





HOW THE RCN IS PREPARING TO MEET THE NEEDS OF THE ARCTIC

Lieutenant-Commander David Dallin

JCSP 45

Solo Flight

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Introduction

The Royal Canadian Navy (RCN) is working to become a key player in the Arctic. From ships, to equipment, to training, progress is happening, but right now it is not enough to fully meet the needs of the Government. The Government has been clear in their instructions, organizations must be ready to react to threats in the Arctic.

The agreement that Government departments must work together is key to Arctic success. Therefore, this research paper utilizes the assumed hierarchy of Arctic priorities as the Arctic Council shapes Canada's Northern Policy Framework, which shapes Canada's Defence Policy, which shapes the Royal Canadian Navy Strategic Plan.

The RCN in relation to the requirements set out in the Arctic Policy Framework, has a lot more progression to be made. By analyzing the current and future situation in the Arctic, applying the theoretical threats to Canadian sovereignty, then comparing those to the current and future RCN readiness levels, this research paper identifies the gap between what is capable of being done, and what is required to operated fully in the Arctic. It must be said that the RCN is significantly better prepared today than twenty years ago.

Much like in business, the RCN has shareholders; Canadians. Businesses goals and objectives are to provide value to its shareholders, nothing more. The RCN provides Canadians value in the form of *readiness*.

Main Arguments

Arctic Policy Overview and Background

The Canadian Arctic area is a constantly changing, relatively new landscape, with multiple involved players. From shifting ice impacting shipping routes, to new discoveries of seabed geology changing Canadian territorial claims that both require the Government of Canada to be flexible in their approach to this yet fully defined area. Additionally with eight arctic states, six permanent participants, and thirty-eight observers¹, the Arctic Council culminates the best interests of all Arctic players. In all areas of Arctic Policy development, Canada desires to be at the forefront of involvement.

Canada's involvement in the Arctic Council plays a crucial role in global Arctic stewardship. Since 1996 Canada has been Chair twice, which helped provide ambitious agendas to further Canadian interests². The agreements resulting from the Arctic Council are the generation of best practices which all parties agree to and then subsequently implement. From the best practices of the Arctic Council, Canada has developed their own internal strategy, formally the Arctic and Norther Policy Framework. From this Framework the CAF has developed their guidelines for response in the Canadian Defence Strategy, Strong Secure Engaged (SSE). Subsequently each environment has developed their own successive plans, including the development of the RCN's Strategic Plan 2017-2022. Each one of these successive documents allows for detailed understanding of what Arctic Operations will be.

In Canada's Arctic and Northern Policy Framework: Safety, Security and Defence chapter, the requirements for CAF are "essential prerequisites for healthy communities, strong

¹ Arctic-council.org website.

² Byers, Michael. 2012. "Circumpolar Challenges: And Ambitious Agenda for the Arctic Council.

economies, and a sustainable environment"³. Highlighting the changing environment due to weather, emphasising increased marine activity, and increased international interest. Simply put, increased climate change is reshaping the Arctic, which allows for increased marine traffic such as fishing, natural resource exploration, shipping, and tourism. The increase in traffic will result in increased potential of environmental or human accidents that may require the support of Canadian Government Departments. With the development of SSE, Ministerial orders and outlines of future Arctic involvement were developed, and further refined by RCN Strategic Plan.

The Department of National Defence has highlighted the Arctic as an emerging area of interest to the CAF. "This rise in [Arctic] activity will also bring increased safety and security demands related to search and rescue and natural or man-made disasters to which Canada must be ready to respond". SSE further orders CAF to "maintain a robust capacity to respond to a range of domestic emergencies...providing military support...when called upon, engaging in rapid disaster response, and contributing to effective search and rescue operations". SSE new initiative 69 states "Prioritize Arctic Joint Intelligence, Surveillance and Reconnaissance as a defence research and development priority to produce innovative solutions to surveillance challenges in the North.". Additionally, SSE new initiative 85 states development of "satellite communications that achieve global coverage, including in the Arctic.". The key idea of SSE is to develop better domain awareness of the Arctic. New initiative 106 states "Enhance the mobility, reach and footprint of the Canadian Armed Forces in Canada's North to support

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³ Government of Canada. Canada's Arctic and Notther Policy Framework. 2019

⁴ Government of Canada. Strong Secure Engaged. P.50

⁵ Ibid P.60

⁶ Ibid. P.65

⁷ Ibid. P.72

operations, exercises, and the Canadian Armed Forces' ability to project force into the region."8. In the stated CAF core missions in SSE⁹, CAF is clearly ordered to deter, assist, and conduct joint/operate with other organizations in the protection of Canada's sovereignty. These CAF priorities have led to the RCN to identify specific criteria such as "the need to operate in the Arctic, alongside the Canadian Coast Guard, and alongside allied partners" 10.

