanded and enhanced military presence.

Lackenbauer highlighted the language asserting "the **most urgent and important** task that we face is asserting Canada's **sovereignty** in the Arctic, where the **changing physical and geopolitical landscapes** have created new threats and vulnerabilities to Canada and Canadians" (emphasis added). By linking the defence's priority to Canada's *sovereignty*, the statement evokes a sense of urgency, alleging that environmental changes have increased regional accessibility and thus open new threat vectors for competitors to exploit in terms of the Canadian Arctic. Lackenbauer fully supports the commitment to increase the CAF's presence, reach, mobility and responsiveness in the Arctic, but he is careful to distinguish between *sovereignty* and *security*.

Lackenbauer also emphasized the importance of distinguishing between different **sectors of security**, noting the danger of lumping them together and failing to ensure that appropriate actors with the mandates and authorities to address specific threats do so, rather than "militarizing" all aspects of the broad Arctic security agenda:

Sector	Key Strategic Element / Driver
Military	Great Power Competition spillover
Political	Rules-based order (UNCLOS) and the resilience of the regional governance mosaic
Economic	Extractive resource development (including destination shipping and foreign investment) vs. conservation economy
Environment	Climate change and new patterns of human activity
Society	Stresses on Indigenous peoples

He asked that participants think clearly about which sectors of security specific threats fall within, and whether DND/CAF are the lead or are expected to play a supporting role (and under what conditions).

Lackenbauer then turned to addressing persistent Arctic "myths":

1. Canada's Arctic is undefended

"Thank goodness NORAD wants to exercise their American troops in Canada's Arctic," retired Army commander and former Liberal MP Andrew Leslie asserted in a 13 May 2024 *National Post* story: "someone's got to be out there (in the Arctic) to show presence, and we are not. We are undefended."[1] These are embarrassing strategic messages for a former senior military officer to be sending to our allies and adversaries alike. The myth of Canada's Arctic being "undefended" is absurd, and the idea that Canada does not have anyone in the Arctic to show presence will be highly offensive to Canadians living in the North – and particularly for Indigenous Peoples for whom this has been a homeland since time immemorial. Lackenbauer noted a persistent problem in media coverage that seeks to embarrass the Government of Canada by claiming that we have no military presence in the Arctic, and often shows a dismal disregard for the CAF Arctic concept designed to meet the probable defence threats to and in Canada's Arctic today and in the near-term future. Furthermore, dismissing the Canadian Rangers as a Northern-based Canadian Army Reserve corps, comprised mainly of Indigenous citizens serving in their homelands, could be considered another example of failing to acknowledge and respect the contributions of Northerners

[1] https://nationalpost.com/news/canada/retired-general-says-trudeau-failing-on-defence

to the defence and security of Canada. Lackenbauer showed various maps showing the breadth of CAF activities in the Arctic, recommending that DND/CAF develop more products to dispel the unfortunate myth that we are uninterested in Arctic defence.

2. Arctic States' sovereignty is on "thinning ice"

While grandiloquent proclamations about the precarity of Canada's Arctic sovereignty are a staple in national discourse, these are often grounded in superficial understandings of the legal basis for Canada's sovereignty and the nature of what is being contested. Furthermore, they are often ambiguous about why the CAF should be the preferred method of addressing emergent challenges in sectors of security (political, economic, environmental, and societal) that typically fall outside of the conventional military threat envelope.

What is the nature of the threats facing Canada that imperil our *sovereignty* in the Arctic? Is the military the best instrument to mitigate and counter these threats? Lackenbauer cited a recently re-released book with Dr. Peter Kikkert suggesting that the Canadian military has confused the concepts of Arctic sovereignty and security for fifty years, reminding participants of points raised by DND legal advisor Erik Wang in April 1969 that "it is difficult to see what expanded role the Canadian Armed Forces could usefully play in support of Canada's claim to sovereignty over water between the Arctic islands.... It is <u>not</u> a military problem. It cannot be solved by any amount of surveillance or patrol activity in the channels by Canadian forces." Furthermore, Wang cautioned that "it should not be 'presence' for the sake of 'presence', in the absence of any military rationale. To build a role for Canadian forces merely to satisfy the optical demands of political sovereignty would be to build on shifting sands."[2]

In *ONSF,* the Government of Canada insists that "Canada's Northwest Passage and the broader Arctic region are already more accessible, and competitors are not waiting to take advantage—seeking access, transportation routes, natural resources, critical minerals, and energy sources through more frequent and regular presence and activity." Does this heightened maritime activity in Canada's Arctic waters include foreign navies? Which pernicious actors are "exploring Arctic waters and the sea floor, probing our infrastructure and collecting intelligence"? Are these primarily military challenges, or illegal activities that should be countered and prosecuted using law enforcement and diplomatic tools? Lackenbauer insisted that DND/CAF must be careful about how "sovereignty" is referenced so that messaging does not inadvertently undermine Canada's longstanding sovereignty position or suggest that we are "militarizing" issues like delineating the outer limits of our extended continental shelf, which has no "occupancy" requirement or military nexus.

