ROYAL CANADIAN

# ROYAL CANADIAN NAVY ARCTIC & NORTHERN STRATEGIC FRAMEWORK



CANADIAN ARMED FORCES



FORCES ARMÉES CANADIENNES





### Contents

FOREWORD	2
INTRODUCTION	3
ARCTIC SECURITY ENVIRONMENT	3
GC/DND/CAF POLICIES	6
THE ARCTIC AND NORTHERN POLICY FRAMEWORK	6
STRONG, SECURE, ENGAGED: CANADA'S DEFENCE POLICY	7
INUIT NUNANGAT POLICY	8
RCN STRATEGIC OBJECTIVES IN THE ARCTIC	8
PRESENCE	10
MARITIME DOMAIN AWARENESS	12
NORTHERN ENGAGEMENT	13
INNOVATION AND SUSTAINABILITY	16
CONCLUSION.	17
REFERENCES	18
GLOSSARY OF ACRONYMS	20



### FOREWORD



Canada is a maritime nation bordered by three oceans. Although historically our attention as a nation has been directed to the Atlantic Ocean and more recently the Pacific, the Arctic has always been a vital part of our Canadian identity. Today, as the Arctic and Northern environment experiences significant change, the Government of Canada (GC), the Canadian Armed Forces (CAF), and the Royal Canadian Navy (RCN) are seized of the crucial strategic value of this part of Canada. Indeed, the Chief of Defence Staff recently designated the Arctic and Northern region as a unique theatre of operations. As a result, I directed members of the Directorate of Naval Strategy to write an RCN Arctic and Northern Strategic Framework to provide the important and necessary connection between higherlevel GC, Department of National Defence (DND) and CAF level guidance to the work already ongoing at the tactical level.

The Arctic is an expeditionary theatre which demands careful preparation and sensible execution of all activities within the region. In the course of our operations to assure sovereignty and security, we can never be a burden on the local communities so we must bring with us, or plan to deliver in theatre, everything that we require to be successful. Our activities must be nested within a whole of society approach that contributes to the overall security and wellbeing of the people of Canada's Arctic. This document will fill the gap between the strategic policy level and tactical level activities associated with the Arctic. The Arctic and Northern region is an extraordinary, remote, pristine, yet vulnerable environment where relationships are founded on openness and respect. Everything the RCN does in Canada's North must contribute to a well-defended, secure, and safe Canadian Arctic, as a precondition to healthy communities, strong economies, and a sustainable environment. I expect everyone in the RCN to appreciate the unique features of this vital theatre of operations, to align our efforts, and to innovate together as we ensure our readiness to protect and defend Canada's North.

Angus Topshee Vice-Admiral Commander Royal Canadian Navy

### INTRODUCTION

The significant strategic value of the Arctic and the North<sup>1</sup> is well understood and has been identified at the most senior levels of the Government of Canada (GC) through the Minister of National Defence Mandate Letter, the Department of National Defence (DND)/Canadian Armed Forces (CAF), and Royal Canadian Navy (RCN). In August 2018, the Chief of the Defence Staff designated the Arctic as a new theatre of operations, calling for a better synchronization of DND/CAF activities in the region.<sup>2</sup> Across the RCN, staffs have already been involved in activities associated with the Arctic. For instance, in 2017, the *RCN Arctic Operations Manual* was promulgated, a tactical level document issued under the authority of the Assistant Chief of Naval Staff (Afloat Training & Readiness). This ever green manual is based on previous lessons learned, practical knowledge, well-established Canadian risk mitigation methodologies, and experience acquired by naval planners and personnel deployed to the region.

However, most RCN documents and initiatives pertaining to the Arctic and the Northern region remain at the tactical and operational levels. Recognizing the lack of strategic governance within the organization, the *RCN Arctic and Northern Strategic Framework* will provide the important and necessary linkages between direction outlined in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), GC, DND/CAF level guidance, and RCN plans and operations. This document also depicts the RCN's role and responsibilities in this new operational theatre, providing a much-needed framework to guide RCN force development, force generation, and force management along key lines of effort. Ultimately, this RCN Framework will ensure the enterprise works collaboratively in support of the following end-state: the RCN contributes to a well-defended, secure, and safe Canadian Arctic,<sup>3</sup> a precondition to healthy communities, strong economies, and a sustainable environment in the North.

### ARCTIC SECURITY ENVIRONMENT

The Arctic strategic and operational environment is rapidly changing due to climate change, technological advancements, and strategic competition. The region is becoming progressively more accessible and human activity, at sea and ashore, is increasing as a result. The transformation of the Arctic environment creates both opportunities and challenges for Canada's security and prosperity. These factors, paired with the the developing technological capabilities of our adversaries, such as under ice capable submarines and the ability to sever pipelines and fibreoptic cables, mean that Canada can no longer rely solely on our geography to safeguard our interests in the region.

Both state and non-state commercial actors are demonstrating growing interest in the region's resources and its strategic position. Indeed, a more accessible Arctic presents great potential for

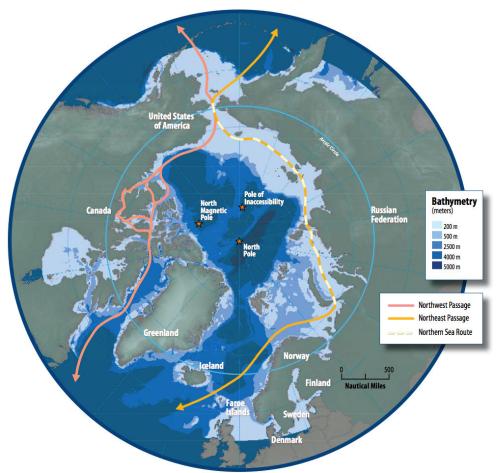
<sup>&</sup>lt;sup>1</sup> The security, economic and social opportunities and challenges common to northern Canada are not limited to the region above the Arctic Circle, which usually defines the Arctic. Herafter, the term Arctic reference to Canada's Arctic and the northern regions, unless otherwise specified.