The RCN developed their Strategic Plan from SSE, to show its sailors how the RCN anticipates moving forward in support of Government direction. Key to the movement, according to the RCN, is that of people stating the "credibility of our profession of arms rests on ensuring that we maintain the means to act decisively and deliver results across the entire spectrum of operations"¹¹. As previously discussed, readiness is the output value of the CAF and RCN, providing Canadians the readiness needed to act as directed by Government. This readiness specifically includes Arctic responsibilities, from the development of new Arctic and Offshore Patrol Craft¹², to the finalization of the Nanisivik Naval Facility¹³, the foundation for operations is supported by money, infrastructure, and equipment. However, there is no specific mention of dedicated personnel support and training programs that are in place to achieve these results effectively. As noted the RCN "must continue to understand how new competencies, such as operating in the Arctic...will affect the Future Fleet"¹⁴. The Strategic Plan clearly sets the baseline of RCN fleet operations as "built around the ability to deploy and sustain a Naval Task Group, composed of up to four surface combatants, a joint support ship"¹⁵. The RCN outcomes¹⁶

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⁸ Ibid. P.80

⁹ Ibid. P.82

¹⁰ Government of Canada. Strong Secure Engaged. P.35

¹¹ Government of Canada. RCN Strategic Plan 2017-2022. P.9

¹² Government of Canada. Arctic and Offshore Patrol Ships.

¹³ Government of Canada. Canada's North: The Nanisivik Naval Facility.

¹⁴ Government of Canada. RCN Strategic Plan 2017-2022. P.11

¹⁵ Ibid. P.13

¹⁶ Ibid. P.15

are detailed in what can be identified as routine operations, but do not indicate specific training and exercises focused on Arctic operations. Despite being planned, the RCN HR Strategy¹⁷ has not been delivered, which will help guide the transition to operate in new environments.

Developing and publishing the HR Strategy that encompasses what RCN requires in terms of personnel for operations in the Arctic environment will take time, specifically for research, trial, and amendment. Ships and facilities are still in their building phase, none of which are operationally ready to deploy or operate. This means the development of the RCN HR Strategy would place any training or operational plan potentially too far ahead of the capability available and lessons learned that are to come. RCN must first understand the capabilities of their equipment before developing the details of training their personnel.

Threats to the Arctic

Threats to Canada's Arctic are diverse, all are primarily derived from human interaction with the Arctic. Canada has made it clear that they want to protect the Arctic from threats that could endanger biological organisms, pollute air or water, harm Arctic people, impact Arctic climate, or create emergency responses. The Arctic Council identifies these areas of vulnerability that will become more threatened as human activity in the area increases¹⁸. Further, "Canada remains committed to exercising the full extent of its sovereignty in Canada's North, and will continue to carefully monitor military activities in the region and conduct defence operations and exercises as required"¹⁹. State actors such as Russia and China both are increasing their activity in the Arctic, as such Canada must assess and review its requirement for CAF operations in the Arctic. The threats from all these sources, other than states military, are defined by MacDonald

¹⁷ Ibid. P.21

¹⁸ Arctic-council.org website.

¹⁹ Government of Canada. Strong Secure Engaged. P.90

as "challenges [to] Canada's sovereignty and security"²⁰, further Lajeunesse notes that these threats "promise to bring new activity (and potential threats) to the region"²¹.

To fully understand the threat to Canada's Arctic, Canada must be able to accurately determine the cause, location, and frequency of humans in the Arctic. Current Canadian policy, in the form of SSE, shows monetary commitment and support to the expansion and development of early warning systems and increase use of Arctic monitoring capabilities, so "Canada's renewed focus on the surveillance and control of the Canadian Arctic will be complemented by close collaboration with select Arctic partners, including the United States, Norway and Denmark, to increase surveillance and monitoring of the broader Arctic regions"²². Increasing the visualization of movements, tracking habits, understanding patterns will best shape the determinations of threats, to which the CAF and Canada can provide the needed protection.

