

December 1, 2023

The Royal Canadian Navy's Past, Present, and Future in the Arctic

Katherine E. Todd NAADSN Research Fellow

"Increasingly aggressive behaviours by Russia and China have signaled a return to geopolitical competition. From an international security perspective, the world is less safe than it was at the end of the Cold War. In the wake of Russia's invasion of Ukraine in 2022, there is now an even greater urgency to enhance the security of the North American Arctic."

Report by Canada's Standing Senate Committee on National Security, Defence and Veterans Affairs:
Arctic Security Under Threat, 2023

The Royal Canadian Navy (RCN) has been active in the Arctic since 1948, deterring adversaries, executing policy objectives, and protecting Canada's northern maritime frontier. However, investments in the Navy's activities and capabilities in the Arctic have followed a boom-and-bust cycle, booming in times of perceived political or military danger and busting when security interests and priorities have shifted to other geographic regions. This lack of continuous investment has left Canada vulnerable, with few ships equipt to navigate through sea-ice, ports capable to resupplying ships, and even fewer servicemembers with experience sailing in the largely unfamiliar terrain. As tension and competition between states grows in the Arctic, it is important for the Government of Canada to continuously invest in the RCN's Arctic capabilities and activities to protect Canada's interests in the region. This report reviews the RCN's historic and present activities and investments in the Arctic and puts forward a vision for future RCN priorities in the region. Given the changing context in and increased geopolitical and strategic importance of the Arctic, Canada needs to break from boom-and-bust cycles of investment in RCN activities and capabilities to ensure that the RCN is well equipped to operate and protect Canada's interests in the Arctic for decades to come.

¹ See: Ken Booth, *Navies and Foreign Policy*, (London: Croom Helm, 1977), 15-16 and Kenneth C. Eyre, *Custos Borealis, The Military in the Canadian North*, 1898 – 1975, ed. P. Whitney Lackenbauer (Peterborough: North American Arctic Defence and Security Network, 2020), 146.

² Adam Lajeunesse, "Niobe Paper No. 2: The RCN in the Arctic: A Brief History," Naval Association of Canada, May 16, 2019, 1.

³ Auditor General of Canada, "Report 6: Arctic Waters Surveillance," Office of the Auditor General of Canada, 2022.

⁴ Standing Senate Committee on National Security, Defence and Veterans Affairs, "Arctic Security Under Threat: Urgent Needs in a Changing Geopolitical and Environmental Landscape," *Senate of Canada*, June 28, 2023, 11.



Climate change in the Canadian Arctic has made navigation more unpredictable, reduced sea-ice coverage, and melted significant amounts of permafrost.⁵ In some areas, such as the western edge of Canada's Archipelago, climate change has displaced icebergs and enhanced the severity of storms, endangering ships.⁶ In others, the reduction in sea-ice has opened sea routes and made the region more accessible for ships as well as for economic development in sectors including mining, fishing, and tourism.⁷ Opportunities for increased shipping and resource extraction resulting from this geographic change have garnered international attention, including from adversaries, increasing geopolitical tension in the Arctic as well as the risk of unregulated vessel transits, illegal activities, and occurrence of emergencies such as search and rescue scenarios and oil spills.⁸ Along with sea-ice, permafrost in Canada's Arctic is melting, damaging existing infrastructure, making it harder to build new infrastructure, and contributing to challenges the Government of Canada already has supporting defence facilities and communities in the region.⁹ As climate change continues to transform the environment and multiply threats in the Arctic, investments in RCN activities and capabilities in the region become increasingly vital to protect Canada's national interests.¹⁰

Emerging economic opportunities and international competition over them make protecting Canada's sovereignty in the Arctic more important now than ever before. ¹¹ Canada's sovereignty over the Arctic, and ability to control and protect it, has long been an area of concern. ¹² The country considers the Arctic Archipelago to be Canadian territory and the Northwest Passage to be internal Canadian Waters, making the region home to 75 percent of Canada's total coastline. ¹³ Due to the extent of Canada's claims to the Arctic and the distinct maritime qualities of the area, the RCN is vital in maintaining Canada's sovereignty over and maritime peace and order in the region. ¹⁴ However, effective maritime security in the Canadian Arctic relies on continuous military presence. ¹⁵ Without the procurement of assets that are designed for year-round operations as well as infrastructure to support activities in the Arctic, the RCN can only pursue expeditionary operations in the region for a short period each year when waters are ice-free, between August and September. ¹⁶ Numerous newspaper and journal articles, as

⁵ Auditor General of Canada, "Report 6," 1 and Standing Committee on National Defence, "A Secure and Sovereign Arctic," *House of Commons Canada*, April 2023, 16.

⁶ Standing Committee on National Defence, "Secure and Sovereign," 16.

⁷ Auditor General of Canada, "Report 6," 1 and Crown-Indigenous Northern Affairs Canada, "Arctic and Northern Policy Framework," 19.

⁸ Auditor General of Canada, "Report 6;" Crown-Indigenous Northern Affairs Canada, "Arctic and Northern Policy Framework," 19 and Lajeunesse and Lackenbauer, "Introduction," xxxiii.

⁹ Arctic Research Consortium of the United States, "How is Permafrost Degradation Affecting Infrastructure?," n.d.; Auditor General of Canada, "Report 6," 21 – 22; and Jessica M. Shadian, "Brief to the Standing Committee on Foreign Affairs and International Development: Canada's Sovereignty in the Arctic," *Arctic360*, November 2018.

¹⁰ Sherri Goodman, "National Security and the Threat of Climate Change," CNA Corporation, 2007.

¹¹ Kate E. Todd, "Canadian Anti-Submarine Warfare in the Future Strategic Environment," *Canadian Global Affairs Institute*, June 2023, 1.

¹² Eyre, Custos Borealis.

¹³ Auditor General of Canada, "Report 6," 1; Lajeunesse, "Brief History," 3; and Lajeunesse and Lackenbauer, "Introduction," xxvii.

¹⁴ Paul Dittmann, "In Defence of Defence: Canadian Arctic Sovereignty and Security," in (Re)Conceptualizing Arctic Security, Selected Articles from the Journal of Military and Security Studies, eds. Ryan Dean, Rob Huebert, and P. Whitney Lackenbauer (Calgary: Centre for Military, Security and Strategic Studies, 2017), 167 and Royal Canadian Navy, "Canada in a New Maritime World: Leadmark 2050," Department of National Defence, 2016, iv.

