

## SUGGESTED READINGS

# Arctic Security<sup>1</sup>

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The Arctic was once described as “High North Low Tension,” but it is now experiencing a geostrategic warming. What security risks [originate in, threaten, and/or travel through](#) the Eastern North American Arctic? This document breaks down current security threats facing the Eastern Arctic through four levels of analysis: International, Arctic, North American, and Individual. Note that this document is designed to give a glimpse into different perspectives surrounding the topic of current Arctic security concerns and should not be taken as an exhaustive list.

The international level of analysis focuses on threats originating outside the circumpolar Arctic such as the threats resulting from environmental security, the encroachment of non-Arctic states (for example China), and the spill over thesis. The spill over thesis speaks to the idea that the Arctic is no longer a region isolated from geopolitics. Security threats and/or problems can spill over and impact the Arctic security environment. A recent example of international spill over can be seen in Russia’s invasion of Ukraine and how that resulted in the pause of the Arctic Council.

The Arctic lens looks at threats emerging from the eight Arctic states within the Arctic and issues surrounding Arctic governance. This Arctic regional level of analysis complements the international level of analysis, but they do have key differences. A good way to understand the difference between these two categories is that the reasons behind the Arctic Council pause falls under the *international* lens but the ramifications and questions regarding regional governance fall under the Arctic category.

The North American level of analysis looks at threats surrounding the idea of continental defence, primarily the North American Aerospace Defence Command (NORAD). Experts agree that NORAD is in dire need of significant modernization. First amongst these modernization priorities are new sensor systems as one cannot defend against threats that they cannot detect.

The last level of analysis looks at threats to individuals and their communities. Subjects include Search and Rescue (SAR), community resilience, and the Canadian Rangers and is meant to illustrate how this deepened understanding of security demands a different way of approaching solutions. This section pushes the reader to think about the local

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<sup>1</sup> This Suggested Readings was produced by a NAADSN graduate fellow or recent postgraduate to provide suggested readings for participants in the Advancing Collaboration in Canada-U.S. Arctic Regional Security (ACCUSARS III) workshop held from 24-25 March 2022.

nature of security threats and the challenges that remote communities have in times of crisis.

As more eyes turn northwards due to climate change, technological advances, and increasing great power competition, it is important to understand that while the region may no longer be an area of “exceptional peace and cooperation” that does not mean traditional interstate military confrontation is imminent. This research highlights different key thinkers on the topic of Arctic security and provides background documentation from a variety of mediums (policy paper, op-ed, report, event recording, podcast, etc.).

### **We invite you to consider the following questions:**

- How does the rise of the Great Power Competition broadly impact Arctic geopolitics?
- Does Russia and/or China pose a threat to Arctic stability?
- What is the role for NATO and NORAD in the Eastern Arctic? How do the two defence alliances relate to each other? Are both needed in the region?
- How could climatic changes alter future defence requirements in the North?

## **International**

**Arctic Monitoring & Assessment Programme. “[Arctic Climate Change Update 2021: Key Trends and Impacts: Summary for Policy-Makers.](#)” *Arctic Council, 2021.***

This Summary for Policymakers is an overview of key findings in the *AMAP Arctic Climate Change Update 2021: Key Trends and Impacts. Summary for Policy-makers* report, which provides updates on key issues and changes since the *Snow, Water, Ice and Permafrost in the Arctic (SWIPA) 2017* assessment and the *Arctic Climate Change Update 2019* report. The report summarizes the latest findings on extreme events; connections between Arctic change and mid-latitude weather’ ecosystem-climate connections, including impacts and feedbacks; and observed (and in some cases projected) societal impacts of Arctic climate change. The Report also provides updated projections of Arctic climate change from the next generation of climate models and scenarios that will be evaluated as part of the Intergovernmental Panel on Climate Change’s Sixth Assessment Report.

**Byers, Michael. “[Crises and international cooperation: An Arctic case study.](#)” *International Relations* 4:31 (2017): 375-402.**

This article contributes the insight that during an international crisis, a pre-existing state of complex interdependence can help to preserve cooperation. It derives the insight from a case study on the International Relations of the Arctic before and after the 2014 Russian annexation of Crimea. The case study is examined through the lens of Robert Keohane and Joseph Nye’s concept of ‘complex interdependence’, as developed in their 1977 book *Power and Interdependence* – a concept which provides the analytical breadth necessary for a multifactorial situation of regional cooperation and conflict. It finds that Arctic international relations had achieved a state of complex interdependence by 2014, and that some important elements of interdependence then disappeared after the annexation

of Crimea. But while most military and economic cooperation between Russia and Western states was suspended, many aspects of regional cooperation continued, including on search and a rescue, fisheries, continental shelves, navigation and in the Arctic Council. The question is, why has Arctic cooperation continued in some issue areas while breaking down in others? Why have Russian–Western relations in that region been insulated, to some degree, from developments elsewhere? The concept of complex interdependence provides some answers.