Foreign Minister Mélanie Joly has promised to release an updated Arctic foreign policy statement this fall. This should help to explain that Canada's Arctic sovereignty is actually well established, and not "tenuous" as pessimistic commentators would have us believe.

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[2] https://www.naadsn.ca/wp-content/uploads/2024/05/CAF_and_Arctic_Sovereignty-rev_ed_2024.pdf

3. Climate change, access to Arctic resources, and uncertainty over Arctic boundaries are driving the hard security agenda in the North American Arctic.

Lackenbauer highlighted persistent myths or misconceptions about the drivers of heightened risk in the North American Arctic. These are often tied to notions that the growing "accessibility" of the region makes it likely that competitors will challenge our sovereignty to steal our resources and challenge the boundaries of our sovereign jurisdiction. Lackenbauer emphasized that strategic global competition, which is spilling over into the Arctic, is the primary driver of heightened conventional military risk in the short to medium term, not regional dynamics (including climate change).

Lackenbauer problematized the generic language about the increased "accessibility" of the Arctic owing to climate change, which is not representative of dynamics in some domains. For example, PDFEC suggests that "Canada's Arctic has experienced warming temperatures and melting sea ice, making the region increasingly accessible to exploitation and military activity" (note the present tense identification of the threat). For its part, *ONSF* suggests that: "Canada's Northwest Passage and the broader Arctic region are already more accessible, and competitors are not waiting to take advantage—seeking access, transportation routes, natural resources, critical minerals, and energy sources through more frequent and regular presence and activity."

Does this logic about a warming Arctic heightening accessibility" apply as generally as these statements would suggest? The US Army Arctic Strategy notes that land forces operating in the Arctic face *constricted* manoeuvrability with wheeled vehicles in warmer temperatures, and that "this challenge is only amplified by extensive bog or wetland areas in the warmer months." Does climate change make our northern air approaches more accessible to competitors, or is the real variable technological development? Even in the maritime domain, Lackenbauer questioned casual assumptions. For example, a recent study by leading Canadian sea ice experts in *Nature* magazine notes that Arctic sea ice has shifted from a perennial (older, thicker ice) to a seasonal (younger, thinner) ice regime, leading to the increasingly common belief that shipping through Canada's Northwest Passage is becoming more viable. Their analysis of recent changes to shipping season lengths along individual sections of the Northwest Passage routes from 2007-2021 shows that multi-year ice flushed southward from high-latitude regions maintains "choke points" along certain route sections, reducing overall shipping season length. This means considerable spatio-temporal variability in shipping season lengths along the southern and northern routes, with parts of the northern route exhibiting a decrease of up to 14 weeks over the 15 years. In their assessment, the variability of shipping season and, in particular, the shortening of the season will affect both international shipping prospects and resupply of many Arctic communities.[3]

Climate change is certainly affecting the Arctic in dramatic ways, but this does not heighten the threat that Russian ballistic missiles, cruise missiles, hyper-glide vehicles and other advanced delivery platforms pose to North America. Most likely scenarios would have strategic weapons

[3] https://www.nature.com/articles/s43247-024-01477-6

pass through the Arctic to strike at higher value targets outside the region. Technological advancements have changed the type and speed of delivery systems, but it is not a fundamentally new threat equation.

Lackenbauer asked that participants pose the following questions before making sweeping assumptions about increased Arctic "accessibility" as a source or driver of new military or security threats:

- Where and how is the Arctic more accessible today?
- How does accessibility vary by domain (air, maritime, land, cyber, space, info), and where does it (and does it not) relate to climate change
- What is common and distinct across Arctic regions?