<sup>&</sup>lt;sup>2</sup> Canada, Department of National Defence, *CDS Initiating Directive for the Development of the CAF Arctic Campaign Plan*, (Ottawa, August 2018), pp. 2.

<sup>&</sup>lt;sup>3</sup> Canada, Arctic and Northern Policy Framework (Ottawa, 2019).

economic development and commercial activities, especially in regard to new sea lines of communication and untapped natural resources. The Northwest Passage (NWP) crossing the Canadian Arctic, the Northeast Passage (NEP) over Europe and Russia, and the Transpolar Sea Route all promise faster transit between continents. In the short term, the Northern Sea Route, comprised in the NEP, is more attractive for commercial and military transit. While navigating through the NWP will remain hazardous and much uncertainty remains around its viability as an economic trade route, its commercial and strategic potential could increase to support economic activity within Canada's Arctic archipelago though it is unlikely that it will ever be the most efficient route across the Arctic ocean.

Figure 1: Arctic sea routes



Source: Arctic Marine Shipping Assessment<sup>4</sup>

The Arctic's geopolitical importance will continue to grow over the long term. The U.S. Geological Survey estimates that the Arctic contains 30 percent of the world's undiscovered

<sup>&</sup>lt;sup>4</sup> Arctic Marine Shipping Assessment 2009 Report. Arctic Council, April 2009, second printing, p. 17, https://www.pame.is/images/03\_Projects/AMSA/AMSA\_2009\_report/AMSA\_2009\_Report\_2nd\_print.pdf

natural gas and 13 percent of global oil reserves.<sup>5</sup> Research also predicts that global fish stocks will migrate toward the Arctic Ocean as temperatures in southern oceans continue to rise, <sup>6</sup> posing a significant challenge to global food security. In 2020, the Russian government adopted legislation creating \$300 billion in incentives for new ports, factories, and oil and gas developments in the Arctic.<sup>7</sup> This significant financial commitment by Russia to develop their Arctic region is being done in concert with sizeable growth and reinvigoration of their Northern Fleet's conventional and nuclear forces, Arctic military facilities, and bases in the region.<sup>8</sup> Despite it being geographically distant from the Arctic, China has also expressed considerable and growing interest in the Arctic. China published the China's Arctic Policy in early-2018, in which it refers to itself as a "near-Arctic State"9. In response to an increased focus on the Arctic by both Russia and China, the United States as well as other Nordic members of NATO are developing more robust and warfighting oriented naval policies.<sup>10</sup> All of which serves to highlight growing overall geopolitical concerns and tensions in the Arctic. This additional international interest and activity in the region will generate greater demand for defence, security, and safety measures to protect Canadian sovereignty and ensure the well-being and prosperity of Canadians; all of which constitute vital maritime strategic interests of Canada.

Canadian Arctic waters, covered with ice most of the year, remain austere, remote, and expansive, posing significant and extraordinary operational challenges. The Canadian Arctic is also prone to extreme weather events, including intense storms, wildfires, and floods. Due to climate change, these events are becoming increasingly severe.<sup>11</sup> They threaten the lives and properties of Northern populations as well as the transportation and communications lanes on which these communities depend.

Considering the archipelagic nature of the Canadian Arctic, as well as the scarcity of critical infrastructure, the RCN plays a vital role in defending Canada's Arctic and its approaches to ensure the security and safety of its communities. Alongside other components of the CAF and in cooperation with domestic and international partners, the RCN will increase its reach and presence in the region over the long term, a prerequisite to the continued safety, well-being, and prosperity

<sup>&</sup>lt;sup>5</sup> U.S. Geological Survey, *Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle*, U.S. Geological Survey Fact Sheet, July 2008, <u>https://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf</u> (accessed January 31, 2019).

<sup>&</sup>lt;sup>6</sup> Ben Goldfarg, "Feeling the Heat: How Fish Are Migrating from Warming Waters," *Yale Environment 360*, June 15, 2017. <u>https://e360.yale.edu/features/feeling-the-heat-warming-oceans-drive-fish-into-cooler-waters</u> (accessed 28 May 2019).

<sup>&</sup>lt;sup>7</sup> John Last "What Russia's \$300B investment in Arctic oil and gas means for Canada" *CBC*, 15 Feb 2020, <u>https://www.cbc.ca/news/canada/north/russian-arctic-oil-and-gas-explained-1.5462754</u> (accessed 20 Jan 2023).

<sup>&</sup>lt;sup>8</sup> Jonas Kjellen, "The Russian Northern Fleet and the (Re)militarization of the Arctic", *Arctic Review on Law and Politics*, Vol. 13, 2022, pp. 34-52.

<sup>&</sup>lt;sup>9</sup> The State Council Information Office of the People's Republic of China, *China's Arctic Policy* (Beijing: January 2018) <u>http://english.www.gov.cn/archive/white\_paper/2018/01/26/content\_281476026660336.htm</u> (accessed 20 Jan 2023).

<sup>&</sup>lt;sup>10</sup> The United States Department of Defense, 2022 National Defence Strategy of The United States of America, including the 2022 Nuclear Posture Review and the 2022 Missile Defense Review (Washington: October 2022) https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF (accessed 20 Jan 2023).