**Canadian Global Affairs Institute. [“Arctic Stability and Climate Change.”](#) *Defence Deconstructed*, 15 October 2021.**

In this episode David Perry talks with Dr. Heather Exner-Pirot and Dr. Will Greaves and discuss Arctic security threats and how climate change is impacting and/or causing the threats to evolve. Greaves and Exner-Pirot discuss themes such as permafrost thaw, the melting of the Arctic ice cap, increased access to the Canadian Arctic, an increased possibility of maritime disasters with an increased amount of traffic, issues around resources, how the race for resource thesis is not a likely feasible outcome in the next fifteen years, and the question of sovereignty and cooperation. The guests also note that it is important to recognize security threats both in the traditional state-based security lens but also in the community based human security lens.

**Dean, Ryan, and P. Whitney Lackenbauer. [“China’s Arctic Gambit? Contemplating Possible Strategies.”](#) *NAADSN Strategic Perspective*, 23 April 2020.**

This Strategic Perspective argues that China can achieve its goals in the Arctic without using military force but instead working cooperatively with the Arctic states. That when attempting to understand China’s desired role in the region one must look beyond just the Arctic and instead be viewed as simply a part of China’s international agenda. “Instead, this Strategic Perspective suggests that analytical frameworks designed to anticipate China’s place in possible Arctic futures should not just fixate on material gains in that region, but also considerations related to broader international reputation and possible moves to distract Arctic states. Scenarios should also consider China “playing by the rules” and exemplifying “Arctic civility” so that it can build political capital to invest in other regions of the globe that are of greater strategic importance to it. Furthermore, Chinese icebreaking and potential Arctic submarine capabilities should be analyzed for the diversionary value that they made hold for Chinese strategists in a global context, rather than as tools for power projection designed to secure narrow, regional gains in the Arctic itself.

**Greaves, Will. [“What a Biden Presidency Means for Climate Change and Canada.”](#) *Policy Options Politiques*, 10 November 2020.**

Greaves discusses the possible implications that a Biden administration will have on climate change (with a focus on Alaska) compared to the previous Trump administration. The article explains that “[i]n the Arctic, Biden will reinstate the ban on offshore oil and gas drilling, work to expand that moratorium globally, permanently protect ANWR, restore the Arctic Council’s consensus on climate change, and work with the other member-states to address short-lived climate-forcing pollutants like methane and black carbon. In many

ways, Biden's climate and Arctic platform resembles a promise to reset the clock to before Trump took office."

**Lackenbauer, P. Whitney.** "[Threats Through, To, and In the Arctic: A Framework for Analysis.](#)" *NAADSN Policy Brief*, 23 March 2021.

Lackenbauer proposes a framework for understanding Arctic security threats by identifying if the threat goes through the region, originates in the north, or is going to the Arctic. Lackenbauer highlights the difference by through to and in by explaining that threats through the Arctic means that it originated outside the region and has a non-Arctic specific target. Compared to threats to the Arctic mean a threat that originated outside the Arctic but targets something/someone in the Arctic. Threats in the Arctic describe the scenario in which a threat emerges and has a target inside the Arctic region. Lackenbauer explains while all the threats need to be addressed it is important to correctly understand the nature of the threat to mount a proper response.

**Lackenbauer, P. Whitney, Justin Barnes, Heather Exner-Pirot, and Lassi Heininen.** "Concluding Reflections." In [China's Arctic Engagement: Following the Polar Silk Road to Greenland and Russia](#), eds. Justin Barnes, Heather Exner-Pirot, Lassi Heininen, and P. Whitney Lackenbauer, 276-88. Peterborough: NAADSN, 2021.

The diverse perspectives offered in this volume are not indicative of academic "strife," but of in-depth research rooted in diverse methodologies, ongoing discussion, and even vigorous debate. In offering a roadmap to conceptualize key debates about China's Arctic interests, we hope that the contributions inspire further research about how this self-declared "near Arctic state" situates itself and exercises influence in a region that Canada's defence policy tidily describes as "an important international crossroads where issues of climate change, international trade, and global security meet" (DND, 2017). The Chinese government's 14th Five-Year Plan, released in March 2021, explicitly confirms Beijing's interest in developing the "Polar Silk Road," and calls for further engagement with the Arctic region. This document reinforces how economic considerations factor heavily in Chinese polar ambitions, alongside expressed interests in scientific research on climate change, shipping routes, and governance (Lanteigne, 2021). With acknowledgment that Beijing's advocacy for "practical cooperation" in the Arctic is inextricably linked to its broader global goals, academics can play an important role in analyzing the forces that shape China's thinking about the region, as well as how other regional stakeholders and rightsholders perceive and shape China's role and behaviour. Further exploration of how dynamics of cooperation and competition interact across national, regional, and international levels will be welcomed as we deepen and widen our understandings of a "Global Arctic" enmeshed within broader international affairs."