¹⁵ Mayne, "On Frozen Wings and Waves," 177.

¹⁶ "The RCN in the Arctic," Naval Association of Canada, August 2022, 1.



well as reports by Canada's House of Commons Committees and Senate, have been published describing the inadequacy of the Navy's abilities in the North and how infrastructure, assets, and technologies are needed to augment RCN capabilities. ¹⁷ As uncertainty and risks develop in the Arctic, the Government of Canada should continue to do what it has always done when there are perceived threats to the Canadian Arctic: invest more in the RCN's activities, assets, and the infrastructure necessary to support them in defending Canada's interests in the region.

The RCN's Past

The RCN's first expedition north of the 60th parallel took place in 1948, where His Majesty's Canadian Ship (HMCS) Magnificent, HMCS Nootka, and HMCS Haida conducted sovereignty patrols and naval personnel were familiarized with sailing in the Arctic. 18 Since then, three distinct surges of investments in Canadian Armed Forces, and the RCN's, Arctic activities and capabilities have taken place. 19 The first of these began at the end of the Second World War and lasted until 1960.²⁰ During this surge, Canada made major investments in the North, reflecting the government's concern about the threat to continental defence posed by the Soviet Union during the Cold War.²¹ The second surge started a decade later in 1970 and continued until the collapse of the Soviet Union.²² This time, the federal government's concern about foreign incursions on Canadian territory led them to finance regular RCN sovereignty patrols in the Arctic.²³ The last of the three surges arose in 2000 and continues to this day. 24 Due to growing concerns about the effect of climate change in the Arctic and competition over increasingly accessible resources in and shipping routes through the region, the Government of Canada established annual Operation Nanook exercises in 2007. 25 Each of these surges helped Canada combat threats to its interests in the North, but the lack of continuous investment in RCN activities and capabilities has left Canada's northern coastline vulnerable, as the RCN's familiarity with the region, number of Arctic-capable assets, and supporting infrastructure is in short supply while geopolitical and climate changes continue to draw international attention to the strategic importance of the region.

During the first decade of the Cold War, the Government of Canada invested in RCN activities in the Arctic to gain an understanding of operating conditions North of the 60th parallel and develop Arctic defence infrastructure such as the Distant Early Warning system. This investment boom was largely reactionary, responding to threats to Canada's sovereignty posed by the United States (US)'s voyages through the Northwest Passage and the Soviet

¹⁷ See: Standing Committee on National Defence, "Secure and Sovereign," 39; Standing Senate Committee on National Security and Defence, "Reinvesting in the Canadian Armed Forces: A Plan for the Future," *Senate of Canada*, May 2017, 30; and Standing Senate Committee on National Security, Defence and Veterans Affairs, "Arctic Security."

¹⁸ Eyre, *Custos Borealis*, 146 – 147.

¹⁹ Adam Lajeunesse and P. Whitney Lackenbauer, "Introduction: Lessons Learned, Lost, and Relearned," in *Canadian Arctic Operations*, 1941 – 2015, Lessons Learned, Lost, and Relearned, eds. Adam Lajeunesse and P. Whitney Lackenbauer (Fredericton: The Gregg Centre for the Study of War and Society, 2017), xvii – xix.

²⁰ Lajeunesse and Lackenbauer, "Introduction," xxii – xxxvi.

²¹ Lajeunesse and Lackenbauer, "Introduction," xxii – xxxvi.

²² Lajeunesse and Lackenbauer, "Introduction," xxvi – xxx.

²³ Lajeunesse and Lackenbauer, "Introduction," xxvi – xxx.

²⁴ Lajeunesse and Lackenbauer, "Introduction," xxx – xxxiii.

²⁵ Lajeunesse and Lackenbauer, "Introduction," xxx – xxxiii.



Union's focus on the Arctic as a strategic military region. ²⁶ Starting in 1948, the RCN sent various classes of ships into Arctic waters to support maritime research initiatives, familiarize themselves with the terrain, and project the military's presence and capabilities. ²⁷ These early RCN activities facilitated the construction of important surveillance mechanisms including a system of radars called the Distant Early Warning Line, designed to detect incoming Soviet attacks targeting North America. ²⁸ They also enabled the Government of Canada to chart the Canadian Archipelago and identify areas for further investment, such as refuelling infrastructure. ²⁹ Most importantly, these RCN activities helped establish Canada's presence and assert its sovereignty in the region. Notably, the RCN's sole icebreaker, HMCS *Labrador*, was the first warship to successfully transit the Northwest Passage in 1954, demonstrating Canada's ability and commitment to monitoring and protecting its waters on all three of its coasts. ³⁰

The end of this first surge of RCN activity in the Arctic began in the late 1950s, as manning reductions, the outbreak of the Korean War, and budget cuts made resource intensive Arctic operations a luxury Canada could no longer afford. The RCN began divesting itself of Arctic assets, transferring its icebreaker, HMCS *Labrador*, to the Canadian Coast Guard in 1958. As advancements in inter-continental missile technology lessened the threat of Soviet bombers targeting North America via the Arctic in the early 1960s, the RCN gradually ceased operating in the region altogether. By 1965, all RCN activities in Canada's northern waters had been terminated as the size and number of operations, as well as the number of ships in the RCN's fleet, shrank dramatically to meet budgetary restrictions. This abandonment of RCN activities and capabilities in the Arctic left Canada unable to monitor and defend its territory in the region and allowed for the RCN's institutional knowledge of how to conduct Arctic operations to atrophy.

Soon afterwards, the Government of Canada began to recognize the vulnerability of the country's northern border, as Canada – US disputes about the legal status of the Northwest Passage flared and advancements in Soviet naval weaponry and submarine technology renewed concerns about continental defence.³⁵ In 1971, the Department of National Defence released a *White Paper*, entitled *Defence in the 70s*, emphasizing the importance of the Canadian Armed Forces' role in defending Canada's long-term national interests in the Arctic.³⁶ From 1970 to 1989, RCN ships were deployed in the Arctic ten times as part of a series of northern deployments, commonly known as NORPLOYs, as well as three additional operations which focused on demonstrating military presence in the region, aiding with resupply missions and scientific research, and building organizational knowledge about

²⁶ Lajeunesse, "Brief History," 1.

