



CAN WE JUST GET ALONG ALREADY?

CANADIAN ARCTIC SOVEREIGNTY IS AMERICAN SECURITY

BY

LIEUTENANT-COLONEL ALAIN LAFRENIÈRE, RCAF

A THESIS PRESENTED TO THE FACULTY OF THE SCHOOL OF
ADVANCED AIR AND SPACE STUDIES FOR COMPLETION OF
GRADUATION REQUIREMENTS

Maxwell Air Force Base, Alabama

June 2017

APPROVAL

The undersigned certify that this thesis meets masters-level standards of research, argumentation, and expression.

DR. JAMES TUCCI (Date)

DR. JAMES KIRAS (Date)



DISCLAIMER

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the US Government, Department of Defense, the United States Air Force, or Air University; the Canadian Government, the Department of National Defence, Canadian Armed Forces, or the Royal Canadian Air Force.



ABOUT THE AUTHOR

Lieutenant-Colonel Alain Lafrenière joined the Canadian Forces as an officer candidate in 1999. After completing Air Combat Systems Officer training in Winnipeg, Manitoba, he was posted to 423 Maritime Helicopter Squadron in Shearwater, Nova Scotia, to fly on the CH-124 Sea King maritime helicopter. This operational tour included seaborne deployments onboard NCSM Ville-de-Québec, HMCS Preserver, HMCS Halifax and HMCS Charlottetown. It also involved participation in NATO Standing Naval Force Atlantic and Operation ALTAIR (the Canadian maritime contribution to Operation ENDURING FREEDOM). Following a post as a flight instructor, he attended the year-long Aerospace Systems Course and was posted to the Directorate of Air Requirements within the Chief of the Air Force Staff. After attending the Joint Command and Staff Program at the Canadian Forces College in Toronto, he was posted back to 423 Maritime Helicopter Squadron, where he deployed as detachment commander onboard HMCS Fredericton for Operation NATO REASSURANCE. In his last year at 423 Sqn, he occupied the position of Deputy Commanding Officer, following which, he was assigned as the first Canadian to attend the USAF School of Advanced Air and Space Studies. He holds a master's degree in Public Administration from the University of Manitoba, and a Master of Defence Studies from the Royal Military College of Canada. Following SAASS, Lieutenant-Colonel Lafrenière will be assigned as the Commanding Officer of 406 Maritime Operational Training Squadron in Shearwater, Nova Scotia.

ACKNOWLEDGEMENTS

First, thanks to the Royal Canadian Air Force for the incredible opportunity to spend a year studying the utmost important subject of military strategy with some of the best and brightest students I have had the chance to meet in my academic career thus far. Thanks to Dr. James Tucci for the guidance, mentorship and flexibility that allowed the process of completing this master thesis through some very difficult moments. Thanks to Dr. James Kiras for mentorship and guidance very early on in the program, and for allowing me to “Canuck-it-up” every once in a while. Thanks to the whole SAASS staff and faculty for providing a world-class learning environment that allowed me to open my mind some more. Thanks to all my classmates and fellow SAASS students, with whom the numerous hours of discussion (and yes, at times, arguments) gave me a unique insight that now makes me a better military officer. Thanks to my dear friend Meghan for volunteering countless hours proofreading my work and providing feedback that increased its quality. Finally, I will forever be thankful to my late parents for being the greatest inspiration in the value of hard work.



ABSTRACT

The indications of climate change and increased access to resources are making the Arctic an area of growing strategic significance. The recent history of the region, however, denotes a regime of peaceful conflict resolution and adherence to international law. In line with the spirit of cooperation, the Arctic is also showing an improving level of governance through the Arctic Council. Canada is an integral part of the Arctic regime and displays great level of interest in its northern region. The only boundary disputes Canada has in the North are with its closest ally, the United States. The most complex disagreement is centered on the legal status of the Northwest Passage, which Canada claims as internal waters, while the US assesses it as a strait used for international navigation. Over the years, Canada has steadily invested in its Arctic maritime surveillance and control capabilities. The US, on the other hand, shows a much lower degree of interest and investment in security means for the region. In the context of North America, a Northwest Passage under the full control of Canadian law is in the interest of both countries. The best way to achieve security around the North American Arctic waters would be through a bilateral agreement between Canada and the United States. Such an agreement could leverage the strengths of both countries and allow for optimum use of resources. By recognizing or not contesting the Canadian claim of internal waters, the United States would increase its homeland security and Canada would achieve its sovereignty goal.