<sup>&</sup>lt;sup>11</sup> NOAA: "Global Warming and Hurricanes – An overview of current research results", 28 Nov 2022, <u>Global</u> Warming and Hurricanes – <u>Geophysical Fluid Dynamics Laboratory (noaa.gov)</u>, (accessed 02 Dec 2022).

of the Canadian Arctic. Accordingly, a well-defended, secure, and safe Arctic is necessary to healthy communities, strong economies, and a sustainable environment.<sup>12</sup>

### GC/DND/CAF POLICIES

Since 2017, the GC, including DND and the CAF, has released strategic policy documents establishing the Canadian strategy in the Arctic. Together, the *Arctic and Northern Policy Framework* (ANPF) and *Strong, Secure, Engaged: Canada's Defence Policy* (SSE) establish the priorities for the defence community in ensuring the Arctic remains safe, secure, and well-defended. Both documents acknowledge growing international interest in the Arctic, and note that the rise in domestic and foreign activity will increase demands for safety, sustainable use, security, and defence to which Canada must be ready to respond. Additional GC policy documentation, including the *Cabinet Directive on the Federal Approach to Modern Treaty Implementation*, guides federal departments in fulfilling their responsibilities to Indigenous treaties and has particular relevance to Arctic operations.

#### THE ARCTIC & NORTHERN POLICY FRAMEWORK

In 2019, the GC released the ANPF, co-developed with Inuit, Indigenous, provincial, and territorial partners. The Framework lays out the GC's vision for the future of the Canadian Arctic and the Northern region: "strong, self-reliant people and communities working together for a vibrant, prosperous and sustainable Arctic and Northern region ... expressing Canada's enduring Arctic sovereignty."<sup>13</sup> SSE (which was released two years prior, in 2017) and ANPF both recognize that Canada and its Arctic partner nations share many of the same challenges in the Arctic, which provides an opportunity to leverage each other's efforts in support of our common security. DND led the drafting of the ANPF's chapter on Safety, Security, and Defence and continues to work to implement its vision.

Notably, the ANPF lays out six objectives the GC will pursue through 2030 as part of its commitment to a safe, secure, and well-defended Arctic. The five objectives which pertain to the RCN are:

- Strengthen Canada's cooperation and collaboration with domestic and international partners on safety, security and defence issues;
- Enhance Canada's military presence in the Arctic, as well as prevent and respond to safety and security incidents in the Arctic and the North;
- Strengthen Canada's domain awareness, surveillance, and control capabilities in the Arctic and the North;
- Enforce Canada's legislative and regulatory frameworks that govern transportation, border integrity, and environmental protection in the Arctic; and,

<sup>&</sup>lt;sup>12</sup> Canada, Arctic and Northern Policy Framework (Ottawa, 2019).

<sup>13</sup> Ibid

• Increase whole-of-society emergency management capabilities in Arctic and Northern communities.

The RCN will contribute to these objectives on its own, as part of joint operations, in support to Other Government Departments and Agencies (OGDAs), and with international partners and allies.

#### STRONG, SECURE, ENGAGED: CANADA'S DEFENCE POLICY

In June 2017, the GC released its defence policy. *Strong, Secure, Engaged* (SSE) emphasizes the importance of the Arctic for Canada's security and defence at a time when the region is attracting growing international interest. To succeed in a changing and complex security environment, the CAF will increase its presence in the Canadian Arctic over the long term through a series of initiatives, working cooperatively with Indigenous inhabitants of the Arctic, domestic and international partners.

Under SSE, the CAF will enhance its presence, reach and mobility in the Canadian North.<sup>14</sup> In regards to the RCN, the defence policy commits to a number of key investments in the Arctic. First and foremost, the RCN is acquiring six ice-capable Arctic & Offshore Patrol Vessels (AOPV), increasing its range, endurance, and effectiveness throughout the region.

SSE also commits to invest in a range of space capabilities to improve surveillance and communications throughout Canada's Arctic region, which currently represent important operational challenges for the RCN and the rest of the CAF. These new capabilities will enhance maritime domain awareness and satellite communications to achieve global coverage. SSE also prioritizes Arctic Joint Intelligence, Surveillance and Reconnaissance as a research and development priority to produce innovative solutions to surveillance challenges in the North.

These investments not only support the defence of Canada, but are also relevant to the defence of North America. Canada's defence partnership with the U.S. remains integral to continental security, and the Arctic is of critical importance to the national security and defence of both nations. Hence, investments in the development of new technologies will be done in collaboration with the U.S. to meet existing challenges and evolving continental threats across all domains. Notably, Canada and the U.S. will work together to improve Arctic surveillance and control, including through the replacement of the North Warning System with future technological solutions and other initiatives to modernize the North American Aerospace Defense Command (NORAD).

SSE also mandates the CAF to conduct joint exercises with Arctic allies and partners and support the strengthening of situational awareness and information sharing in the Arctic, including with the North Atlantic Treaty Organization (NATO), as well as Indigenous communities. With icecapable vessels, joint support ships, and a new class of surface combatants, the RCN will be well

<sup>&</sup>lt;sup>14</sup> Canada, Department of National Defence, *Strong, Secure, Engaged: Canada's Defence Policy*, (Ottawa, 2017), pp. 80.

equipped to work with and in support of domestic partners, and conduct joint exercises with allied navies and coast guards in the Arctic as we strive for greater integration with the United States, as well as our Nordic NATO allies.

Overall, SSE sets out the capability investments that will give the RCN and the CAF the mobility, reach, and infrastructure required to project force in the region in ways that defend Canada's vital maritime strategic interests and sovereignty,<sup>15</sup> while better responding to the needs of those residing in Arctic and Northern communities.