**NASA Global Climate Change Vital Signs of the Planet.** "[Warming Seas Are Accelerating Greenland's Glacier Retreat.](#)" *NASA*, 25 January 2021.

This short article explains how Climate Change is having a detrimental impact on Greenlandic glaciers and how that is in turn increasing global sea levels. It adds an important component to climate change knowledge as by "[g]aining a better understanding of how warming ocean water affects these glaciers will help improve

predictions of their fate. Such predictions could in turn be used by communities around the world to better prepare for flooding and mitigate coastal ecosystem damage. [...] They found that of the 226 glaciers surveyed, 74 in deep fjords accounted for nearly half of the total ice loss (as previously monitored by satellites) from Greenland between 1992 and 2017.” There is a video linked to the page that explains how a glacier melts.

**Poirier, Nathalie, and Mathieu Landriault. “[Sea-Ice Loss and the Arctic Region](#),” *NAADSN Activity Report*, 30 January 2020.**

This activity report highlights findings from a conference that looked at how the loss of sea ice is impacting the Arctic with a focus on how the loss of ice is impacting military operations and how it is impacting Arctic governance and shipping. It explains that the “sea-ice loss in the Arctic region will create a more complex regional landscape. Global warming will not make the ice cover disappear. As highlighted by Conrad Schubert, Sylvain Bernier and Alison Cook, sea-ice loss will make military operations and shipping activities in the region both more complex and dangerous. In this context, the needs of Northerners must be considered in new multilateral arrangements and in media coverage. Past mistakes have increased mistrust: sustained cooperation and exchange however can build a foundation of trust and confidence.”

**Regehr, Ernie. “[Combat “Spillover” – into and out of the Arctic](#).” *Simons Foundation Arctic Security Briefing Papers*, 2021.**

The likelihood that internal Arctic disputes would rise to crisis levels in danger of escalating to armed combat in any foreseeable future is by all accounts remote. The worries about armed combat in the Arctic centre instead on the possibility that war between Russia and NATO away from the Arctic, somewhere in Europe, would spill into the Arctic. In an East/West war in Europe, combat could spill both into and out of the Arctic by virtue of each side seeking advantage by attacking the other’s war-making capacity away from the immediate theater of operations.

## Arctic

**Barclay, Jill. “[A Comparison of Strategies and Policies of the Eight Arctic States](#).” *NAADSN*, 2021.**

This piece compares the Arctic policies of the Arctic States broken down into the following themes: sovereignty, security, economic development, trade, human and social development, Indigenous rights, climate change. Sovereignty is mentioned as a priority for Canada, Norway, Iceland, Denmark, and the US. All Arctic states mention the importance of security and defence. All the states except for the United States highlight economic development and international trade is mentioned by Canada, Denmark, Norway, Iceland, Finland, and Sweden. For the human and social development index it is discussed by all the states except for Iceland and Denmark. Indigenous Rights and the Environment are highlighted by all eight Arctic states.

**Charron, Andrea.** [“Common Ground: Why Russia and Canada Should Cooperate in the Arctic.”](#) *Carnegie Moscow Center, 2021.*

This brief piece highlights similarities between Russia and Canada and explains that the two states have a lot to lose if they refuse to cooperate. Charron argues that “Of all the Arctic states, Canada and Russia’s Arctics are the most similar in terms of geography, climate, and development potential. [...] But there are also differences that are stark, concerning, and growing in intensity. Now is the time to seize common ground.” In terms of similarities this piece describes their attitudes towards northern institutions and principles of good governance, respect for the United Nations Law of the Sea, and the fact that both states need to improve their relations towards their respective northern indigenous peoples. In terms of differences, she looks at northern economics, and how the growing great power competition is making it harder for Canada and Russia to cooperate in the Arctic.

**Exner-Pirot, Heather.** [“Between Militarization and Disarmament: Challenges for Arctic Security in the Twenty-First Century.”](#) In *Climate Change and Arctic Security*, eds. Lassi Heininen and Heather Exner-Pirot, 91-106. Cham: Palgrave Pivot, 2020.