4. "The Arctic" is a single geostrategic theatre

The phrase "the Arctic" is often used in ambiguous ways. Lackenbauer noted that analysts must be clear about whether they are analyzing dynamics within the entire circumpolar Arctic (the macro-region covering eight countries, including Russia); a particular region of the Arctic (eg. the European Arctic, Bering Strait region, Eastern North American Arctic); a national Arctic (eg. the Canadian Arctic); or a particular national sub-region (such as the Yukon or Nunavut). Flowing from this, he urged analysts to be precise in their threat assessments and points of comparison, suggesting that "Nanisivik is not Nome, Mayo is not Murmansk, and Tuktoyaktuk is not Tromsø."

He also noted that, while *SSE* specifically framed the North Atlantic as a geostrategic centre of gravity, this geographical emphasis is largely missing from *ONSF*. The document is rife with concern about "asserting," "defending," "protecting," and "securing" Canada's Arctic sovereignty, but neither the integrity nor security of the European Arctic nor the larger concept of NATO's Northern Flank are emphasized in any detail. Does the expectation that Canadians' defence priority should be to protect their own Arctic *sovereignty* mean that we should do so at the expense of our commitments elsewhere, particularly in the European Arctic? As Canada's defence capability contracts, should our international commitments follow a similar trajectory in favour of basic national security needs such as protecting Arctic sovereignty? *ONSF* insists that "securing our Arctic will keep North America safe, allow us to support our allies abroad, and contribute to deterring global conflict" – but do our European allies concur that Canadian Arctic homeland defence to assert our sovereignty will make them more secure?

5. Russians believe that they stand to gain from Arctic military conflict / conquest

The Russians are unpredictable, aggressive, and outright attacking the rules-based international order as evidenced by their unprovoked full invasion of Ukraine. The Russians have military assets in their Arctic, so Canadians are at risk of facing a similar invasion?

Much is made of Russia's expanding Arctic footprint. Most of its Arctic military bases are concentrated in Murmansk Oblast and are associated with the Northern Fleet – the maritime leg of Russia's nuclear triad based on the Kola Peninsula. The Kremlin has also built up its footprint along its Arctic coastline (including Wrangel Island, Cape Schmidt, and Kotelny Island bases across the Bering Strait from Alaska), asserting that these are homeland defence measures in

response to NATO's increasingly aggressive presence in the region (an ironic mirroring of what we typically argue in the West). These investments are also rationalized as a way to defend and secure Russia's economic future. While Canada must remain vigilant in monitoring these strategic threats, they should not be ready as Russian preparations to launch a strike or to invade the Canadian Arctic akin to Ukraine because they seek to conquer our lands or waters.

ONSF states that the GoC is "seeing more Russian activity in our air approaches." Russian bomber flights that are routinely intercepted by NORAD do not transgress Canadian sovereign airspace and, while they may fly more aggressive patterns than before, they are not a "new" threat. Furthermore, climate change does not heighten the threat that Russian ballistic missiles, cruise missiles, hyper-glide vehicles and other advanced delivery platforms pose to North America. Most likely scenarios would have strategic weapons pass through the Arctic to strike at higher value targets outside the region (see the Threats Through the Arctic section below). Technological advancements have changed the type and speed of delivery systems, but Lackenbauer suggests that this is not a fundamentally new threat equation in terms of changing nuclear or conventional military threats through or in the Arctic.

Based upon his work in the open-source literature (and reiterating that he does not have access to classified information), Lackenbauer suggests that the primary Russian threats to the Canadian Arctic are "hybrid" threats, particularly in the cyber domain and the information environment. He highlighted various themes in Russia's anti-Western disinformation and propaganda ecosystem that indicate the Kremlin's intentions:

- Russian superiority over the West
- legitimize Russia as the largest Arctic rightsholder
- requirement for Russia to defend its Arctic territory against the US and NATO as strategic competitors
- promote Kremlin statements and its Arctic Development Doctrine, touting Russia's icebreaking and construction programs in the North (including the refurbishing and modernizing of military infrastructure and air-defence systems), and claiming the superiority of Russian weapon systems in the Arctic region
- trumpet the extensive energy resources in the Russian Arctic, and suggests that these are a primary driver of the Americans' covetous interest in the region

Russian narratives also highlight the country's adherence to international law, respect for sovereignty, openness to dialogue, and readiness to discuss common issues in the Arctic, all of which serve as a basis to accuse Canada and its allies of seeking to "militarize" the Arctic region.