CONTENTS

DISCLAIMER	ii
ABOUT THE AUTHOR.....	iii
ACKNOWLEDGEMENTS	iv
ABSTRACT	v
Introduction	1
The Arctic and the Canadian Context.....	7
Canada's Arctic and Defense Policies	27
Canada's Arctic Defense Capability	38
Implications for Canada Sovereignty and the Northwest Passage.....	51
Conclusion	65
Bibliography	71

ILLUSTRATIONS

Figure 1 – Arctic Geography and Arctic Nations.	8
Figure 2 – Canadian Arctic Maritime Claims.	16
Figure 3 – Lincoln Sea Tentative Boundary.	17
Figure 4 – Canada-US Beaufort Sea dispute.....	18
Figure 5 – The Northwest Passage.....	20
Figure 6 – NORDREG zone.....	48

Chapter 1

Introduction

In the spring of 1995, off the coast of Newfoundland, an uncommon event of dramatic proportion took place in the North Atlantic. In a series of naval maneuvers, a maritime contingent of Canadian Armed Forces¹ supporting the Canadian Coast Guard openly opposed a few Spanish and Portuguese fishing trawlers. This drama subsequently became known as the Turbot War. The turbot is a species of fish praised for its delicate taste, and as such, is a target of the vast international fishing industry. In the context of the Turbot War, the Canadian government accused the foreign trawlers of overfishing their quotas just outside of the Canadian Economic Exclusion Zone (EEZ), leading to rapid depletion of stocks. Canada justified the use of force with environmental concerns, coupled with the need to protect a resource inside its national jurisdiction. As such, the Canadian naval vessel fired warning shots, intercepted a Spanish trawler, arrested the crew, and took it under custody to St-John's, Newfoundland for prosecution. The Canadian Navy also later cut the dragging nets of Portuguese trawlers in the area. Within a few weeks following the events, Canada, Spain and the European Union came to a diplomatic agreement that ended the conflict.

The Turbot War is a good example of a benign conflict in which a state had the means to protect its resources and the extent of its jurisdiction over them. Indeed, in this case, Canada had both the ability to appropriately monitor its EEZ, and to react with adequate means of control when it perceived a direct threat. In examining these events and looking towards the future, a question arises: would Canada be able to do the same thing in the Arctic if its national interests were threatened?

¹ The Canadian Armed Forces (formerly known as the Canadian Forces) is Canada's single service military, which includes the Canadian Army, the Royal Canadian Navy, and the Royal Canadian Air Force,

Research Question

This thesis will focus on Canada's capabilities in the Arctic, and assess them in light of the goals of the Canadian government in the region. More specifically, the thesis will answer the following question: Are Canada's defense capabilities in the Arctic sufficient to contribute to the securing of Canadian sovereignty objectives in its northern region?

Background

The subject of Arctic sovereignty is sensitive in Canada. As assessed by political strategist and former Canadian senator from Ontario, Hugh Segal, in the foreword of *Canada and the Changing Arctic: Sovereignty, Security, and Stewardship*: "It is rare that a territory seen by so few can be emotionally, spiritually, and personally so compellingly important to so many. Yet that is a modest and understated description of the relationship between Canadians and their Arctic region and territories."² The attachment of Canadians to the Arctic is a question of national identity. As such, it has, and will likely continue to be, an important question of Canadian politics.

Limitations

The development of northern regions includes a vast array of economic and political considerations that would need special attention, especially given their remoteness and the harshness of their climate. This thesis will focus on the *defense* aspects of protecting sovereignty in the Canadian Arctic. While the government can provide elements of sovereignty legitimacy through other actions, such as the establishment of an adequate level of governance and the provision of services to the

² Hugh Segal, "Foreword," in Franklyn Griffiths, Rob Huebert, and P. Whitney Lackenbauer, *Canada and the Changing Arctic: Sovereignty, Security, and Stewardship* (Waterloo, ON: Wilfrid Laurier Univ. Press, 2011).

indigenous peoples of the area, these topics fall outside of the scope of this thesis.

Assumptions

Most authors and scholars studying the strategic importance of the Arctic discuss the subject of climate change in the region. The Arctic Monitoring and Assessment Programme (AMAP) is a working group of the Arctic Council responsible for offering: "... reliable and sufficient information on the status of, and threats to, the Arctic environment, and providing scientific advice on actions to be taken in order to support Arctic governments in their efforts to take remedial and preventive actions relating to contaminants and adverse effects of climate change."³ In 2011, AMAP released a report entitled *Arctic Climate Issues 2011: Changes in Arctic Snow, Water, Ice and Permafrost*. A key finding of this report is that: "The Arctic Ocean is projected to become nearly ice-free in summer within this century, likely within the next thirty to forty years."⁴ This thesis assumes that this prediction in climate change will be realized, and that the steady retreat of Arctic ice will allow for gradual increase in accessibility to the region over the next few decades.

The availability of the north could also mean access to new resources. An oft-cited study by the US Geological Survey states that as much as 13 percent of the world's oil and 30 percent of natural gas reserves may be located in the Arctic.⁵ On top of oil and gas, the Canadian north contains a significant amount of minerals, diamonds, fish resources and fresh water.⁶ While the total value of resources cannot simply be assessed, this thesis assumes that there are enough resources

³ "Arctic Monitoring and Assessment Programme | AMAP," accessed April 5, 2017, <http://www.amap.no/>.