²⁷ Richard Mayne, "On Frozen Wings and Waves: RCN Operations and RCAF Maritime Air in the Arctic 1946 – 1950," in *Canadian Arctic Operations*, 1941 – 2015, Lessons Learned, Lost, and Relearned, eds. Adam Lajeunesse and P. Whitney Lackenbauer (Fredericton: The Gregg Centre for the Study of War and Society, 2017), 160, 168.

²⁸ Lajeunesse and Lackenbauer, "Introduction," xxxiv – xxv, xxi, xxiv.

²⁹ Lajeunesse and Lackenbauer, "Introduction," xxxiv – xxv, xxi, xxiv and Mayne, "On Frozen Wings and Waves," 171, 176.

³⁰ Peter Pigott, From Far and Wide: A Complete History of Canada's Arctic Sovereignty, (Toronto: Dundurn Press, 2011), 207.

³¹ Mayne, "On Frozen Wings and Waves," 176.

 $^{^{32}}$ Lajeunesse, "Brief History," 2-3.

³³ Eyre, *Custos Borealis*, 202 and Lajeunesse, "Brief History," 3.

³⁴ Eyre, Custos Borealis, 202 and Richard Mayne, "The Canadian Navy in the 1960s," Government of Canada, November 8, 2017.

³⁵ Lajeunesse, "Brief History," 3.

³⁶ Department of National Defence, "Defence in the 70s," Government of Canada, August 1971, 1, 8.



and experience with Arctic operations.³⁷ These deployments were often conducted alongside assets operated by the Canadian Coast Guard, Royal Canadian Airforce, and allied states, ranging year-to-year from excursions of one vessel to deployments featuring squadrons of destroyers.³⁸ By patrolling and monitoring and demonstrating interoperability in Canada's Arctic waters, the RCN was able to project power in the region, further develop claims to sovereignty over the Archipelago, and contribute to Canada's strategic aims.

Despite the classification of much of the documentation about the activities and achievements associated with NORPLOYs, records indicate that they were strategically valuable for the Government of Canada. ³⁹ During northern operations, the Defence Research Establishment, RCN, and US collaborated to set up surveillance programs, continue charting the Archipelago, and test new technologies. ⁴⁰ This included the trial of acoustic systems designed to detect and track Soviet submarines in the Northwest Passage. ⁴¹ Rather than focusing on non-kinetic US threats to Canada's sovereignty in its Arctic waters, the Government of Canada chose to utilize the RCN's NORPLOYs, its alliances, and defence scientists to develop capabilities that helped protect North America from kinetic Soviet threats. ⁴² Although US rhetoric and excursions posed real challenges to Canadian sovereignty in the Arctic, the Government of Canada's more immediate concern during the Cold War was deterring Soviet aggression.

The Government of Canada continued to invest in the RCN's Arctic presence and capabilities into the 1980s, initiating the procurement process to purchase a fleet of nuclear-powered submarines to patrol the North and investigating a new proposal to create a training centre in Nanisivik, Nunavut. However, in 1991, the Soviet Union collapsed. Without the Soviet threat in the Arctic, RCN activities and capabilities in the region were no longer needed. In this unipolar moment, where the US became the world's uncontested hegemon, the Government of Canada reprioritized its resources, resulting in deep defence budget cuts and a serious deterioration of RCN capabilities. NORPLOYs, the procurement of nuclear submarines, and the construction of a centre in Nanisivik were cancelled, leaving the waters of the Canadian Arctic unpatrolled by the RCN for over a decade. During this period, the number of operational ships in the RCN's fleet dwindled to the lowest number on record since the beginning of World War Two, in what RCN sailors refer to as the 'bathtub years.' The end of the second surge, much like the first, saw the RCN's activities and ability to defend Canada's interests in the Arctic vanish as government priorities shifted elsewhere.

³⁷ Lajeunesse, "Brief History," 3 and Lajeunesse and Lackenbauer, "Introduction," xxviii.

³⁸ Lajeunesse, "Brief History," 4 and Lajeunesse, "Canada's Northern Deployments," 200.

³⁹ Adam Lajeunesse, "Canada's Northern Deployments, 1970 – 89: Symbolism and Substance," in *Canadian Arctic Operations, 1941* – 2015, Lessons Learned, Lost, and Relearned, eds. Adam Lajeunesse and P. Whitney Lackenbauer (Fredericton: The Gregg Centre for the Study of War and Society, 2017), 202-203.

⁴⁰ Lajeunesse, "Canada's Northern Deployments," 202-203, 212.

⁴¹ Lajeunesse, "Canada's Northern Deployments," 202-203, 212.

⁴² Lajeunesse, "Canada's Northern Deployments," 212.

⁴³ Eyre, *Custos Borealis*, 246 – 247.

⁴⁴ Lajeunesse, "Brief History," 4.

⁴⁵ Lajeunesse and Lackenbauer, "Introduction," xxix.

⁴⁶ Eyre, Custos Borealis, 252 and Lajeunesse and Lackenbauer, "Introduction," xxx.

⁴⁷ Tim Addison, "RCN Fleet by the Numbers," Naval Association of Canada, March 2023, 42



Arctic security, and the importance of naval capabilities in the region, re-entered the Canadian zeitgeist for a third time in the 2000s, as climate change and international interest in emerging Arctic sea routes and resources restoked old fears about challenges to Canadian sovereignty in the North. ⁴⁸ In reaction, the Government of Canada began funding RCN activities in the Arctic in 2002 and 2004 through Operation Narwhal, where RCN ships visited northern communities and participated in exercises with the Canadian Rangers, Coast Guard, and Air Force. 49 These operations allowed sailors to once again gain the experience needed to operate in the Arctic and were followed closely by Exercise and Operation Hudson Sentinel, an Arctic fishery patrol in 2005, and Operation Lancaster in 2006, where the RCN began integrating other government departments into northern exercises in order to support their mandates. 50 This whole-of-government approach was reminiscent of the collaboration between the Defence Research Establishment and the RCN during the second surge, allowing the Government of Canada to achieve the objectives of multiple departments simultaneously in a cost effective manner. The RCN's operations in the early 2000s were coupled with a new naval strategy, entitled Securing Canada's Ocean Frontiers: Charting the Course from Leadmark, that highlighted the need for the RCN to be able to surveil and patrol all three of Canada's oceans.⁵¹ Presence in and the protection of Arctic Canada had become a government priority, as the then-Prime-Minister Stephen Harper declared in 2007 that the government was determined to use, rather than lose, the Arctic.⁵² This political commitment to being active in the Arctic led to major investments in RCN capabilities and supporting infrastructure.