6. China is a "peer competitor in the Arctic"

ONSF suggests that "despite not being an Arctic nation China seeks to become a 'polar great power' by 2030 and is demonstrating an intent to play a larger role in the region. The steady growth of its navy, including its conventional and nuclear-powered submarine fleet, will support this ambition. China is also expanding its investments, infrastructure and industrial scientific influence throughout the Arctic region."

Why should we worry about China in the Arctic? Lackenbauer notes that China seeks to leverage all of its tools of state power (diplomatic, information, military, economic) to achieve national objectives, including its "Polar Silk Road." It is also a self-declared "near-Arctic" state that is conducting military intelligence collection and influence activities under cover of economic development and scientific research. Furthermore, it is developing Arctic-capable military and dual-use assets, including ice-capable ships, Arctic satellite communications and imagery, and cold weather drones. Furthermore, it seeks to use economic investment as way to secure a footprint, influence people, conduct espionage, and steal intellectual property.

Lackenbauer insists, however, that Canada should avoid casting China as an "Arctic peer competitor."[4] Despite its effective efforts to leverage its reputation and limited activities to "normalize" its regional presence in the maritime domain,[5] its scientific research icebreakers do not have the same presence, impact, and capabilities as the Arctic state fleets, and its knowledge of the region naturally lags those states' considerably. In the military sphere, the Arctic is not as central or important to China as the writings of many Western Arctic commentators might suggest. Beijing's main preoccupations are still closer to home. Narratives tend to conflate the more hypothetical risk that China poses as an international actor in the Arctic with the real risk that it already poses as a regional actor in the Pacific. Over-inflated or misplaced fears about China's military threat to and in the Arctic may prove to be a strategic distraction, diverting Arctic states' attention and defence resources from elsewhere. In this sense, prematurely elevating China to military peer or near-peer competitor status in the Arctic can pull attention from parts of the world where its capabilities and interests actually warrant such status. Chinese strategists would love to see Canada divert and commit massive resources from supporting Western alliance operations in Asia to the North American Arctic.[6]

Accordingly, *ONSF*'s treatment of China's Arctic interests is problematic in parts, especially as it does not reflect the significant shifts in Beijing's far northern policies in recent years or China's overall reduced presence in the region. First, the paper cites the timeworn assertion that Beijing is seeking to become a "polar great power" by 2030, a claim based largely on a 2014 statement from the country's (now defunct) State Oceanic Administration which detailed the need for China to enhance its scientific and research capabilities at both poles. The phrase used in those remarks, and in subsequent government statements, jidi qiangguo (极地强国), is vague enough to potentially refer to both polar strength but also skills and capability, given that China's polar programmes are still relatively new compared with many other non-Arctic states.[7]

Moreover, in the past decade China's military presence in the Arctic has been nominal at best, commonly in the form of joint operations with Russia, and primarily as signaling exercises towards the West. While China is indeed seeking to rapidly develop its overall naval capabilities, which

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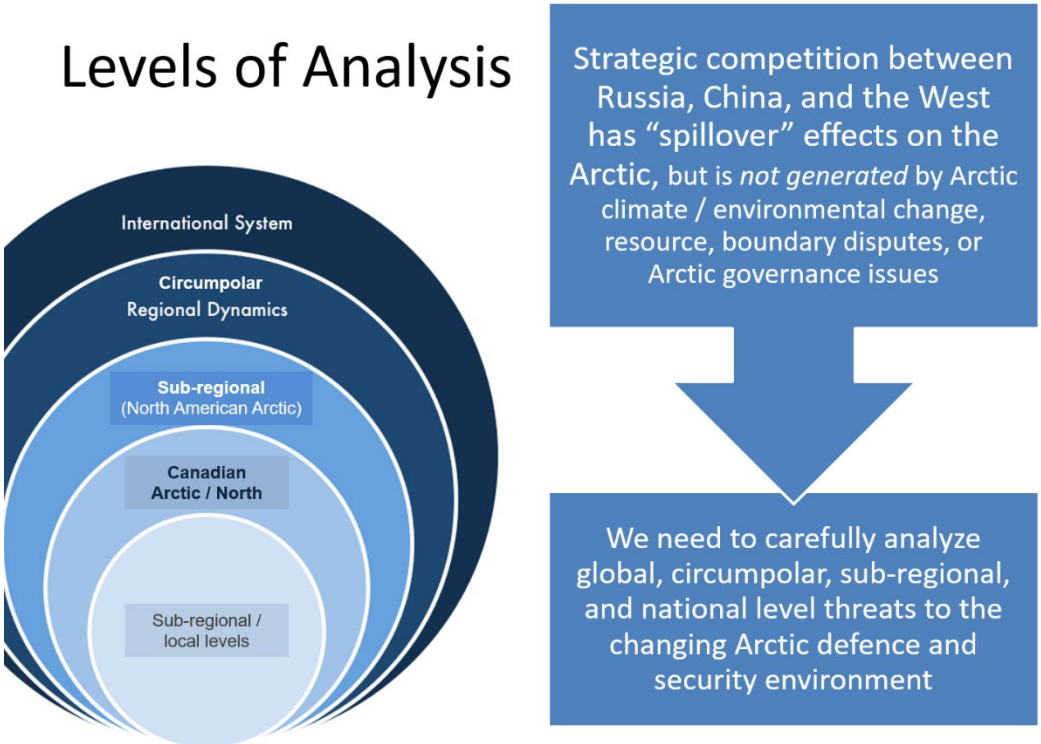
[4] https://media.defense.gov/2022/Sep/28/2003087089/-1/-1/1/07%20LACKENBAUER_FEATURE.PDF
[5] https://www.cgai.ca/trojan_dragons_normalizing_chinas_presence_in_the_arctic
[6] https://www.naadsn.ca/wp-content/uploads/2020/04/20-apr-23-China-Arctic-Gambit-RD-PWL.pdf
[7] https://www.naadsn.ca/wp-content/uploads/2024/04/24apr10-Lanteigne-Quick-Impact-Arctic-Security-China-Russia.pdf