⁴ Arctic Monitoring and Assessment Programme, *Arctic Climate Issues 2011: Changes in Arctic Snow, Water, Ice and Permafrost* (Arctic Monitoring and Assessment Programme, 2011), vii.

⁵ Kenneth J. Bird, et al., "Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle," *US Geological Survey Fact Sheet 2008-3049*, 2008.

⁶ Griffiths, Huebert, Lackenbauer, *Canada and the Changing Arctic*, 162.

in the region to encourage an increase in commercial activity within the next few decades.

Additionally, with enough resources and an increased availability, the subject of marine transportation is also relevant to the Arctic region. Another working group of the Arctic Council, called Protection of the Arctic Marine Environment (PAME), studied the potential impacts of shipping in the region in the near future. Its report concurs with AMAP assessment that shipping in the Arctic region is likely to increase.⁷ Thus, this thesis will also assume the amount of maritime traffic in the Arctic will increase as the accessibility rises in response to receding ice and increasing resource availability.

Finally, Canada has little concern about the defense of its airspace in the north. The North American Aerospace Defense Command (NORAD), in use since 1958, has afforded Canada and the United States with effective means of protecting North American airspace. Therefore, this thesis assumes that NORAD will continue to be Canada's airspace defense and sovereignty mechanism.

Preview of the Argument

This thesis will address the topic of Canadian sovereignty in the Arctic by describing Canada in the context of the Arctic. This will be achieved by: 1) reviewing the evolution of Canadian defense and Arctic policy to extract the nation's overarching goal in the region; 2) reviewing the country's Arctic defense capabilities; and 3) combining the implications of both on the desired political course of action to achieve Arctic sovereignty goals in the region. The following is a preview of the chapters that form the arguments of the thesis.

⁷ Protection of the Arctic Environment (PAME), "Arctic Marine Shipping Assessment" (Protection of the Arctic Environment, 2009).

Chapter 2 explains where Canada fits into the polar region. It starts with a broad overview of the Arctic geographically, and the states that constitute the major political players in the region. With this established, the chapter continues in defining the Arctic as a *regime*, considering it has principles, norms, and a certain level of governance. The second half of the chapter describes the Canadian Arctic political realities. More specially, it illustrates how there is no perceived sovereignty threats to the Canadian land mass in the Arctic. The only significant disputes Canada has with any of its neighbour in the North is over maritime boundaries. Moreover, the only disputes that are still of concern are with the United States. The most complex of the conflicts, the legal status of the Northwest Passage, is analyzed in detail.

Chapter 3 looks at the Canadian official discourse in the defense of its sovereignty in the Arctic. First, this chapter offers a historical overview of the official Canadian defense policy since the Arctic became a subject of national interest in the mid-1950s. It then examines the recent policy documents governing Arctic development to analyze where the subject of defense fits in the overall Canadian grand Arctic policy. In general terms, every policy document highlights the importance of military assets to assert Canadian nationality in the North. The common recurring theme is that Canada requires the ability to monitor the activity in its northern areas of jurisdiction and the means to affect control when its sovereignty is threatened.

Chapter 4 assesses Canada's actual and projected Arctic capabilities in the short and medium term. It discusses the interactions of the Canadian Coast Guard, the Royal Canadian Mounted Police, and the Canadian Armed Forces in the maintenance of Arctic sovereignty. More specifically, it looks at capabilities associated with both monitoring and control, the terms described in the official policy documents. Canada currently possesses some airborne and space-based surveillance assets but is investing largely in improved surveillance through Remotely

Piloted Aircraft and additional space-based surveillance. For its means of control, Canada has a modest fleet of icebreakers, but is currently building the world's most powerful non-nuclear icebreaker and a fleet of armed ice-capable naval vessels. The chapter also analyzes how the Arctic Water Pollution Prevention Act provided Canada with a legal justification to impose unilateral means of control over the shipping through and around its waters. Canada currently has a modest capability for surveillance and enforcement in the High North, while these capabilities will increase significantly with the delivery of new acquisitions.

Finally, Chapter 5 looks at the implications of the current defense policy and posture in the achievement of Canada's sovereignty goals in the Arctic. More specifically, the most important dispute, the status of the Northwest Passage, is discussed in detail. To better understand how the conflict fits in the context of American strategy, the chapter starts with an overview of American defense and Arctic policies. As a part of this review, the chapter assesses the limitations of American Arctic control and surveillance. As a striking example of these limitations, China is shown to have a better icebreaking capability than the US. The chapter also analyses the common security goals and interests shared between the Canadian and American policies. It then makes a case that an eventual Canadian control of the Northwest Passage better serves the interest of both nations, as opposed to a regime of transit passage through an international straight. Ultimately, if Canada can muster a credible force to monitor and control the traffic through its northern waters, it will be in a much better position to negotiate a bilateral security agreement with the US that would align with its own claim of sovereignty over the Northwest Passage.