The period of regionalization that the Arctic has enjoyed since Gorbachev’s famous Murmansk Speech in 1987 has brought stability and peace. Ironically, however, it has not led to disarmament, despite the initial premise of developing the Arctic region into a ‘Zone of Peace’, with an Arctic Council focused on demilitarization and arms control issues. Why have issues of militarization fallen so far off the Arctic states’ political agenda? This chapter will provide an historical overview of disarmament and demilitarization discussions in the Arctic, including coordination around cleaning up nuclear and radioactive waste. It will then turn to more contemporary issues around militarization: the threat of an arms race in the region, an absence of fora to discuss issues of military security; and the geopolitical dynamics, especially concerning Russia, that make Arctic demilitarization efforts so challenging. The chapter will conclude with an assessment of the short and long-term security trends in the region and strategies for more explicit peacebuilding, including demilitarization.

**Greaves, Wilfrid.** [“Securing Sustainability: The Case for Critical Environmental Security in the Arctic.”](#) *Polar Record* 6:52 (2016): 660-671.

The politics, economies, and ecology of the Arctic region are experiencing fundamental transformation driven largely by human-caused environmental change. This article presents a critical account of environmental security in the Arctic. It outlines the environmental changes transforming the Arctic and theorises the Arctic as a regional environmental security complex in which conditions of security for state and non-state referent objects are predicated on a particular ecological context. It then surveys state- and human security issues in the Arctic and argues that environmental change has destabilised the ecological base on which the contemporary Arctic as a cooperative region supportive of human activity has been built. The article concludes by outlining alternative ways of conceiving of Arctic security that are more compatible with maintaining the region's ecological base and suggests that dominant approaches to Arctic security are pathological because they remain premised on the control, extraction, and consumption

of hydrocarbon resources. It argues that, in the context of the geological Anthropocene, security cannot be sustainable if it fails to address the relationship between human wellbeing and human-caused environmental change or informs practices that further contribute to environmental change.

**Huebert, Rob. “[The New Arctic Strategic Triangle Environment \(NASTE\)](#).” In *Breaking the Ice Curtain? Breaking the Ice Curtain? Russia, Canada, and Arctic Security in a Changing Circumpolar World*, eds P. Whitney Lackenbauer and Suzanne Lalonde, 75-92. Calgary: Canadian Global Affairs Institute, 2019.**

In this chapter, Canadian political science professor Rob Huebert assesses how the Arctic fits into the evolving strategic postures of Russia, the United States, and China. In contrast to his earlier “sovereignty on thinning ice” and “perfect storm” hypotheses,” he emphasizes that potential Arctic conflict will not emanate from disputes over Arctic resources or territory but from the “spill-over” effects of broader strategic rivalry. Driven by its opposition to NATO expansion and a desire to recapture the international status of the former Soviet Union, Russia has been modernizing and expanding its armed forces, particularly its strategic weapon systems based in the Arctic. Huebert asserts that Russia’s goal is to leverage these regional weapons to achieve its interests globally, which has provoked a nascent security dilemma. Strategic weapons are drawing the American military into the Arctic, given that American strategic doctrine calls for a strong counter-force effort against opposing nuclear forces. Conversely, the American development of a limited ballistic missile defense shield partially based in Alaska invites China and Russia to develop capabilities to neutralize it. Furthermore, Huebert contends that China’s strategic competition with both Russia and the United States will inevitably draw it into the region, given its importance as a theatre for submarine forces. Ultimately, in a growing great power competition in the Arctic region, Huebert implies that Canada could find itself pushed to the margins in the New Arctic Strategic Triangle Environment (NASTE) that he suggests is taking form.

**Konyshev, Valery, Alexander Sergunin, and Sergei Subbotin. “[Russia’s Arctic Strategies in the context of the Ukrainian Crisis](#).” *The Polar Journal* 1:7 (2017): 104-124.**

This study aims to examine Moscow’s Arctic policies in the wake of the Ukrainian crisis. Particularly, it tries to explain why the Kremlin – in contrast with its strategies in the post-Soviet space – opted for a cooperative model of its behaviour in the High North. Furthermore, this paper discusses the question whether Moscow has radically changed its Arctic strategies in the context of the Ukrainian crisis or its course basically remained the same? Based on the analysis of Russia’s principal doctrinal documents, this article explores Moscow’s threat perceptions and its strategic priorities in the Arctic. The authors emphasise the inward-, rather than outward-looking nature of Russia’s Arctic strategy which focuses on numerous economic, societal, environmental and socio-cultural problems of the Russian North. In fact, Moscow’s international strategy in the region is subordinated to its domestic needs. On the other hand, Russia’s preoccupation with its internal problems does not preclude the Kremlin from a rather assertive international course when it comes to the protection of Russia’s national interests in the Arctic. In this context, the authors analyse Moscow’s renewed claim on the expansion of the Russian continental shelf and military modernisation programmes. In sum, the authors believe

that Russia is serious about being a responsible and predictable actor who is interested in fostering regional cooperation and strengthening multilateral regimes and institutions in the Arctic.