will have significant effects on Indo-Pacific security, it remains to be seen whether this will translate into any sort of shift in Arctic military strategy, especially given China's limited power-projection capabilities in the far north, and Russian sensitivity to its own Arctic sovereignty. The DND paper also curiously notes that Beijing is "expanding its investments, infrastructure and industrial scientific influence throughout the Arctic region." This may have been the case when China and Russia were initially seeking to develop a Polar Silk Road in 2017, and when the Chinese government had ambitious investment plans spanning the Arctic Circle. Since then, however, almost all of China's planned Arctic investments outside of Russia have either stalled or failed. These include railways in the Nordic region, ports in Iceland and Norway, mining in Greenland, natural gas development in Alaska, and the Hope Bay mine purchase in Nunavut which was blocked by the Trudeau government in late 2020. In short, analysts should recognize how the actions of the seven like-minded Arctic states have successfully forced China – which is a competitor but not a peer in the Arctic – to temper its ambitions in recent years.

ONSF states that the GoC is seeing "a growing number of Chinese dual-purpose research vessels and surveillance platforms collecting data about the Canadian North that is, by Chinese law, made available to China's military." Chinese researchers, icebreakers, buoys, and balloons may serve dual-use agendas, but they do not represent conventional kinetic threats. Why characterize the Canadian Arctic as a region facing new, acute military pressures rather than more general national security ones inviting more deliberate coordination of the military instrument with other instruments of national power?



To conclude his first brief, Lackenbauer emphasized the importance of analytical precision, suggesting that Arctic security analysts must apply levels of analysis to situate global, circumpolar, sub-regional, national, and local level threats to the changing Arctic defence and security environment. He argued that strategic competition between Russia, China, and the West has "spillover" effects on the Arctic, but that most Arctic military threats are not generated by Arctic climate / environmental change, resource, boundary disputes, or Arctic governance issues (despite popular misconceptions to the contrary). He also reiterated the importance of precision in terms of domains and sectors of security, which is key to building an Arctic pan-domain campaign plan that is synchronized with other instruments of national power.

Threats Through, To, and In the Arctic: Categorizing Arctic Threats

In his second detailed briefing, Lackenbauer laid out his framework to distinguish between threats "through, to, and in the Arctic" (language adopted in *ONSF*), the evolving hybrid threat environment, the importance of clarity on different federal departments and agencies' mandates and authorities in specific sectors of security and domains, and the spirit of "nothing about us, without us" that guides relationships between Northern Indigenous Peoples, Territorial governments, and the Government of Canada.