#### **INUIT NUNANGAT POLICY**

In April 2022, at the Inuit Crown Partnership Committee (ICPC), the Prime Minister and Inuit Tapiriit Kanatami President Natan Obed approved the Inuit Nunangat Policy (INP). DND was involved in the co-development of this policy, which includes the recognition of Inuit Nunangat as a geographic, cultural, and political region within Canada. The INP now guides how all federal government departments work with Inuit as rights holders: "the INP will help ensure Inuit priorities and self-determination are part of the government's programs, policies and initiatives going forward." The policy applies to all new or renewed federal policies, programs or initiatives that apply in Inuit Nunangat. The INP commits the government to improving coordination of federal programs and investments across Inuit Nunangat and ensures engagement with Inuit in these processes at all stages.

### RCN STRATEGIC OBJECTIVES IN THE ARCTIC

The Arctic represents a rapidly changing operating environment in which the RCN must be capable of generating forces and ensuring sustainable activities in service of the larger CAF and GC intent described previously. However, in addition to challenges posed by an austere and unpredictable environment, the RCN will require new capabilities and competencies to answer the growing operational demand in the Arctic. The *RCN Strategic Plan 2017-2022* acknowledges these challenges and sets the vision for the Future Fleet: in the Arctic like in other regions of interest to Canada, the RCN must be "Ready to Help, Ready to Lead, and Ready to Fight."<sup>16</sup>

In the coming years, in line with the ANPF, SSE and the INP, the RCN will pursue three key strategic objectives in the Arctic:

- Enhance the ability to **project and sustain military force** as well as prevent and respond to safety and security incidents in the Arctic and the North;
- Strengthen sustainable maritime **domain awareness**, surveillance, and control capabilities in the Arctic and the North; and;

<sup>&</sup>lt;sup>15</sup> Canada, Department of National Defence, *Strong, Secure, Engaged: Canada's Defence Policy*, (Ottawa, 2017), pp. 80.

<sup>&</sup>lt;sup>16</sup> Canada, Royal Canadian Navy, *Royal Canadian Navy Strategic Plan 2017-2022: Ready to Help, Ready to Lead, Ready to Fight*, (Ottawa, 2018), pp.5, <u>http://navy-</u>

marine.forces.gc.ca/assets/NAVY\_Internet/docs/en/analysis/rcn\_strategicplan\_2017-2022\_en-s.pdf

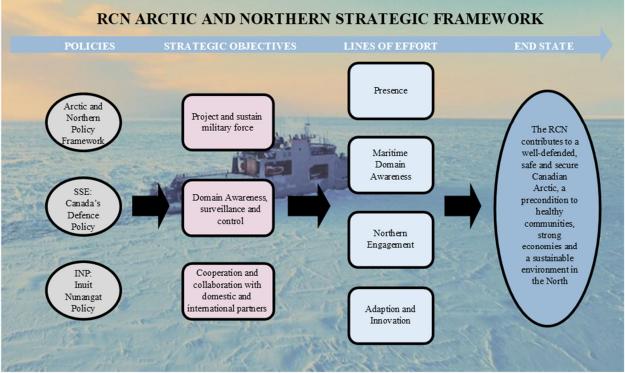
• Strengthen **cooperation and collaboration with domestic and international partners** on safety, security, and defence issues, including territorial authorities, local communities, Inuit and Indigenous peoples.

To achieve these objectives, the RCN will progressively increase its presence in the Canadian Arctic. The organisation's interest in the region is not limited to the navigation season. To the contrary, advancing the RCN's strategic objectives requires long-term and year-round planning and investment. More marine traffic through the Arctic will lead to more marine incidents and the RCN will be positioned to respond. With this additional activity, there will be more scrutiny on the RCN's presence and its impact on the environment; necessitating monitoring programs by or at least in consort with OGDAs and indigenous partners, including Safety and Environment Management System (SEMS) documentation and subsequent verification.

#### **LINES OF EFFORT**

The RCN will focus its planning and operations in the Arctic along four Lines of Effort (LOE), as depicted at *figure 2* below. These LOE are: *Presence; Maritime Domain Awareness; Northern Engagement;* and *Innovation and Adaptation*. In so doing, the RCN will align its efforts with GC policy objectives aimed at achieving the following endstate: **the RCN will contribute to a well-defended, secure, and safe Canadian Arctic; a precondition to healthy communities, strong economies, and a sustainable environment in the North.<sup>17</sup>** 

<sup>&</sup>lt;sup>17</sup> Canada, Arctic and Northern Policy Framework (Ottawa, 2019).



#### Figure 2: RCN Arctic and Northern Strategic Framework

Source: Directorate of Naval Strategy, Royal Canadian Navy

#### PRESENCE

#### Operations and exercises

Under the umbrella of Operation NANOOK, the RCN will participate every year in major wholeof-government (WoG) Arctic exercises to better integrate CAF, OGDAs and foreign partners inputs, resources, and personnel. Through such operations, the RCN will further develop its competencies specific to the polar environment and showcase the expertise of its specialised units, including the Fleet Diving Units, the Naval Tactical Operations Group, and the Naval Security Team (NST). While operating in the North, the RCN will work collaboratively with Joint Task Force North (JTFN), Indigenous organizations, and foreign Arctic partners to ensure compliance with the various territorial, Inuit and Indigenous government legislative, regulatory, sustainable, and good governance requirements and procedures.<sup>18</sup>

New concepts of operations will be required as new capabilities are acquired by the RCN to operate in polar conditions and enhance the WoG approach. For instance, as stated in the Canadian Coast Guard and RCN Joint Arctic Concept of Operations,<sup>19</sup> future planning disscussions should allow for search and rescue, and environmental and emergency response exercises to continue, while

<sup>&</sup>lt;sup>18</sup> Canada, Canadian Armed Forces, "DAOD 8007-0, Notification of DND and CF Activities Within the Joint Task Force (North) Area of Responsibility," June 18, 2014. <u>DAOD 8007-0, Notification of DND and CF Activities</u> <u>Within the Joint Task Force (North) Area of Responsibility - Canada.ca (accessed November 15, 2022).</u>

<sup>&</sup>lt;sup>19</sup> Canadian Coast Guard and Royal Canadian Navy, CCG/RCN Joint Arctic Concept of Operations (Ottawa, 2018).

building interoperability with Inuit, Indigenous and Northern communities, other elements of the CAF, and OGDAs. As an enabler supporting JTFN and CJOC through the deployment of its naval platforms and specialised capabilities in Arctic waters, the RCN will play a key role in the defence of the Canadian Arctic.