As part of Prime Minister Harper's plan to 'use' the Arctic, the Government of Canada announced the procurement of six new Arctic Offshore and Patrol Vessels, unveiled plans to convert a former deep-water port in Nanisivik into a multiuse naval facility, and created the annual *Operation Nanook* series of joint and combined exercises. ⁵³ In 2007, the Government began procuring six RCN Arctic and Offshore Patrol Vessels and announced the construction of a naval facility in Nanisivik. ⁵⁴ These new ships and facilities were designed to allow the RCN to increase their presence in the region, traverse the Arctic from June to October each year, and refuel ships in Canada, supporting core defence missions and assisting other government departments in fulfilling their mandates. ⁵⁵ The delivery of the ships and construction of Nanisivik are still underway, having experienced setbacks and been scaled down due to budgetary constraints. ⁵⁶ In addition to investments in physical assets, the Government of Canada began funding the *Operation Nanook* series of exercises in 2007, including operations *Nanook, Nunalivut*, and *Nunakput*, allowing the Canadian Armed Forces to practice responding to security threats

⁴⁸ Lajeunesse and Lackenbauer, "Introduction," xxx.

⁴⁹ Adam Lajeunesse, "The CAF Returns to the Arctic, 2000 – 2006," in Canadian Arctic Operations, 1941 – 2015, Lessons Learned, Lost, and Relearned, eds. Adam Lajeunesse and P. Whitney Lackenbauer (Fredericton: The Gregg Centre for the Study of War and Society, 2017), 309, 312 – 313 and Lajeunesse and Lackenbauer, "Introduction," xxxi.

⁵⁰ Lajeunesse, "The CAF Returns," 318 – 319 and Lajeunesse and Lackenbauer, "Introduction,", xxxi.

⁵¹ Directorate of Maritime Strategy, "Securing Canada's Ocean Frontiers: Charting the Course from Leadmark," *Department of National Defence*, May 2005.

⁵² Paal Sigurd Hilde, "The "New" Arctic: the Military Dimension," in *(Re)Conceptualizing Arctic Security, Selected Articles from the Journal of Military and Security Studies*, eds. Ryan Dean, Rob Huebert, and P. Whitney Lackenbauer (Calgary: Centre for Military, Security and Strategic Studies, 2017), 101.

⁵³ Hilde, "The "New" Arctic," 101 and Lajeunesse, "Brief History," 7.

⁵⁴ Lajeunesse, "Brief History," 8.

⁵⁵ Lajeunesse, "Brief History," 8.

⁵⁶ "Arctic and Offshore Patrol Ships," *Naval Association of Canada*, April 2023, 3 and Auditor General of Canada, "Report 6," 20 – 22.



in the Arctic.⁵⁷ By having the RCN, Canadian Coast Guard, Royal Canadian Air Force, other government departments, and allied maritime assets routinely work together during these exercises, the federal government is able to project their power in the region, monitor Canada's Arctic waters, and build capacity to respond to real-life threats.⁵⁸ These three sixteen year old initiatives continue to shape the RCN's activities and capabilities in the Arctic today, building the Canadian Armed Forces' capacity to protect and respond to emergencies in the North.

The RCN's Present

To date, the RCN has commissioned three of the six promised Arctic and Offshore Patrol Vessels, and since 2021, has been investigating options to replace the RCN's *Victoria*-class submarines. ⁵⁹ The newly commissioned ships are large and versatile, designed for constabulary operations such as search and rescue, aid to civil power, and sovereignty protection missions in Arctic and non-Arctic waters. ⁶⁰ They carry a crew of 45 sailors, with the capacity to support up to 85 personnel as well as multi-purpose small boats, pick-up trucks, all-terrain vehicles, snowmobiles, and a helicopter. ⁶¹ The first ship of the class, HMCS *Harry DeWolf*, proved the class' ability to patrol all three of Canada's coasts in August 2021, when the warship circumnavigated North America via the Northwest Passage. ⁶² These new ships come at a time when the RCN's fleet is detriorating and in need of replacement. In 2021, the Canadian Patrol Submarine Project was established to identify procurement options for new submarines, as the current *Victoria*-class is at the end of its lifespan and is slated to be decommissioned in the 2030s. ⁶³ According to the Department of National Defence's head of media relations in June 2023, only one of the four vessels remains operational. ⁶⁴ Experts and military leaders are calling for the replacement submarines to be Arctic-capable, allowing them to aid in surveillance and deterrance in the region. ⁶⁵ As geopolitical tension and challenges to Canada's interests increase in the Arctic, maintaining and improving the capabilities of the RCN's fleet is increasingly important.

Canada's current defence policy from 2017, *Strong, Secure, Engaged*, as well as Canada's 2019 *Arctic and Northern Policy Framework* reflect these realities and emphasize the importance of the RCN's activities in the Arctic, including *Operation Nanook* deployments as well as participation in international exercises. ⁶⁶ In both of these documents, the Government of Canada is explicit about the need to increase the Canadian Armed Forces' presence in the Arctic and further develop interoperability with domestic and international partners to ensure that

⁵⁷ Hilde, "The "New" Arctic," 101 and Lajeunesse and Lackenbauer, "Introduction," xxxi.

⁵⁸ Lajeunesse and Lackenbauer, "Introduction," xxxi.

⁵⁹ "Arctic and Offshore Patrol Ships," *Naval Association of Canada*, April 2023 and Ryan deForest, "Niobe Papers, No. 17: Does the RCN need Submarines? A Surface Naval Warfare Officer's Wave-Top Perspective," *Naval Association of Canada*, January 2022, 1.

^{60 &}quot;Arctic and Offshore Patrol Ships."

^{61 &}quot;Arctic and Offshore Patrol Ships."

^{62 &}quot;Arctic and Offshore Patrol Ships," and Auditor General of Canada, "Report 6," 20.