His intent was to articulate a framework to conceptualize the origin and destination of specific security challenges rather than bundling them all together as a generic laundry list of "Arctic threats." First, threats passing *through* the Canadian Arctic emanate from outside of the region and pass through or over it to strike targets also outside of the region. For example, a ballistic missile launched from Russia would likely pass over the Canadian Arctic before striking at a target in the northern continental United States. Sensor systems that detect the launch and track the missile might be based in the Arctic, but it would be misconstrued as an *Arctic* threat in a defence of North America context. Second, threats *to* the Canadian Arctic are those that emanate from outside of the region and affect the region itself. Examples could include a below-the-threshold attack on critical Arctic infrastructure, a foreign vessel running aground in Canadian waters with deleterious environmental effects, the introduction of a pandemic, or the acquisition of a port or airfield at a strategic location by a company owned and controlled by a non-like-minded state. Third, threats *in* the Arctic originate within the region and have primary implications for the region. Examples include the failure of a diesel-electric generator powering an isolated community, permafrost degradation threatening critical infrastructure, or the heightened polarization of public debate leading to economic or political disruption. Some threats, such as climate change (which is caused by activities outside the region and thus represents a threat *to* it, while regional and local climate dynamics *in* the Arctic, such as extreme weather, threaten local residents), will straddle these categories.

Lackenbauer argued that a more deliberate and nuanced approach to conceptualizing Arctic security threats, across domains and levels of analysis, can help to determine appropriate scales for preparedness and response by specific stakeholders. This, in turn, can support comprehensive

approaches that do not "militarize" all Arctic threats. It can also encourage investments to empower a broader range of actors to meet existing and emerging challenges across the defence-security-safety continuum.

Threats Through the Arctic: Situating the Arctic in a Global Context

Current North American defence modernization efforts have amplified the debate about the nature of Arctic security in Canada and implications for policy and investment. In early 2020, NORAD commander General Terrance O'Shaughessy argued that "geographic barriers that kept our homeland beyond the reach of most conventional threats" no longer guarantee North America as a "sanctuary," and "the Arctic is no longer a fortress wall … [but an avenue] of approach for advanced conventional weapons and the platforms that carry them."[8] He insisted that "Russia has left us with no choice but to improve our homeland defense capability and capacity. In the meantime, China has taken a number of incremental steps toward expanding its own Arctic presence."[9]

Emerging threats to North America, across all domains, must be situated in the context of continental defence and the longstanding Canada-US defence partnership exemplified by the North American Aerospace Defence Command (NORAD). This binational command has proven effective in deterring, detecting, and defending North America's approaches since the 1950s, and it remains the cornerstone of Canada's defence relationship with the US. Resurgent major power competition and advances in weapons technology pose new threats to continental security, which require NORAD to modernize and evolve to meet current and future threats.

[8] https://www.armed-services.senate.gov/imo/media/doc/OShaughnessy_02-13-20.pdf.
[9] https://www.armed-services.senate.gov/imo/media/doc/O'Shaughnessy_03-03-20.pdf.

NORAD modernization efforts, the integration of layered sensor and defeat systems, and improving the CAF's reach and mobility in the Arctic fall within this alliance construct (and that of NATO). New commitments will require creative thinking about surveillance and detection, interception capabilities, command and control relationships and enhancing targeting capabilities that can allow decision-makers to respond at the speed of relevance. US Northern Command and NORAD highlight the importance of advanced sensors that can detect, track, and discriminate advanced cruise missiles, ballistic missiles, hypersonics, and small unmanned aerial systems at full ranges (as well the platforms that carry these weapons), as well as new mechanisms to defeat advance threat systems (including advanced cruise missiles capable of striking North America from launching positions in the Arctic). Accordingly, "hardening the shield" to project a credible deterrent against conventional and below-the-threshold attacks on North America anticipates new Canada-U.S. solutions that will incorporate Arctic sensors and systems in a layered "ecosystem" of sensors, fusion functions, and defeat mechanisms.

Furthermore, Canada also is working with its NATO allies to re-examine conventional deterrence and how to counter adversarial activities "below the threshold" of armed conflict in the Arctic. *ONSF* notes that "establishing greater presence, reach, mobility, and responsiveness in the Arctic and North … also means that our Arctic waters, airspace, and territory cannot be vulnerable to intrusion or used as an avenue to harm Canada, our closest ally, the United States, or other NATO allies. Our contributions to securing the Arctic are an important component in the defence of NATO's western and northern flanks, and directly support broader NATO deterrence efforts." How this newfound interest in NATO's Arctic posture interacts with Canada's longstanding preference to partner bilaterally with the US on North American continental defence remains to be clarified and instrumentalized.