There has been significant environmental consideration and Indigenous community engagement for Arctic Naval operations under Operation NANOOK requiring dedicated northern Indigenous liaison capability for environmental assessments, logistics coordination, emergency response, casualty evacuation, spill response and supply replenishment.

Intergovernmental collaboration will continue to be an important aspect of RCN domestic operations. While the mandates of several OGDAs, including the Royal Canadian Mounted Police (RCMP), the Canada Border Services Agency (CBSA), Transport Canada (TC), and Fisheries and Oceans Canada (DFO), encompass Canadian territorial waters, these agencies and departments have limited capacity to operate on their own at sea. The RCN, along with the Canadian Coast Guard, therefore plays both an enabling and supporting role by embarking OGDAs agents and representatives and contributing to the maritime domain awareness through the Marine Security Operations Centres (MSOCs).

In the current evolving political climate that is seeing increasing tensions and challenges to the Rules Based International Order, maintaining and strengthening close relationships with our principal Arctic allies is of paramount importance to ensuring overall Arctic security. The RCN must therefore leverage opportunities for interoperability training with our Arctic allies through Allied vessel participation in Op NANOOK, as well as seeking to participate in other exercises and operations hosted by our Arctic allies such as the United States Navy's (USN) annual Ice Exercise (ICEX). The RCN will also encourage opportunities for RCN sailors to conduct personnel exchanges with allied navies.

#### Naval platforms

Ensuring a greater presence and operating at a faster pace in the Canadian Arctic increases demand on the RCN fleet and requires the acquisition and development of new capabilities. As the *Harry DeWolf*-class Arctic & Offshore Patrol Vessels (AOPV) continue to come online, the *Halifax*-class patrol frigates and *Kingston*-class Maritime Coastal Defence Vessels (MCDVs) will continue to complement operations in Canada's Northern waters and their approaches. As the ice-capable *Harry DeWolf*-class reach full operational capability (FOC), it will provide a more robust naval capability in the Arctic, with greater range and autonomy than the *Kingston*-class, at a lower cost than *Halifax*-class frigates, and facilitate a much larger Area of Operations (AoO) than previously possible. It is worth highlighting the capacity of the *Harry DeWolf*-class to facilitate helicopter operations and landing craft support, provide storage and transport, as well as Command and Control capabilities, and the ability to provide significant support to operations ashore and at sea. Additionally, the future *Protecteur*-class Joint Support Ships (JSS) will be capable of operating in the region during summer months, as the waterways in the Canadian North become more accessible.



11

Although the *Harry DeWolf*-class is designed to operate in an austere environment, operational sustainment of naval platforms in the North remains challenging. Looking forward, the RCN could also potentially increase its reach in the region and support local economies by leveraging infrastructure projects led by local communities and regional authorities, such as the deep-water port in Iqaluit and the Grays Bay road and port project.<sup>20</sup>

#### MARITIME DOMAIN AWARENESS

Domain awareness is critical to identifying, deterring, and defeating potential threats to Canadian security and sovereignty. It is also a vital element of Canada's shared responsibility to defend North America. However, command, control, communications, computer, intelligence, surveillance, and reconnaissance (C4ISR) capabilities face significant challenges at high latitudes due to the current lack of satellite coverage and environmental conditions. To address these issues, the RCN contributes to CAF, DND and Canadian Space Agency (CSA) initiatives increasing reconnaissance and surveillance assets such as the RADARSAT Constellation Mission, polar satellite communications, remotely piloted aerial systems, and autonomous underwater surveillance sensors. Additionally, research and development efforts led by ADM(DRDC) will increase awareness of maritime traffic and under-water activity in Canadian Arctic waters and their approaches, and improve information sharing and integration across all domains. An increased presence of RCN ships and maritime helicopters in Canadian Arctic waters will also contribute to establishing a clearer picture of Canadian air and maritime approaches, as well as providing opportunities to conduct hydrographic surveys and scientific trials to ensure sustainable operations.

In close coordination with the United States, additional capabilities are being considered, including:

- An Arctic Over-the-Horizon Radar system to provide early warning radar coverage and threat tracking from the Canada-U.S. border to the Arctic Circle; and
- A Polar Over-the-Horizon Radar system to provide early warning radar coverage over and beyond the northernmost approaches to North America, including the Canadian Arctic Archipelago.

As a developing theater of operations, the Arctic will witness an increase in maritime traffic in the coming years. As maritime traffic increases in Canada's Northern waters, a WoG approach will be necessary to ensure the proper use of Northern marine transportation corridors and the stewardship of marine protected and conservation areas and areas of subsistence and cultural significance. Strengthening MSOCs by adopting formal information-sharing agreements amongst OGDAs will reinforce WoG collaboration. Furthermore, the RCN and the CAF, alongside the CCG, the RCMP, TC, and DFO, will be key to developing a system-of-systems approach to ensure data sharing and integration, thereby ensuring a timely response to potential threats and emergencies.