⁶³ Ryan deForest, "Niobe Papers, No. 17: Does the RCN need Submarines? A Surface Naval Warfare Officer's Wave-Top Perspective," *Naval Association of Canada*, January 2022, 1.

⁶⁴ Chase, "Canada Urged to Buy New Submarines."

⁶⁵ Standing Senate Committee on National Security, Defence and Veterans Affairs, "Arctic Security," 17.

⁶⁶ Crown-Indigenous Northern Affairs Canada, "Arctic and Northern Policy Framework," *Government of Canada*, 2019 and Department of National Defence, "Strong, Secure, Engaged," *Government of Canada*, 2017.



Canada can respond to effectively to security and safety threats in the region. ⁶⁷ Through participating in operations and exercises in the Arctic, the RCN is building and maintaining relationships with both international and domestic partners, including international military partners, North American Treaty Organization (NATO) allies, territorial and Indigenous governments, and Northern communities. ⁶⁸ However, during current Northern operations, Canada lacks domestic infrastructure and refuelling capabilities needed to traverse the vast region and must rely on using ports in Greenland to resupply RCN ships. ⁶⁹ The planned naval facility and refuelling port in Nanisivik is still under construction, as rising costs, delays due to COVID-19, and climate change continue pushing completion dates further afield. ⁷⁰ Due to the decision to cut costs by eliminating components of the project including heated fuel-tanks, Nanisivik will not be able to meet the RCN's operational needs, as the RCN is only expected to be able to use the facility for four weeks per year when it opens in 2025. ⁷¹ Although the Government of Canada has recognized the need for continuous and increased RCN presence and activity in the Arctic, no new investments have been made to ensure that the RCN and Canadian Armed Forces have additional capacity to meet policy and defence objectives.

Compounding this issue of lacking capacity, the RCN faces a critical personnel shortage.⁷² As of April 2023, the Canadian Armed Forces is 16,000 servicemembers short of its targeted size.⁷³ In the RCN, seventeen percent of positions are vacant, making staffing existing ships as well as the new Arctic Offshore Patrol Vessels difficult as the Navy is forced to deploy less experienced sailors and shorten the amount of time sailors spend ashore between deployments, increasing their risk of burn out.⁷⁴ General Wayne Eyre, the Chief of Defence Staff, highlighted the urgency of this staffing issue in October of 2022, calling for a 'reconstitution' of the Canadian Armed Forces to attract and retain more servicemembers.⁷⁵ Since then, no reports measuring the progress of this reconstitution have been published in the public domain.

Two factors contributing to the Canadian Armed Forces' personnel shortage are the labour shortage in Canada and the negative publicity and calls for culture change plaguing the military since issues of sexual misconduct within the Forces came to light in 2021.⁷⁶ Even before the COVID-19 pandemic, the labour market in Canada was facing major shortages partially due to a large number of Baby-Boomers retiring. ⁷⁷ Since then, unemployment levels in the country have dropped to a historic low, forcing the Canadian Armed Forces to compete to attract workers. ⁷⁸ At the same time, the Canadian Armed Forces has faced public scrutiny and embarrassment in relation to numerous sexual harrassment and misconduct scandals. From February to October

⁶⁷ Department of National Defence, "Strong, Secure, Engaged," 113 and ANPF 78

⁶⁸ Department of National Defence, "Operation NANOOK," Government of Canada, August 29, 2023.

⁶⁹ Ryan Bunt, "Long-term Feasibility of the Nanisivik Naval Facility," Canadian Forces College, 2021, 4.

⁷⁰ Auditor General of Canada, "Report 6."

⁷¹ Auditor General of Canada, "Report 6," 21 – 22.

⁷² Dylan Dyson, "Canadian Armed Forces Facing Member Shortage 'Crisis," CTV News, April 5, 2023.

⁷³ Dyson, "Member Shortage."

⁷⁴ Lee Berthiaume, "Canada's Navy Facing Personnel 'Crisis' as Vacancy Nearly 20%," *Global News*, September 27, 2023.

⁷⁵ Murray Brewster and Richard Raycraft, "Military Personnel Shortage Will Get Worse Before it Gets Better, Top Soldier Says," *CBC News*, October 6, 2022.

⁷⁶ Ashley Burke and Murray Brewster, "A Military in Crisis: Here are the Senior Leaders Embroiled in Sexual Misconduct Cases," *CBC News*, December 16, 2022, and Michael Cocolakis-Wormstall, "Labour Shortage: Here to Stay," September 2018, 8.

⁷⁷ Cocolakis-Wormstall, "Labour Shortage: Here to Stay."

⁷⁸ Orsetta Causa et al., "The Post-COVID-19 Rise in Labour Shortages," OECD Economics Department, 2022.



2021, 13 senior Officers in the Armed Forces were removed from their positions and investigated due to allegations of sexual misconduct. In the wake of this, former Supreme Court Justice Louise Arbour delivered a report to the Minister of National Defence in May 2022 recommending 48 courses of action to change the military's dysfunctional culture. In May 2023, a report monitoring progress towards such culture change noted that reforms have taken place, but that there is more to be done to make the Forces an inclusive and positive work environment. Major effort is needed to make the Canadian Armed Forces a desirable employer in the current labour market. Without investment in its assets and people, the military will struggle to fulfill it mandate in all theatres, including the Arctic.

The RCN's Future

Existing policies and investments made in procuring Arctic and Offshore Patrol Vessels will shape the future of RCN activities in the Arctic, but more can be done to ensure that the Canadian Armed Forces are ready and capable to defend Canada's interests in the North. In both *Strong, Secure, Engaged* and Canada's *Arctic and Northern Policy Framework*, the Government of Canada has committed to ensuring the long-term presence of the Canadian Armed Forces, and the RCN, in the Arctic. 82 To do so, the documents emphasize the need to work alongside allies, including international and domestic partners. They also stress the importance of having Arctic-capable military assets that can be deployed to defend Canada's territory and interests there. Yet, these documents do not adequately address the need to replace the RCN's soon-to-be decommissioned *Victoria*-class submarines and to develop infrastructure to support military operations in the region. To address mounting security and defence concerns, the Government of Canada must resist falling back into the pattern of surging investment in the Arctic and continue prioritizing the RCN's Arctic activities and capabilities.