These "through threats" are often conflated with threats to the Arctic, which leads many media commentators to conflate them with climate change and Arctic regional dynamics – even though they are driven by broader geopolitics. They have an Arctic nexus because there are plans to expand the Arctic footprint to detect, deter, and defeat these threats to the North American homeland writ large – but not because the Arctic is exceptionally imperiled. Lackenbauer laid out the various NORAD modernization commitments announced by Minister Anita Anand in June 2022, as well as the new promises and intentions to "explore options" articulated in *ONSF*. Discerning these "through threats" requires analysts with expertise on broader geostrategic competition more than Arctic analysts, which is why it is important to parse these threats from those originating from Arctic dynamics or those targeting the Arctic specifically. Arctic expertise is essential when it comes to building appropriate relationships with Northern rightsholders and stakeholders who own the lands and are effected by infrastructure built on their lands or near Northern communities.

Threats To the Arctic

Recent newspaper stories are laden with sensational narratives about Russia and/or China launching a military attack on the Canadian Arctic. These are often preposterous, with no clear understanding of either our competitors'/adversaries' intent or capabilities. If an adversary launched a military strike at a NORAD forward operating location in the Canadian Arctic or Canadian Forces Station Alert, it would likely be part of a more general conflict and would be intended to disrupt and distract us from primary theatres elsewhere in the world. Lackenbauer noted that we need to plan and prepare to defend against such scenarios through investments in Arctic defences, but not because our rivals want to steal our Arctic from us. That is confusing the global drivers of conflict that could spillover into the Arctic with regional dynamics at play in the Arctic itself.

Lackenbauer suggested that most of the threats to the Canadian Arctic are non-kinetic and are not traditional military threats. He noted the following "hybrid threat" activities in the Circumpolar Arctic:

- Russian violations of airspace
- GPS jamming
- critical infrastructure interference (including cutting undersea cables)
- fishing vessels as a cover for intelligence gathering and other malign activities
- marine scientific research as a platform for dual-use information gathering
- lawfare
- "tourists" using drones and photography to gather intelligence
- cyber attacks

- dis/misinformation campaigns
- academic espionage
- Chinese (attempted) acquisitions of mining operations at strategic locations or as part of a global strategy to control resources and critical mineral value chains
- weaponizing migration along the Finnish border[10]

He urged further discussion of which of these threats applied in the Canadian context, and which federal departments and agencies would have the lead in identifying, tracking, and responding to them. He also touched on tangible examples of threats that have entailed a military response, including COVID-19 (Op LASER), the recovery of debris from the Soviet Cosmos 954 satellite in 1977, and the balloon incidents of February 2023. It is important to identify how these threats differ from general threats to Canada and North America, and where a differentiated Arctic response is required. This will help to determine which Northern governments, rightholders, and stakeholders should be engaged, and through what governance or engagement mechanisms.

Threats In the Arctic

Lackenbauer noted that most threats in the Arctic tend to fall on the safety and security side of the operational continuum. Accordingly, the CAF plays a supporting role to other government departments and agencies (OGDAs, including to territorial and Indigenous governments through requests for assistance) with respect to safety and security challenges, such as disaster response, environmental degradation, search and rescue (SAR), espionage, organized crime, and other illegal activities. DND/CAF are often uniquely postured to provide this support owing to special

[10] https://www.reuters.com/world/europe/finland-vote-turning-back-migrants-crossing-russia-2024-07-12/

operational challenges, the need for rapid and coordinated responses, and the limited capacity of other partners to respond. *ONSF* explains that:

> As climate change accelerates, the Canadian Armed Forces is being called on with increasing frequency to assist in domestic emergencies, including disaster response and search and rescue operations. Our military must be able to respond when needed, as a force of last resort and while maintaining its ability to defend Canada and North America, support our allies and partners, and contribute to peace and stability abroad.

Climate change impacts, as well as increased hazards to physical infrastructure in the Arctic, also have implications for domestic military operations.

Lackenbauer highlighted how adversaries seek to exacerbate and exploit North-South and Indigenous-State divisions in the Arctic states. 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 also point to significant gaps between Northern Canadian jurisdictions and their southern counterparts, elucidating higher rates of human insecurity in the Canadian Arctic.