\***|** \*

<sup>&</sup>lt;sup>20</sup> Kitikmeot Inuit Association and Government of Nunavut, *The Grays Bay Road and Port Project: Arctic Gateway Connecting Nunavut to the World*. <u>http://www.miningnorth.com/\_rsc/site-</u>content/library/Infrastructure/Grays Bay Port Information%20Pamphlet English.pdf (accessed June 5, 2019).

#### Canadian Rangers

When operating in the North, the RCN will remain engaged with the Canadian Rangers through JTFN and the Canadian Army. While they do not include a naval component, they contribute to RCN and CAF domain awareness by conducting patrols and reporting unusual activities or sightings at sea and ashore, collecting local data for the CAF and performing sovereignty duties. Upon request from relevant authorities, they can also assist in search and rescue efforts, and support response to natural and environmental disasters such as forest fires, floods and spills. The RCN will reinforce its relationship with the Canadian Rangers in order to build mutual understanding and create opportunities for cooperation.

#### NORTHERN ENGAGEMENT

Increasing RCN presence and effective operations in the Canadian Arctic is closely linked to the ability of the institution to establish meaningful relationships with OGDAs, territorial, provincial and regional authorities, as well as local communities, Inuit and Indigenous governments and peoples. These relationships deepen the RCN's understanding of the North and ensure it contributes to the best of its ability to Arctic safety, security, and defence. Under the current RCN Strategic Framework and in coordination with JTFN, the RCN will continue to develop extensive relations with Northern governments and local populations, and contribute to raising public awareness, safety and security issues unique to Northern regions. The RCN will do so as part of the larger WoG approach to ensure strong, self-reliant people and communities working together for a vibrant, prosperous and sustainable Arctic, while expressing Canada's enduring Arctic sovereignty.

Local communities and Inuit and Indigenous peoples are at the forefront of safety and security in the Arctic and the Northern region. Their experience and knowledge of the Canadian North is unparalleled. As the RCN increasingly operates in the region, it must do so in a way that is both cognizant and respectful of traditional knowledge and expertise, and remain inclusive of all Northern peoples. Any engagement must be meaningful and clearly convey the intent of RCN operations in the region and do so in a manner that respects and considers local custom, expectations and traditions.

#### Employment and Educational Programs

Since 2003, the Commander of Maritime Forces Pacific (MARPAC) has conducted the Raven Aboriginal Youth Employment Programme. This outreach programme is designed to build bridges with Inuit and Indigenous communities across Canada and showcase Inuit and Indigenous peoples potential for part-time employment or a fulltime career with the RCN and the CAF. Raven is conducted each summer at Canadian Forces Base Esquimalt. It combines basic military training and traditional knowledge transmitted by Elders, and has a distinct naval focus. It promotes self-discipline, teamwork, and pride through Inuit and Indigenous traditions within the military service.

While not exclusive to the RCN, the CAF has established over the years other educational programs to attract Inuit and Indigenous peoples. Through the Aboriginal Leadership Opportunity Year (ALOY) initiative, Inuit and Indigenous individuals can enrol in the Royal Military College

14

(RMC). During the ALOY, the candidates meet with RCN personnel, participate in naval functions and training, and visit either MARPAC or MARLANT. At the end of the year they can continue in a degree programme through either the Regular Officer Training Programme or the Reserve Entry Training Plan. The Junior Canadian Rangers (JCR) Programme, which consists of more than 3,400 members in 119 locations, also provides a beneficial engagement opportunity with Northern communities. It represents a unique way to better understand and exchange perspectives with young members of our Northern communities. In return, the RCN becomes more representative of Canadians and develop a greater understanding of the Canadian Arctic.

#### Arctic Community Engagement

The RCN conducts engagements with Northern and Inuit and Indigenous governments and communities as part of its routine activities during Arctic deployments. In the future, the RCN can expect to work more closely and with a greater numbers of partners in the Arctic and the North, as part of the WoG approach described under the ANPF and the Inuit Nunangat Policy. When conducting government and community engagements, the RCN Liaison should maintain active, ongoing and strategic communication. This should include consultations with JTFN, Canadian Army, CJOC and seek advice from Director General Indigenous Affairs (DGIA), as well as Defence Intergovernmental Affairs. For instance, with additional CCG vessels and RCN ships in the Arctic, it would be beneficial for both organizations to coordinate their community engagement activities through multi-year engagement plans.<sup>21</sup> Increased, repeated, and coordinated community engagement will enhance trust, communication, and dialogue with local governments and communities, supporting and improving the RCN and CAF situational awareness across the region.

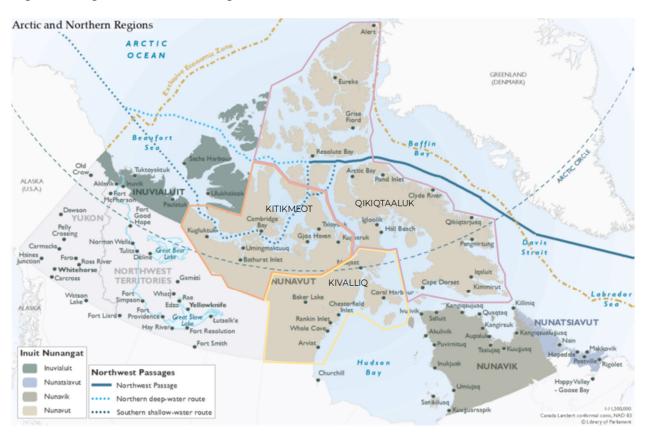
#### Ship Affiliation

Ship Affiliation is a long-standing Canadian naval tradition, associating ships and their crews with cities and communities on the basis of history, geography, and mutual shared interests. It is a flexible relationship and might include participation in community events, exchanges of ideas and knowledge, and the ship's involvement in, or crew's sponsorship of, local charitable events. Through these activities, affiliation reinforces the identity of ships to local communities and establishes relationships for the life of the ship. In the absence of Naval Reserve units in the Arctic region, the affiliation of the six *Harry DeWolf*-class ships will provide a powerful engagement mechanism through which the RCN can establish and sustain stronger relationships with peoples in the North and their governments.<sup>22</sup>

\***|** \*

<sup>&</sup>lt;sup>21</sup> Canadian Coast Guard and Royal Canadian Navy, CCG/RCN Joint Arctic Concept of Operations.