**Lackenbauer, P Whitney.** [“Why Fear Russia in the Arctic? Contemplating Scenarios as an Exercise in Assumption-Testing and ‘Red Teaming.’”](#) *NAADSN Strategic Perspectives*, 4 May 2020.

Dr. Lackenbauer describes Russia and Canada as Arctic “frenemies”, and he discusses possible scenarios of how to understand Russia that run counter to his typical way of understanding the relationship and in doing so highlights possible ways of understanding Russia from a more traditional Realist lens. The piece explains that the “[m]essaging from both countries, however, combines elements of strategic deterrence and the idea that the region should retain its status as a “territory of dialogue” and cooperation – or, at the very least, non-conflict.[...] offer these neither as probable threats nor “actionable” recommendations. Instead, they are merely offered as part of ongoing exercises to encourage a more fulsome range of thinking on this subject—exercises that I am sure Russian thinkers are undertaking with respect to Canada and its NATO allies.”

**Lackenbauer, P Whitney, Troy Bouffard, and Ryan Dean.** [“Effects of Recent Developments on Arctic Regional Governance.”](#) *NAADSN Activity Report*, 2022.

This closed session of the Arctic Academic eTalks was held during a rapidly changing situation, with select participants providing authoritative perspectives to two developments that occurred just prior to the event, including 1) a joint statement from Canada, Finland, Iceland, Kingdom of Denmark, Norway, Sweden, and the United States as member states of the Arctic Council, and 2) an official statement from the RAIPON organization. The purpose of the event was to provide a rapid, initial assessment of how the developments might be understood in terms of impacts to regional governance. ‘Governance’ is a leading indicator as a metric for Arctic stability, which the U.S. Department of Defense monitors and studies closely to maintain awareness and understanding in support of national security-related efforts led by the U.S. State Department. [...] Participants also discussed the press release by the Russian Association of Indigenous Peoples of the North Russian (RAIPON) dated 1 March that offered justification and support for the invasion of Ukraine, implying an aspect of “militarizing” involving the Arctic Council by way of RAIPON as a Permanent Participant (PP) in the organization (despite the charter mandate prohibiting military security as part of Arctic Council activities and discussions). While the Kremlin’s political purge of the RAIPON leadership and its replacement with Putin loyalists a decade ago had already compromised the integrity of that Indigenous organization, RAIPON’s recent press release in support of the invasion of Ukraine demonstrates a new level of Russian state coercion and use of the PP as a proxy to advance its message through Arctic Council circles.

**NAADSN.** [Did the Cold War Ever End? The New Arctic Security Triangle Environment.](#) *NAADSN Ideas Series Event*, 2020.

This installment of the NAADSN Ideas series sees Dr. Rob Huebert discuss how the Cold War never ended in the Arctic. Note there is an activity report and presentation slide deck



attached to the video. Throughout the presentation Dr. Huebert asks the question of how we should understand the factors that are driving the Arctic security regime and discusses three possible hypotheses. The first is the Arctic Exceptionalism thesis, the second is that Arctic security is just part of international spillover, or third that the Arctic is experiencing a never-ending Cold War. Huebert concludes that it is hypothesis three that is most likely correct and presents what he calls the “New” Arctic Strategic Triangle Environment (NASTE). Through the framework of NASTE Huebert looks at and explains Chinese, Russian, and American actions and concludes with touching on what this all means for Canada.

**Østhagen, Andreas, Gregory Levi Sharp, and Paal Sigurd Hilde. “[At Opposite Poles: Canada’s and Norway’s Approaches to Security in the Arctic.](#)” *The Polar Journal* 1:8 (2018): 163-181.**

Canada and Norway are similar in many ways. They share a strong commitment to international law and humanitarian issues, consistently rank amongst the most developed countries in the world, and have aligned themselves with the United States on security matters. They are also two of the five Arctic coastal states that have most actively engaged in northern issues over the last decade. Yet, on the issue of security in the Arctic, their interests have historically differed. This difference came to the fore during the governments of Stephen Harper (2006–2015) and Jens Stoltenberg (2005–2013). This article compares the divergent approaches to security and national defence in Canada and Norway under the Harper and Stoltenberg governments. It asks what role traditional military concerns in the circumpolar region had for the two countries during the period, and how threat perceptions in Ottawa and Oslo shaped their respective Arctic policies. We argue that, to understand the contrasting approaches to Arctic security, two factors are key: (1) the inherent difference in the two countries’ approach to, and utilisation of, NATO as a defence alliance; and (2) a clear difference in the role the Arctic holds for security considerations in the two countries given their disparate geographic locations. Ultimately, we make the case that to understand the different approaches adopted by Canada and Norway during the period examined, the Arctic needs to be understood not as one uniform region, but instead as a series of sub-regions where the dominant security variable – Russia – is present to a greater or lesser degree.