"Our Arctic and North is an integral part of our country, home to 150,000 Canadians and generations of Indigenous communities," *ONSF* states. "We have an obligation to work with communities in defending the region and securing their ability to take advantage of opportunities in a rapidly changing environment." Lackenbauer spoke to the Canadian Rangers as a permanent military presence in the Canadian Arctic. Although the Rangers are not tasked to play a kinetic role in Arctic defence, they are a practical and highly effective force enable and force multiplier by providing lightly-equipped and self-sufficient mobile forces in support of domestic operations. They also represent contribute to myriad forms of community and Indigenous resilience, bringing the civil-military divide in a uniquely Canadian form of military service. It is telling that Alaska, Greenland/Denmark, Sweden, and other countries are looking at the Rangers as a potential model for their own engagement with Northern populations. As a strategic reconnaissance screen, the Rangers also serve as grassroots indicators of change in and around their communities. 1st Canadian Ranger Patrol Group, based in Yellowknife with patrols across the three territories, is under-resourced and over-tasked, and it should be a priority when it comes to implementing the vision espoused in *ONSF*.

Lackenbauer also framed GoC policy contexts, including the Arctic and Northern Policy Framework (ANPF), released in 2019, which envisages "strong, self-reliant people and communities working together for a vibrant, prosperous and sustainable Arctic and northern region at home and abroad, while expressing Canada's enduring Arctic sovereignty." The Safety, Security, and Defence chapter speaks to the aim that "the Canadian Arctic and North and its people are safe, secure, and well-defended." Its key priorities include efforts to:

- Strengthen Canada's cooperation and collaboration with domestic and international partners on safety, security and defence issues

- Enhance Canada's military presence as well as prevent and respond to safety and security incidents in the Arctic and the North
- Strengthen Canada's domain awareness, surveillance, and control capabilities in the Arctic and the North
- Enforce Canada's legislative and regulatory frameworks that govern transportation, border integrity, and environmental protection in the Arctic and the North
- Increase the whole-of-society emergency management capabilities in Arctic and Northern communities

Aligned with this broad policy framework, *ONSF* commits to:

> collaborate with Indigenous partners and northern communities to safeguard our security and assert our sovereignty. Our investments in Arctic defence present enormous opportunities for the region. To help realize these opportunities, we are committed to doing things differently—to an inclusive approach to national defence that recognizes that there is nothing to defend if we do not put our people first. We will deepen our dialogue with northern and Arctic stakeholders, including to establish multipurpose northern infrastructure that can support Canadian Armed Forces operations and contribute towards the needs of territorial governments, Indigenous peoples, and Northern communities wherever possible, consistent with the Arctic and Northern Policy Framework. In doing so, we will rely on Indigenous expertise, experience and talent across the region.

This promise to adopt a new approach – and particularly the focus on collaborating with Northern Indigenous partners and community stakeholders – should invite deliberate reflections on fundamental ideas and assumptions about "sovereignty," "security," and "presence." An "inclusive approach to national defence" that places Arctic rightsholders at the forefront and engages with them more substantively is likely to reveal that Indigenous Peoples envisage these concepts in broader and deeper ways than DND/CAF.

Lackenbauer ended with references to Territorial and Indigenous Government priorities with respect to infrastructure. Knowing what these partners have also identified as needs and opportunities will allow DND/CAF to craft implementation plans for *ONSF* that bring tangible benefits to Northern rightsholders and stakeholders and serve a broader Whole of Nation approach.

Final Reflections

The Arctic is inextricably tied to the rest of Canada, to North America, and to the international system as a whole. This interconnectedness brings opportunities for communities, governance, and economic development, and also poses complex, multifaceted challenges. Accordingly, strategic forecasters must situate the Canadian Arctic in global, regional, and domestic contexts to anticipate new challenges, promote effective adaptations to changing circumstances, and identify how the military should be trained and equipped to act decisively in concert with its allies. Anticipating and addressing twenty-first century challenges requires clear, coordinated action in order to leverage the broad and deep expertise of the modern state and civil society. In the defence and security realm, Canada's ANPF emphasizes that meeting "enormous collective challenges requires

coordinated action across the whole-of-government – military capabilities working hand in hand with diplomacy and development." Taken together, the opportunities, challenges, increased competition, and risks associated with a more accessible (and unpredictable) Arctic require a greater presence of security organizations, strengthened emergency management, and improved situational awareness. They also require more fidelity in anticipating and preparing to address different threats through, to, and in Arctic regions.

Next Steps

Building on these initial framing ideas, participants in APDEW24 engaged in substantive discussions on Problem Definition and Desired Effects. These will be the subject of a full workshop report which the NAADSN team will submit by the end of August 2024.

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