<sup>&</sup>lt;sup>22</sup> Each vessel will be affiliated with one of 6 regions – Inuvialuit (Western Arctic – Yukon and North West Territories), Qikiqtaaluk (Baffin Island and area – Nunavut), Kivlliq (Western Hudson Bay – Nunavut), Kitkmeot (Central Arctic – Nunavut), Nunavik (Northern Quebec) and Nunatsiavut (Newfoundland and Labrador) regions.



#### Figure 3: Regional Affiliation Map<sup>23</sup>

Public Affairs and Strategic Outreach

Public Affairs plays a key role not only in supporting RCN engagement with Northern communities, but also in raising public awareness on Arctic matters. It also reinforces public opinion that the RCN and the CAF are ready to act in the service of Canadians in the Arctic and the North. RCN Strategic Outreach, a separate, purpose-built organization, conducts the Canadian Leaders at Sea (CLaS) programme, which is designed to help familiarize Canadian leaders from business, industry and academia with the work of sailors and present fleet capabilities. The ultimate goal of Strategic Outreach is to educate a broad spectrum of Canadians through an ever-expanding network, bringing more Canadians closer to their navy. Through the CLaS programme, the RCN can achieve two main objectives:

• Raise partners' awareness of the unique opportunities and challenges present in the Arctic; and,

<sup>&</sup>lt;sup>23</sup> Source: Canada (NRCan), Atlas of Canada National Scale Data 1:5,000,000 Series, "Boundary Polygons" and "Waterbodies", Ottawa, 2013; NRCan, Administrative Boundaries in Canada - Canvec Series, "Administrative Features", Ottawa, 2018; NRCan, Atlas of Canada National Scale Data 1:1,000,000 Series, "Place Names", Ottawa, 2014; Indigenous and Northern Affairs Canada (INAC), Inuit Regions (Inuit Nunangat), Gatineau, 2017; INAC, Inuit Communities Location, Gatineau, 2016; Natural Earth, Physical Vectors, "Geographic Lines", 1:10m, version 4.1.0; and Jackie Dawson et al., "Temporal and Spatial Patterns of Ship Traffic in the Canadian Arctic from 1990 to 2015", Arctic, Vol. 71, No. 1, 2018, p. 18. The following software was used: Esri, ArcGIS PRO v. 2.1.0. Contains information licensed under Open Government Licence – Canada.

• Embark Arctic leaders to build understanding, trust and relationships with the navy. Strategic Outreach is essential in raising public awareness about the RCN and its contribution to the Arctic's safety, security and defence.

#### **INNOVATION AND SUSTAINABILITY**

Universally recognized as a pristine and vulnerable region, it is imperative that the RCN act as good stewards in safeguarding the Arctic environment. This means acting responsibly and sustainably across all lines of RCN operations in the Arctic, including planning, monitoring, coordinating activity or conducting operations in the region.

New technologies and innovative ways to operate in the polar environment will be critical, not only to defend Canadian sovereignty, but also to ensure a vibrant, prosperous and sustainable Arctic. To this end, the RCN is exploring ways to mitigate the impact of RCN operations in the vicinity of Inuit and Indigenous hunting grounds, natural habitats of vulnerable species, and traditional on-ice travel routes. For example, careful management of on-board waste and pollutants will help offset the expected increase in Arctic maritime traffic and increasingly lengthy deployment periods. To this end, the RCN will continue to engage with innovation forums such as the Innovation for Defence Excellence and Security (IDEaS) Programme led by ADM(DRDC), which is investing in a number of innovative solutions focused on the Arctic and other RCN priority areas by leveraging the capabilities of Canada's private industry, academia and international allies.

To maintain its credibility as a leading and innovative organization, the RCN must be a highly respected environmental leader demonstrating how it seeks to reduce, or eliminate where possible, risks of adversely affecting the Arctic environment. Consultations must take place with local and territorial government and leaders to ensure participation of local communities and respect for traditional practices.

### CONCLUSION

The Arctic physical and strategic environment is rapidly changing, raising the importance of the region for Canada's security and defence. As a result, the defence team and the GC have adopted policies to ensure the Canadian Arctic is well-defended, secure, and safe as a precondition to healthy communities, strong economies, and a sustainable environment in the North. The RCN will play a crucial role in achieving this end state, given the importance of the maritime environment in the Canadian Arctic.

The RCN Arctic & Northern Strategic Framework is intended to provide guidance aimed at achieving RCN objectives in the Arctic, while respecting the INP, CAF and GC policies. Current and future activities must be aligned and respond to the needs and priorities of the CAF in regard to security and defence, while also ensuring the well-being of Northern communities, contributing to strong local economies, and protecting the Arctic environment. To support this end state in a new theater of operations, the RCN must demonstrate openness, respect, and flexibility in the way

1

it conducts business and operations. These efforts will directly contribute to a safe and vibrant Canadian Arctic and ensure the RCN establishes itself as a credible steward of the region.