Strong, Secure, Engaged describes how the acquisition of new assets will enable the RCN to meet anticipated security challenges in the coming decades. ⁸³ The Navy expects to acquire three more Arctic and Offshore Patrol Vessels by 2027, allowing Canada to monitor the Arctic and operate with partners more effectively. ⁸⁴ In addition to the Arctic and Offshore Patrol Vessels, the procurement of new Arctic-capable submarines is being investigated by the RCN's Canadian Patrol Submarine Project, as the Navy's four *Victoria*-class submarines are scheduled to be decommissioned within the next decade. ⁸⁵ The recognition of submarines' ability to provide navies with unparalleled sea command and intelligence gathering abilities, by military and civilian leaders alike, make the procurement of new submarines increasingly likely despite their substantial cost. ⁸⁶ In 2023, Vice Admiral J.

⁷⁹ Burke and Brewster, "A Military in Crisis."

^{80 &}quot;Independent External Comprehensive Review," Department of National Defence, July 20, 2023.

⁸¹ Jocelyne Therrien, "External Monitor Report – First Status Report," Department of National Defence, May 2, 2023.

⁸² Crown-Indigenous Northern Affairs Canada, "Arctic and Northern Policy Framework," 75 and Department of National Defence, "Strong, Secure, Engaged," 60.

⁸³ Department of National Defence, "Strong, Secure, Engaged," 35.

⁸⁴ Department of National Defence, "Arctic and Offshore Patrol Ships," *Government of Canada*, February 8, 2023.

⁸⁵ deForest, "Does the RCN need Submarines," 1.

⁸⁶ deForest, "Does the RCN need Submarines," 1 −2.



Robert Auchterlonie argued that replacing the RCN's submarines is vital to both the sovereignty and security of Canada. 87 The Canadian Senate's 2023 report on Arctic security echoed this sentiment. 88

However, with culture change in the Forces remaining unresolved, personnel at already critical levels, and no rebound in sight for Canada's declining workforce, finding operators for the RCN's new and potential assets will be difficult. The procurement of uncrewed underwater vehicles may be a viable alternative to submarines for the RCN, allowing the military to monitor Canada's Arctic waters more efficiently. 89 Uncrewed underwater vehicles offer sea command and intelligence gathering capabilities, like conventional submarines. 90 Yet, they are significantly less expensive and require fewer operators compared to Canada's current submarines which require a crew of 49 highly trained sailors. 91 Uncrewed platforms would allow the RCN to reallocate submariners to other ships, lessening the need to recruit new members of the Navy. Despite their potential benefit to the RCN, these vehicles are still in their nascent form compared to conventional submarines, making them a less predictable investment. When deciding which assets to procure to replace the Victoria-class submarine, the RCN should consider choosing a more cost and labour efficient platform to reflect current personnel and financial restraints.

Another area for investment that would benefit all RCN assets as well as Northern partners, is the development of additional ports in the Arctic. The Nanisivik Naval Facility is predicted to open in 2025, but will only be operational for four weeks per year. 92 The completion of Nanisivik represents a significant accomplishment for the Government of Canada, allowing RCN ships to refuel domestically, but the facility is far being the perfect solution to Canada's needs. 93 The port provides little value to Northern communities in desperate need of regional port infrastructure. 94 The construction of new multipurpose port facilities in addition to Nanisivik, that can be used for both military and civilian purposes, is essential to ensure that costly investments in infrastructure benefit both the RCN and its partners. 95 New ports with adequate refuelling and repair facilities could support Canadian and allied military assets in transiting the Northwest Passage, industry growth, and Indigenous communities in lowering their cost of living. Although the government is not actively investigating the construction of such ports, growing accessibility and interest in the region necessitates that more and better supporting infrastructure be built to meet security, defence, and reconciliation related government commitments.

⁸⁷ Standing Committee on National Defence, "Secure and Sovereign," 39.

⁸⁸ Standing Senate Committee on National Security, Defence and Veterans Affairs, "Arctic Security."

⁸⁹ deForest, "Does the RCN need Submarines," 4.

⁹⁰ deForest, "Does the RCN need Submarines," 4.

⁹¹ deForest, "Does the RCN need Submarines," 4 and Department of National Defence, "Victoria-class Capability," Government of Canada, May 3, 2019.

⁹² Auditor General of Canada, "Report 6," 22.

 $^{^{93}}$ Bunt, "Nanisivik," 2-3. 94 Bunt, "Nanisivik," 2-3.

⁹⁵ Crown-Indigenous Northern Affairs Canada, "Arctic and Northern Policy Framework," 56 and Standing Senate Committee on National Security, Defence and Veterans Affairs, "Arctic Security," 18.



Conclusion

The RCN's Arctic activities and capabilities hinge on the Government of Canada's priorities. In times of perceived threat, Canada has historically prioritized the protection of its interests in the Arctic by investing in the RCN's Arctic operations and assets. Since 2000, the Government has been steadfast in its efforts to mitigate threats to its Arctic territory and interests. As the international security environment becomes increasingly uncertain and unstable, Canada is now working to adapt its defence priorities to the changing context. In 2023, the Department of National Defence began drafting a new version of its defence policy, entitled the *Defence Policy Update*. Sa an update to, rather than a total rehaul of, *Strong, Secure, Engaged*, the new policy can be expected to include the previous policy's focus on increased presence and cooperation with partners in the Arctic, but may be more forward thinking in its assessment of the RCN's asset and infrastructure related needs. *Strong, Secure, Engaged* emphasized the need to modernize and maintain the RCN's *Victoria*-class submarines, but offered no insight into the Government's plans to replace them. Aside from briefly mentioning the Nanisivik Naval Facility, the policy also failed to recognize the need for more and better port infrastructure. Though there is no tentative release date for the *Defence Policy Update*, this new document will dictate the Canadian Armed Forces and RCN's future in the Arctic.

The future of the RCN's investments, activities, and capabilities is likely to follow historic trends: surging as real and perceived threats grow in the Arctic. In accordance with stated government policy objectives, the RCN's rate of Arctic operations and exercises is likely to gradually increase. Cooperation with both Indigenous and international partners is likely to grow as well, as recognition of Indigenous rights and the need to work alongside allies becomes more mainstream. Further investments in RCN assets and infrastructure will also be needed to support Canada's interests in the Arctic. However, priorities may shift when Canada's next defence policy, the *Defence Policy Update*, is released. Nevertheless, the RCN's future in the Arctic will clearly reflect the Government's already initiated forward-looking investments and commitments as well as emerging realities such as continued climate change and competition in the region.