**Pincus, Rebecca. “[Three-Way Power Dynamics in the Arctic.](#)” *Strategic Studies Quarterly* 1:14 (2020): 40-63.**

The Arctic is an emerging region of great significance to US-China-Russia great power competition. This is due to the concentration of natural resources in the Arctic, as well as its future use as a transportation corridor between the Pacific and Atlantic. Russia’s dominant position in the Arctic complicates the US-China dyad. While most high-level US security strategies and discourse identify the return of great power competition as the dominant current security paradigm, China and Russia are generally treated in isolation from each other. However, when it comes to the Arctic, China-Russia cooperation is a crucial factor to consider when formulating US strategy. This article places Chinese ambitions in the Arctic in the context of Chinese grand strategy and assesses the basis of, and prospects for, Chinese-Russian Arctic cooperation. It also advances a three-track framework for understanding Chinese-Russian cooperation in the Arctic—economic, military, and political—in which issues of control and trust are contested.

Regehr, Ernie. "[Cooperative Security and Denuclearizing the Arctic.](#)" *Journal for Peace and Nuclear Disarmament* 1:2 (2019): 274-296.

Geography alone will continue to ensure that, if the United States and Russia place nuclear deterrence at the centre of their security strategies, both offensive and defensive systems will be deployed in the Arctic. As changing climate conditions also bring more immediate regional security concerns to the fore, and even as east-west relations deteriorate, the Arctic continues to develop as an international "security community" in which there are reliable expectations that states will continue to settle disputes by peaceful means and in accordance with international law. In keeping with, and seeking to reinforce, those expectations, the denuclearization of the Arctic has been an enduring aspiration of indigenous communities and of the people of Arctic states more broadly, even though the challenges are daunting, given that two members of that community command well over 90% of global nuclear arsenals. The vision of an Arctic nuclear-weapon-free zone nevertheless persists, and with that vision comes an imperative to promote the progressive denuclearization of the Arctic, even if not initially as a formalized nuclear-weapon-free zone, within the context of a broad security cooperation agenda.

Rowe, Elana Wilson. "[Analyzing frenemies: An Arctic repertoire of cooperation and rivalry.](#)" *Political Geography* 76 (2020): 1-10.

Intensive transnational cooperation and manifestations of the NATO-Russia security rivalry have endured for over 30 years in the post-Cold War Arctic. Drawing upon the concept of repertoires from the social movement literature, this article seeks to make a conceptual contribution as to how we might better analyse and articulate the simultaneity of these practices and narratives of cooperation and rivalry in the circumpolar region. Repertoires are typically defined as bundles of semi-structured/semi-improvisational practices making up a context-contingent performance (for example, by civil society towards the 'state'). These repertoires are argued to be created and performed in 'contentious episodes', rather than structured by long-term trends or evidenced in single events. Translated to global politics, a repertoires-inspired approach holds promise for privileging an analysis of the tools and performance (and audience) of statecraft in 'contentious episodes' above considerations of how different forms of global order or geopolitical narrative's structure options for state actors. The emphasis on the performance of statecraft in key episodes, in turn, allows us to consider whether the interplay between the practices of cooperation and rivalry is usefully understood as a collective repertoire of statecraft, as opposed to a messy output of disparate long-term trends ultimately directing actors in the region towards a more cooperative or more competitive form of Arctic regional order. The article opens with two key moments in Arctic politics – the breakup of the Soviet Union and the 2007 Arctic sea ice low. The strong scholarly baseline that these complex moments have garnered illustrates how scholars of Arctic regional politics are already employing an episodic perspective that can be usefully expanded upon and anchored with insights and methods loaned from social movement literature on repertoires. The 18-month period following Russia's annexation of Crimea is then examined in detail as a 'contentious episode' with an attending effort to operationalize a repertoires-inspired approach to global politics. The article concludes

that a repertoire-inspired approach facilitates systematic consideration of the mixed practices of amity and enmity in circumpolar statecraft over time and comparison to other regions, as well as offers one promising answer to the growing interest in translating the insights of constructivist scholarship into foreign policy strategy.