### REFERENCES

Canada. Arctic and Northern Policy Framework. Ottawa, 2019.

Canada. Canadian Armed Forces. "DAOD 8007-0, Notification of DND and CF Activities within the Joint Task Force (North) Area of Responsibility," June 18, 2014. <u>DAOD 8007-0, Notification of DND and CF Activities within the Joint Task Force (North) Area of Responsibility - Canada.ca</u> (accessed Nov 16, 2022).

Canada. Canadian Coast Guard and Royal Canadian Navy. CCG/RCN Joint Arctic Concept of Operations. Ottawa, 2018.

Canada. Defence Research and Development Canada. "All Domain Situational Awareness S&T Programme." February 12, 2018. <u>https://www.canada.ca/en/defence-research-development/programs/all-domain-situational-</u> awareness-programme.html/content/canadasite/en/defence-research-development/programs/all-

domain-situational-awareness-program.html (accessed Nov 15, 2022).

Canada. Department of National Defence. *Strong, Secure, Engaged: Canada's Defence Policy*. Ottawa, 2017.

Canada. Royal Canadian Navy. *Royal Canadian Navy Strategic Plan 2017-2022: Ready to Help, Ready to Lead, Ready to Fight*. Ottawa, 2017.

Canada. Royal Canadian Navy. Royal Canadian Navy Arctic Operations Manual. Halifax, 2016.

Goldfarg, Ben. "Feeling the Heat: How Fish Are Migrating from Warming Waters." *Yale Environment 360*. June 15, 2017. <u>https://e360.yale.edu/features/feeling-the-heat-warming-oceans-drive-fish-into-cooler-waters</u> (accessed Nov 15, 2022).

Inuvialuit Final Agreement (Inuvialuit Final Agreement | Inuvialuit Regional Corporation (IRC)) (accessed Nov 15, 2022)

John Last "What Russia's \$300B investment in Arctic oil and gas means for Canada" *CBC*, 15 Feb 2020, <u>https://www.cbc.ca/news/canada/north/russian-arctic-oil-and-gas-explained-1.5462754</u> (accessed 20 Jan 2023).

Jonas Kjellen, "The Russian Northern Fleet and the (Re)militarization of the Arctic", Arctic Review on Law and Politics, Vol. 13, 2022, pp. 34-52.

Kitikmeot Inuit Association and Government of Nunavut. *The Grays Bay Road and Port Project: Arctic Gateway Connecting Nunavut to the World*. <u>http://www.miningnorth.com/\_rsc/site-content/library/Infrastructure/Grays\_Bay\_Port\_Information%20Pamphlet\_English.pdf</u> (accessed Nov 15, 2022).

NOAA: "Global Warming and Hurricanes – An overview of current research results", 28 Nov 2022, <u>Global Warming and Hurricanes – Geophysical Fluid Dynamics Laboratory (noaa.gov)</u>, (accessed 02 Dec 2022).

Nunavut Land Claims Agreement (<u>https://nlca.tunngavik.com/</u>) – Specifically section 21.5.13 (accessed Nov 15, 2022)

U.S. Geological Survey. *Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle*, U.S. Geological Survey Fact Sheet. July 2008. <u>Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle (usgs.gov)</u> (accessed Nov 15, 2022).

Senate of Canada. *Northern Lights: A wake-up call for the future of Canada – Report of the Special Senate Committee on the Arctic.* Ottawa, June 2019.

The State Council Information Office of the People's Republic of China, *China's Arctic Policy* (Beijing: January 2018)

http://english.www.gov.cn/archive/white\_paper/2018/01/26/content\_281476026660336.htm (accessed 20 Jan 2023).

The United States Department of Defense, 2022 National Defence Strategy of The United States of America, including the 2022 Nuclear Posture Review and the 2022 Missile Defense Review (Washington: October 2022) <u>https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF</u> (accessed 20 Jan 2023).



19

## **GLOSSARY OF ACRONYMS**

ADM(DRDC)	Assistant Deputy Minister (Defence Research & Development Canada)
ADSA	All Domain Situational Awareness
ALOY	Aboriginal Leadership Opportunity Year
ANPF	Arctic and Northern Policy Framework
AoO	Area of Operations
AOPV	Arctic & Offshore Patrol Vessel
C4ISR	Command, Control, Communications, Computer, Intelligence, Surveillance, and Reconnaissance
CAF	Canadian Armed Forces
CBSA	Canada Border Services Agency
CCG	Canadian Coast Guard
CJOC	Canadian Joint Operations Command
CLaS	Canadian Leaders at Sea
DFO	Fisheries and Oceans Canada
DGIA	Director General Indigenous Affairs
DND	Department of National Defence
GC	Government of Canada
ICPC	Inuit Crown Partnership Committee
ICEX	Ice Exercise
IDEaS	Innovation for Defence Excellence and Security
INP	Inuit Nunangat Policy
JCR	Junior Canadian Rangers

JSS	Joint Support Ship
JTFN	Joint Task Force North
MARLANT	Commander Maritime Forces Atlantic
MARPAC	Commander Maritime Forces Pacific
MCDV	Maritime Coastal Defence Vessel
MSOC	Marine Security Operations Centres
NATO	North Atlantic Treaty Organization
NEP	Northeast Passage
NNF	Nanisivik Naval Facility
NORAD	North American Aerospace Defense Command
NWP	Northwest Passage
OGDA	Other Governmental Departments and Agencies
R&D	Research and Development
RCMP	Royal Canadian Mounted Police
RCN	Royal Canadian Navy
RMC	Royal Military College
S&T	Science and Technology
SSE	Strong, Secure, Engaged: Canada's Defence Policy
TC	Transport Canada
USN	United States Navy
WoG	Whole of Government