Canada's population, specifically those from the Arctic, are not under threat from any external state military. Leading authors MacDonald and Lejeunesse indicate Canada is not under any threat; where MacDonald states "Canada's security challenges in the North do note emanate from a military threat but are rather largely constabulary in nature." and Lajeunesse states that "the absence of a real military threat has led the CAF to rightly focus on a host of other unconventional, security concerns" This lack of conventional military opposition is one that the CAF is not stereotypically ready to defend. The mandate directed to the CAF is to work with allies and other departments to support and help the protection of the Arctic. This changes the normal operating style roles that the CAF and RCN will need to develop for Arctic missions.

²⁰ MacDonald. The Canadian Armed Forces and the Arctic: Maintaining a Suitable and Sustainable Role. P.1

²¹ Lajeunesse. The Canadian Armed Forces in the Arctic: Purpose, Capability, and Requirements.

²² Government of Canada. Strong Secure Engaged. P.90

²³ MacDonald. The Canadian Armed Forces and the Arctic: Maintaining a Suitable and Sustainable Role. P.1

²⁴ Lajeunesse. The Canadian Armed Forces in the Arctic: Purpose, Capability, and Requirements. P.1

Canada's major threat areas in the Arctic are that of boarder security, emergency response, and search and rescue. The uncertainty of climate change is "transforming the Arctic landscape by increasing accessibility to human activity to an unprecedented level" which could potentially provide vulnerabilities in Canada's border security. Increased traffic with unpredictable waterways, the Arctic Council notes that "Harsh conditions and the sparse and limited amount of infrastructure in much of the Arctic increase risks and impacts and hinder response activities." This stresses the importance that Government Arctic environmental response that could potentially involve RCN or CAF interaction. The possibility of a maritime incident that may require a Search and Rescue (SAR) response from CAF assets is increasing over time as maritime traffic in the Arctic increases. In 2016 the Crystal Serenity was the "largest passenger vessel to sail the waterway passing through Canadian Arctic territory" although the vessel made the passage safely, "a serious incident would most likely [have] stress[ed] Canada's SAR system to the breaking point." These major threat areas to Canada's Arctic must be articulated in CAF and RCN readiness to support.

RCN Role in Arctic Presence

Canada's Navy plays a key role in the sovereignty of the Arctic, in operations, training, equipment, and readiness; in fact it is mandated to do so. Operations to include increased ship based presence in the Arctic's ever expanding regions, as new ships come into operational use. Training in the Arctic landscape could include cold weather training and collective team training to be able to fully deploy to the region. Importantly, needed equipment that is Arctic capable and supportive to operations, and that providing RCN Sailors the needed material to achieve ordered

²⁵ MacDonald. The Canadian Armed Forces and the Arctic: Maintaining a Suitable and Sustainable Role. P.2

²⁶ Arctic-council.org website.

²⁷ ArcticToday.com website.

²⁸ MacDonald. The Canadian Armed Forces and the Arctic: Maintaining a Suitable and Sustainable Role. P.5

missions. Readiness, in terms personnel readiness and standby forces to support surge threats to the Arctic. Each of these areas are highlighted in their progress towards RCN's readiness to support the needs of the Arctic environment.

Currently the RCN is in a position where Arctic based operations are limited by the capabilities of their ships. The Halifax Class Frigate is not optimally suited for operations in the Arctic, "and potentially compromise[s] other missions and mandates by drawing resources away"²⁹. The use of a high readiness warship would bring the incorrect type of readiness to the Arctic area, furthermore this class of ship is not designed to operate in ice environments.

Maritime Coastal Defence Vessels are also operating in the Arctic region, which are more crew size appropriate than the Frigate, however lack the displacement size needed for large scale operations.

Operation NANOOK is the major RCN operation that takes place in the Arctic, an annual domestic Operation that MCDV's and Frigates take part in. This operation is limited to ice free maritime environments, which limits significantly the time of year that ships can participate. Given the inability for RCN ships to operate in the Arctic environment year round, they are therefore not yet prepared to do so with any sort of internal experience. Implementation of the AOPS will shift this target and increase Arctic operations and experience.