**Staun, Jørgen. "[Russia's strategy in the Arctic: Cooperation, not confrontation.](#)" *Polar Record* 3:53 (2017): 314-332.**

Russia's strategy in the Arctic is dominated by two overriding international relations (IR) discourses – or foreign policy directions. On the one hand, there is an IR-realism/geopolitical discourse that puts security first and often has a clear patriotic character, dealing with 'exploring', 'winning' or 'conquering' the Arctic and putting power, including military power, behind Russia's national interests in the area. Opposed to this is an IR-liberalism, international law-inspired and modernisation-focused discourse, which puts cooperation first and emphasises 'respect for international law', 'negotiation' and 'cooperation', and labels the Arctic as a 'territory of dialogue', arguing that the Arctic states all benefit the most if they cooperate peacefully. After a short but very visible media stunt in 2007 and subsequent public debate by proponents of the IR-realism/geopolitical side, the IR-liberalism discourse has been dominating Russian policy in the Arctic since around 2008–2009, following a pragmatic decision by the Kremlin to let the Foreign Ministry and Foreign Minister Sergey Lavrov take the lead in the Arctic. The question asked here is how solid is this IR-liberalist-dominated Arctic policy? Can it withstand the pressure from more patriotic minded parts of the Russian establishment?

**Teepie, Nancy. "[Great Power Competition in the Arctic.](#)" *Network for Strategic Analysis*, 13 April 2021.**

This policy report explores the extent to which the concept of Arctic Exceptionalism collides with the return to great power competition (GPC), particularly Russia's resurgent strategic behaviour in the High North and China's attempt to increase its influence in and access to the Arctic region." Throughout the report, Teepie looks at the Arctic exceptionalism thesis and the return to GPC in the Arctic with a focus on the rise of Russia and China in the region. The report ends with a great chart that shows the cooperative and competitive elements of Russia, China, and the United States in the Arctic.

## North America

**Canadian NORAD Region Public Affairs. "[Arctic Survival and Search and Rescue Key Topics during Sixth Arctic Airpower Seminar.](#)" *North American Aerospace Defense Command*, 18 February 2021.**

This article reports on the status of northern search and rescue and highlights the challenges with conducting SAR operations in the Canadian Arctic through a report about JABAS. JABAS or the Joint Agile Basing Airpower Seminar, brings together different stakeholders (private, public and military) to discuss challenges that accompany Arctic air operations. This particular report looks at the first seminar of a two part series that is focused on Arctic search and rescue and survival. The report highlights the importance of

time in relation to the survivability gap, a key challenge in launching a SAR air based mission in the Canadian Arctic. “There is notably a very small window to enable or aid in a potential crash in the Arctic. Without defeating time and distance by moving SAR locations closer, no matter how much gear pilots have, without specific Arctic training, there is a very high likelihood they will not survive before SAR arrives.”

**CGAI Podcast Network. “[Modernizing Continental Defence.](#)” *Defence Deconstructed*, 29 January 2020.**

David Perry discusses Canada’s efforts to modernize continental defence with Dr. James Fergusson. This conversation is focused and stems from the first phone call between Canadian prime minister Justin Trudeau and American President Joe Biden. Discusses the possible difference between what Canada and the United States understand what NORAD modernization means, Canada focuses on the North Warning System and the United States views it as a much bigger project. Fergusson discusses the need for a multi-domain approach to continental defence due to the current nature and evolution of military technologies. Fergusson discusses the idea of how NORAD modernization may impact the Canadian defence budget and Canada/U.S. cost sharing arrangements in terms of NORAD historically and posits what the future agreement could hold.

**Charron, Andrea. “[Beyond the North Warning System.](#)” *War on the Rocks*, 7 September 2020.**

The article discusses NORAD modernization and how the current NWS needs to be modernized in order to respond to current and emerging threats. Charron reminds the reader that despite the need to modernize the NWS, the NORAD modernization requires more than just updating the NWS radar sites. And that “Upgrading the North Warning System exclusively in a NORAD context is not sufficient. Canada and the United States need new sensors capable of dual-use data and information collection for military and civilian government agencies and allies in multiple domains including land, space, maritime, and subsurface zones, in addition to the aerospace domain. And these sensors — which will be subject to probing, denial of service, and cyber attacks — are but one layer in an ecosystem (beyond even system of systems) informed by a reconsideration of what it means to defend North America.” Charron remarks that with the rise of the Great Power Competition Canada, and the United States (and their allies) need to work together to ensure continued domain and situational awareness across the Arctic.

**Dean, Ryan, and Nancy Teeple. “Introduction: The Missing Chapter of Strong, Secure, Engaged.” In [Shielding North America: Canada’s Role in NORAD Modernization](#), eds Nancy Teeple and Ryan Dean, 1-26. Peterborough: NAADSN, 2021.**

This volume explores Canada’s role in the modernization of North American defence within an evolving integrated all-domain concept that addresses current gaps in awareness between domains (i.e., sensors), data collection, fusion, and access. Ultimately, NORAD aims to renew the credibility of its deterrent capability to defend North America. It involves the integration of the aerospace, cyberspace, land, and maritime domains, with command and control (C2) to close the gaps and seams that adversaries can exploit with new missile technology, unmanned systems, and even undetectable underwater vehicles.