⁹⁶ Department of National Defence, "Department of National Defence and Canadian Armed Forces open public consultations on update to Canada's defence policy to all Canadians," *Government of Canada*, March 9, 2023.

⁹⁷ Department of National Defence, "Strong, Secure, Engaged," 35.

⁹⁸ Department of National Defence, "Strong, Secure, Engaged," 79 – 80.



Bibliography

- Addison, Tim. "RCN Fleet by the Numbers." *Naval Association of Canada*, March 2023. https://www.navalassoc.ca/wp-content/uploads/2023/04/Starshell-March-2023-LR.pdf.
- "Arctic and Offshore Patrol Ships." *Naval Association of Canada*, April 2023. https://www.navalassoc.ca/wp-content/uploads/2023/05/BN14-AOPS.pdf.
- Arctic Research Consortium of the United States, "How is Permafrost Degradation Affecting Infrastructure?," n.d. https://www.arcus.org/files/pyramid/assets/aa-018-permafrostdegradationinfrastructure.pdf.
- Auditor General of Canada. "Report 6: Arctic Waters Surveillance." *Office of the Auditor General of Canada*, 2022. https://www.oag-bvg.gc.ca/internet/English/parl_oag_202211_06_e_44152.html.
- Berthiaume, Lee. "Canada's Navy Facing Personnel 'Crisis' as Vacancy Nearly 20%." *Global News*, September 27, 2023. https://globalnews.ca/news/9159765/royal-canadian-navy-personnel-crisis/.
- Booth, Ken. Navies and Foreign Policy. London: Croom Helm, 1977.
- Brewster, Murray and Raycraft, Richard. "Military Personnel Shortage Will Get Worse Before it Gets Better, Top Soldier Says." *CBC News*, October 6, 2022. https://www.cbc.ca/news/politics/eyre-shortage-directive-1.6608107.
- Bunt, Ryan. "Long-term Feasibility of the Nanisivik Naval Facility." *Canadian Forces College*, 2021. https://www.cfc.forces.gc.ca/259/290/23/305/Bunt.pdf
- Burke, Ashley and Brewster, Murray. "A Military in Crisis: Here are the Senior Leaders Embroiled in Sexual Misconduct Cases." *CBC News*, December 16, 2022. https://www.cbc.ca/news/politics/sexual-misconduct-military-senior-leaders-dnd-caf-1.6218683.
- Causa, Orsetta, et al. (2022), "The Post-COVID-19 Rise in Labour Shortages", *OECD Economics Department Working Papers*, No. 1721, OECD Publishing, Paris, https://doi.org/10.1787/e60c2d1c-en.
- Chase, Steven. "Canada Urged to Buy New Submarines Capable of Operating in the Arctic." *Globe and Mail*, June 29, 2023. https://www.theglobeandmail.com/politics/article-canada-urged-to-buy-new-submarines-capable- of-operating-in-the-arctic/.
- Cocolakis-Wormstall, Michael. "Labour Shortage: Here to Stay." *Business Development Bank of Canada*, September 2018. https://www.bdc.ca/en/documents/analysis_research/labour-shortage.pdf
- Constitution Act, 1982, Schedule B to the Canada Act 1982 (UK), 1982, c 11.
- Crown-Indigenous Northern Affairs Canada. "Arctic and Northern Policy Framework." *Government of Canada*, 2019. https://www.rcaanc-cirnac.gc.ca/eng/1560523306861/1560523330587.
- deForest, Ryan. "Niobe Papers, No. 17: Does the RCN need Submarines? A Surface Naval Warfare Officer's Wave-Top Perspective." Naval Association of Canada, January 2022. https://www.navalassoc.ca/wp-content/uploads/2022/01/DeForest-Submarines.pdf.
- Department of National Defence. "Arctic and Offshore Patrol Ships." *Government of Canada*, February 8, 2023. https://www.canada.ca/en/department-national-defence/services/procurement/arctic-offshore-patrol-ships.html.



- Department of National Defence. "Defence in the 70s." *Government of Canada*, August 1971. https://publications.gc.ca/collections/collection-2012/dn-nd/D3-6-1971-eng.pdf.
- Department of National Defence. "Department of National Defence and Canadian Armed Forces open public consultations on update to Canada's defence policy to all Canadians." *Government of Canada*, March 9, 2023. https://www.canada.ca/en/department-of-national-defence-and-canadian-armed-forces-open-public-consultations-on-update-to-canadas-defence-policy-to-all-canadians.html.
- Department of National Defence. "Operation NANOOK." *Government of Canada*, August 29, 2023. https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-nanook.html.
- Department of National Defence. "Strong, Secure, Engaged." *Government of Canada*, 2017. https://publications.gc.ca/collections/collection_2012/dn-nd/D3-6-1971-eng.pdf
- Department of National Defence, "Victoria-class Capability," *Government of Canada*, May 3, 2019. https://www.canada.ca/en/navy/corporate/fleet-units/submarines/victoria-class/capability.html.
- Directorate of Maritime Strategy. "Securing Canada's Ocean Frontiers: Charting the Course from Leadmark." *Department of National Defence*, May 2005. https://publications.gc.ca/collections/collection 2008/nd-dn/D2-164-2005E.pdf.
- Dittmann, Paul. "In Defence of Defence: Canadian Arctic Sovereignty and Security." In (Re)Conceptualizing Arctic Security, Selected Articles from the Journal of Military and Security Studies, edited by Ryan Dean, Rob Huebert, and P. Whitney Lackenbauer, 158 213. Calgary: Centre for Military, Security and Strategic Studies, 2017.
- Dyson, Dylan. "Canadian Armed Forces Facing Member Shortage 'Crisis." *CTV News*, April 5, 2023. https://ottawa.ctvnews.ca/canadian-armed-forces-facing-member-shortage-crisis-1.6344761.
- Eyre, Kenneth C. *Custos Borealis, The Military in the Canadian North, 1898 1975*, edited by P. Whitney Lackenbauer. Peterborough: North American Arctic Defence and Security Network, 2020.
- Goodman, Sherri. "National Security and the Threat of Climate Change." *CNA Corporation*, 2007. https://www.cna.org/archive/CNA_Files/pdf/national%20security%20and%20the%20threat%20of%20climate%20change.pdf.
- Hilde, Paal Sigurd. "The "New" Arctic: the Military Dimension." In (Re)Conceptualizing Arctic Security, Selected Articles from the Journal of Military and Security Studies, edited by Ryan Dean, Rob Huebert, and P. Whitney Lackenbauer, 97 114. Calgary: Centre for Military, Security and Strategic Studies, 2017.
- "Independent External Comprehensive Review." *Department of National Defence*, July 20, 2023. https://www.canada.ca/en/department-national-defence/services/conduct-and-culture/independent-external-comprehensive-review.html.
- Irwin, Robert. "Duty to Consult." *The Canadian Encyclopedia*, October 12, 2018. https://www.thecanadianencyclopedia a.ca/en/article/duty-to-consult
- Lajeunesse, Adam. "The CAF Returns to the Arctic, 2000 2006." In Canadian Arctic Operations, 1941 2015, Lessons Learned, Lost, and Relearned, edited by Adam Lajeunesse and P. Whitney Lackenbauer, 309 332. Fredericton: The Gregg Centre for the Study of War and Society, 2017.
- Lajeunesse, Adam. "Canada's Northern Deployments, 1970 89: Symbolism and Substance." In *Canadian Arctic Operations, 1941* 2015, Lessons Learned, Lost, and Relearned, edited by Adam Lajeunesse and P. Whitney Lackenbauer, 196 216. Fredericton: The Gregg Centre for the Study of War and Society, 2017.