As stated in the RCN Strategic Plan, the primary focus of the RCN is based on the Maritime Task Group, and therefore the majority of the RCN training is focused around meeting that mandate. Additionally noted in the RCN Strategic Plan, is that the RCN is taking on new ships and must transition to those new platforms in more ways than just accepting the platform. It states that "transitioning to the Future Fleet is to manage the complex undertaking of

²⁹ MacDonald. The Canadian Armed Forces and the Arctic: Maintaining a Suitable and Sustainable Role. P.1

introducing new platforms... evolving our organizational structure, naval occupations, [and] training system."³⁰ Significantly the plan also notes that "This transition must be well planned, coordinated and sequenced."³¹; in other words, that plan, is not yet put in place. The RCN needs to finalize the development the transition to future fleet plans first and then move towards training in the key areas of Arctic Operations.

Further planning and implementation for individual training must be prioritized and completed before full Arctic operations are capable. The RCN Strategic Plan indicates that Assistant Chief of the Naval Staff, Personnel and Training (A/CNS P&T) is responsible to develop and deliver the future fleet individualized plans³². At the same time as the new fleet is being transitioned, so too is the Naval Training System, of which the "first stage of IT optimization and modernization is already well underway. This initiative must be completed to enable and support the interrelated initiatives"³³. This highlights that the final implementation is not yet in full service and thus RCN sailors are not fully trained to support Arctic Operations.

The primary equipment needed for the RCN who is required operate in the Arctic and provide support to the realistic threats identified is the platform, is the Arctic Offshore and Patrol Ship (AOPS). Initially the task of Director General Naval Force Development, now under the development of Director New Capabilities Introduction³⁴, the AOPS which are designed to "Provide increased presence and conduct surveillance operations throughout Canada's waters, including in the Arctic "35 These ships are now being built and expected to be operating in the Arctic at full operational capability by 2025³⁶. These new platforms will help to shape the first

³⁰ Government of Canada. RCN Strategic Plan 2017-2022. P.14

³¹ Government of Canada. RCN Strategic Plan 2017-2022. P.14

³² Ibid. P.26

³³ Ibid. P.27

³⁴ Government of Canada. *Director New Capability Introduction (DNCI)* Intranet website.

³⁵ Government of Canada. Arctic and Offshore Patrol Ships website.

³⁶ Ibid.

transformation to future fleets along with serving as the baseline for the transformation of the Naval Training System. These ships will significantly increasing the distance and operating window of Arctic operations, the AOPS puts the RCN significantly farther forward in terms of achieving mandated directions. Tied to the reach the AOPS is the completion of the Nanisivik Naval Station, which drastically increases range and time on station for government vessels in the Arctic.

The final key milestone to the RCN being able to operate as directed in the Arctic is the output of readiness. The first few AOPS have been built and the RCN know how they are designed to operate, how they maneuver, along with their capacities and limitations. What has not yet been established is the corrective measures which are learned through training and trials. Because the full extent of the readiness needed for each member of the team, and the collective training requirements have not fully been established, the RCN cannot fully operate in Arctic environments. Much of the current readiness development has been tied to working with the Canadian Coast Guard to develop an understanding of what year-long operations in the Arctic looks like³⁷. Small steps like this will help the RCN further develop their desired state of readiness in Arctic operations, which will need to be honed as the first AOPS conducts patrols and operations in seas and ice that have never before seen a RCN ship before. Critically, these development opportunities will shape the training system, individual training, equipment requirements, and ultimately define what Arctic Operations will be able to achieve for Canada's sovereignty.

³⁷ Government of Canada. Canadian sovereignty operations. Website

CONCLUSION

Through the use of Canada's Arctic and Northern Policy Framework, which shaped the development of *Canada's Defence Policy, Strong Secure Engaged*, and detailed the RCN Strategic Plan 2017-2022, this paper has identified the gaps in current offering of the RCN to support full time Arctic operations. The Arctic geography is being increasingly surveyed, which subsequently assists in the understanding of shipping and movements in the arctic that could potentially pose a threat to Canada's sovereignty. While well on its way to achieving full Arctic operations, the next crucial steps in RCN preparations will create the new operating procedures that will lead to support full Arctic readiness.

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