Information is a key domain in this initiative. Increasing the sources of information collection through expanding the sensor system and reducing the stove-piping of information collection, analysis, and sharing, can drastically reduce the time for effective decision-making to respond to threats in their earliest phases. The ability to respond to threats across various domains broadens the available deter and defeat options, better protecting North America.

**Lajeunesse, Adam, and P. Whitney Lackenbauer, “[Arctic Security: A Canadian Perspective](#).” *The Watch Magazine*, 2021.**

The brief article concludes that “the emergence of new defense and security threats to the North American homeland is reigniting important discussions about where the Canadian Arctic fits. Moving beyond outdated “sovereignty on thinning ice” frames is essential for political support to deploy the right components of an integrated, layered, defense ecosystem that is essential to defend our shared continent. Interoperability and information sharing between Canada and the United States, as well as other trusted allies and partners, is integral to future security. An essential precondition is that Canada is clear on what it is defending and against which type of threat.”

**Regehr, Ernie. “[The North Warning System \(NWS\) and “What We Cannot Defeat”](#).” *Simons Foundation Arctic Security Briefing Papers*, 2020.**

When a Canadian Armed Forces official recently told an Ottawa security conference that “we cannot deter what we cannot defeat, and we cannot defeat what we cannot detect,” his audience may well have heard it as the credible proclamation of a prudent and resolute defence posture. In truth, the statement seems to run counter to decades of defence policy and practice. It ignores the inconvenient reality that there is no defence against a nuclear attack, even though current and planned early warning systems ensure that such an attack would be reliably detected.

## Community

**Kikkert, Peter, and P. Whitney Lackenbauer. “[Enhancing the Canadian Ranger Role in Disaster/Emergency Management \(DEM\)](#).” *NAADSN Policy Brief*, 24 February 2021.**

The policy brief explains the role that the Canadian Rangers have in increasing the level of local disaster resiliency in the remote communities in the Canadian Arctic and as the changing climate continues to generate disaster scenarios the role for the Rangers will be increased. The authors explain that “[t]hrough a relatively modest investment, the Government of Canada has supported the Canadian Rangers as a practical and celebrated tool to strengthen the resilience of over 200 communities in regions particularly vulnerable and exposed to natural hazards. They have effectively responded to avalanches, forest fires, severe weather, power outages, and even pandemics. The Ranger role in disaster and emergency management is likely increase in importance as climate change exacerbates these natural hazards facing their communities and the CAF should explore ways to enhance their DEM capabilities.”

**Kikkert, Peter, and P. Whitney Lackenbauer. “[Strengthening Search and Rescue in Nunavut: Approaches and Options.](#)” *NAADSN Policy Primer*, 27 January 2021.**

The policy primer looks at the status of SAR operations in Nunavut and reports findings from the Kitikmeot SAR Project. “The results of the Kitikmeot SAR Project – a community-collaborative effort that seeks to identify and assess existing community-based SAR and emergency management capabilities in the communities of Kugluktuk, Cambridge Bay, Gjoa Haven, Taloyoak, and Kugaaruk – suggest that this task is getting more difficult. The impacts of climate change and the loss of traditional skills (particularly amongst younger community members), coupled with the failure of some travelers to take the necessary fuel and equipment when on the land, and increased visitors to the region, has led to an increase in SAR cases in the Kitikmeot over the last two decades – similar to trends reported in other parts of Nunavut.” The primer explains that Nunavut requires a tailored SAR approach due to the territory’s unique context.

**Kikkert, Peter, and P. Whitney Lackenbauer. “[The Canadian Rangers: Strengthening Community Disaster Resilience in Canada’s Remote and Isolated Communities.](#)” *The Northern Review* 51 (2021): 35–67.**

The Canadian Rangers are Canadian Armed Forces Reservists who serve in remote, isolated, northern, and coastal communities. Due to their presence, capabilities, and the relationships they enjoy with(in) their communities, Rangers regularly support other government agencies in preparing for, responding to, and recovering from a broad spectrum of local emergency and disaster scenarios. Drawing upon government and media reports, focus groups, and interviews with serving members, and a broader literature review, this article explains and assesses, using a wide range of case studies from across Canada, how the Rangers strengthen the disaster resilience of their communities. Our findings also suggest ways to enhance the Rangers’ functional capabilities considering climate and environmental changes that portend more frequent and severe emergencies and disasters. It also argues that the organization can serve as a model for how targeted government investment in a local volunteer force can build resilience in similar remote and isolated jurisdictions, particularly in Greenland and Alaska.