- Lajeunesse, Adam. "Niobe Paper No. 2: The RCN in the Arctic: A Brief History." *Naval Association of Canada*, May 16, 2019. https://www.navalassoc.ca/wp-content/uploads/2019/05/Lajeunesse- NiobeNo2 Souleamend16May2019.pdf
- Lajeunesse, Adam and Lackenbauer, P. Whitney. "Introduction: Lessons Learned, Lost, and Relearned." In *Canadian Arctic Operations*, 1941 2015, Lessons Learned, Lost, and Relearned, edited by Adam Lajeunesse and P. Whitney Lackenbauer, xv 1. Fredericton: The Gregg Centre for the Study of War and Society, 2017.
- Mayne, Richard. "The Canadian Navy in the 1960s." *Government of Canada*, November 8, 2017. https://www.canada.ca/en/navy/services/history/naval-service-1910-2010/years-of-crisis.html.
- Mayne, Richard. "On Frozen Wings and Waves: RCN Operations and RCAF Maritime Air in the Arctic 1946 1950." In *Canadian Arctic Operations*, 1941 2015, Lessons Learned, Lost, and Relearned, edited by Adam Lajeunesse and P. Whitney Lackenbauer, 152 183. Fredericton: The Gregg Centre for the Study of War and Society, 2017.
- Pigott, Peter. From Far and Wide: A Complete History of Canada's Arctic Sovereignty. Toronto: Dundurn Press, 2011.
- "The RCN in the Arctic." *Naval Association of Canada*, August 2022. https://www.navalassoc.ca/wp-content/uploads/2022/08/BN15-RCN-and-Arctic.pdf.
- Royal Canadian Navy, "Canada in a New Maritime World: Leadmark 2050," *Department of National Defence*, 2016, iv. http://navy-marine.forces.gc.ca/assets/NAVY_Internet/docs/en/rcnleadmark-2050.pdf.
- Royal Canadian Navy, "Your Navy Today Volume 4 Issue 8," *Department of National Defence*, November 16, 2021. https://www.canada.ca/en/navy/corporate/navy-news/your-navy-today/volume-4-issue-8.html.
- Shadian, Jessica. "Brief to the Standing Committee on Foreign Affairs and International Development: Canada's Sovereignty in the Arctic." *Arctic360*, November 2018. https://www.ourcommons.ca/content/Committee/421/FAAE/Brief/BR10185960/brexternal/ShadianJessica-e.pdf.
- Standing Committee on National Defence. "A Secure and Sovereign Arctic." *House of Commons Canada*, April 2023. https://www.ourcommons.ca/Content/Committee/441/NDDN/Reports/RP12342748/nddnrp03/nddnrp03-e.pdf.
- Standing Senate Committee on National Security and Defence. "Reinvesting in the Canadian Armed Forces: A Plan for the Future." Senate of Canada, May 2017. https://sencanada.ca/content/sen/committee/421/SECD/reports/SECDDPRReport_FINALe.pdf
- Standing Senate Committee on National Security, Defence and Veterans Affairs. "Arctic Security Under Threat: Urgent Needs in a Changing Geopolitical and Environmental Landscape." *Senate of Canada*, June 28, 2023. https://sencanada.ca/content/sen/committee/441/SECD/reports/2023-06-28 SECD ArcticReport e.pdf
- Stavridis, James. "Sweden and Finland Give NATO an Arctic Opportunity." *Washington Post*, July 13, 2023. https://www.washingtonpost.com/business/2023/07/13/sweden-finland-give-us-and-nato-arctic-dominance-over-russia/acc33394-2134-11ee-8994-4b2d0b694a34 story.html.
- Therrien, Jocelyne. "External Monitor Report First Status Report." *Department of National Defence*, May 2, 2023. https://www.canada.ca/en/department-national-defence/corporate/reports-publications/external-monitor-report-first-status-report-may2-2023.html
- Todd, Kate E. "Canadian Anti-Submarine Warfare in the Future Strategic Environment." *Canadian Global Affairs Institute*, June 2023. https://assets.nationbuilder.com/cdfai/pages/5275/attachments/original/1690427471/Cana https://assets.nationbuilder.com/cdfai/pages/5275/attachments/original/1690427471/Cana <a href="https://assets.nationbuilder.com/cdfai/pages/5275/attachments/original/1690427471/Cana https://assets.nationbuilder.com/cdfai/pages/5275/attachments/original/1690427471/Cana https://assets.nationbuilder.com/cdfai/pages/5275/attachments/original/1690427471/Cana https://assets.nationbuilder.com/cdfai/pages/5275/attachments/original/1690427471.
- United Nations Declaration on the Rights of Indigenous Peoples Act, S.C. 2021, c. 14