Chapter 2

The Arctic and the Canadian Context

Mon pays ce n'est pas un pays, c'est l'hiver (Free translated to: My country, it is not a country, it's winter)

- Gilles Vigneault, Canadian Folk Singer, "Mon Pays," 1964

Who owns the Arctic? In terms of political significance, this question is as important as *what* is the Arctic. There is no official definition of the Arctic. The Arctic, in its broadest sense, constitutes the land and ocean that sit around the most northerly part of the planet. As described by historian and researcher Shelagh D. Grant in *Polar Imperative*, two of the most used definitions of the region involved either all the land and seas above the Arctic Circle or all the land and water situated above the line where trees are replaced by tundra.¹ The problem with trying to establish a single definition is that different schools of studies require different definitions. For the purpose of this thesis, a precise territorial definition is less important than a good understanding of the major states with interests in the region. As such, the Arctic refers to the Arctic Ocean as well as the northern land and waters masses of Canada, the United States, Russia, Greenland (Denmark), and Norway. Figure 1 provides an overview of the Arctic region.

¹ Shelagh D. Grant, *Polar Imperative: A History of Arctic Sovereignty in North America* (D & M Publishers, 2011), 6.



Figure 1 - Arctic Geography and Arctic Nations.
(Source: Adapted from *Who Owns the Arctic* (<http://geology.com/world/arctic-ocean-map.shtml>)

Major Political Players in the Arctic

An attempt to comprehend the Arctic necessitates an understanding of the major political players that project international influence in the region. The first group of countries that have the most vested interest in the area are those which have land there. As depicted in Figure 1, those countries are Canada, the United States, Russia, Denmark (in Greenland) and Norway (the Svalbard Islands). They are commonly referred to as the “Arctic-5.” For their proximity and access to Arctic waters, three additional countries are recognized for their interest in the Arctic: Iceland, Finland, and Sweden. The addition of these three to the land-owning states is referred to as the “Arctic-8.”

Actors other than the Arctic-8 have also shown interest in the region. For example, the European Union has recently started to demonstrate a marked interest in the Arctic. As such, it has criticized

some of the claims made by different Arctic nations with regard to continental shelf claims, drawing of territorial baseline, and freedom of navigation principles.² The EU's position is centered on a request that anything affecting division of the Arctic should be in accordance with international law. There is no doubt that the European community recognizes the Arctic for its potential in natural resources and shipping. The EU is a massive consumer of imported resources and a direct client of shipping routes to and from Asia. Consequently, it takes a position that serves the interests of its members.

Of all non-Arctic nations, China is probably the one country that has demonstrated the greatest interest in the Polar North. As reported by Professor of Ocean Laws and Policy, James Kraska, in *Arctic Security in an Age of Climate Change*: "In the past two years, China has become more assertive about its 'rights' in the Arctic Ocean, principally as a means to exploit natural resource in the region..."³ China has long been involved with sending ships to the Arctic for scientific research, exploration, and resource surveying.⁴ Right now, China holds a credible icebreaking capability and even possesses the world's largest non-nuclear icebreaker.⁵ China's investment in capability demonstrates a clear interest to play a role in Arctic development.

Political and Legal Considerations in the Arctic

How do these major players interact in the context of the High North? Norwegian Arctic scholar, Njord Wegge, conducted an analysis of the region using International Relations theories. He contrasted the

² Michael Byers, *International Law and the Arctic* (Cambridge University Press, 2013), 150-153.

³ James Kraska. "The New Arctic Geography and U.S. Strategy," in James Kraska, ed., *Arctic Security in an Age of Climate Change* (Cambridge: Cambridge University Press, 2013), 257.

⁴ Alun Anderson, "Can We Keep Up with Arctic Change," in Barry Scott Zellen, ed. and Arctic Institute of North America, *The Fast-Changing Arctic: Rethinking Arctic Security for a Warmer World*, (Calgary, AB: University of Calgary Press, 2013).

⁵ Kraska, *Arctic Security in an Age of Climate Change*, 258.

theories of *Hegemonic Stability*, *Balance of Power*, and *Kantian Peace* to explain the realities of Arctic politics. He ultimately concluded that the Arctic is a multi-polar system in which no single country is dominating.⁶ Wegge bases his opinion on a number of empirical observations. First, the United States, although the world's only superpower, shows little interest in the region and is not pursuing Arctic hegemony. Second, the combined economic power of Canada, Denmark, and Sweden offsets Russia military power capability, giving neither of them a clear advantage. Wegge also assessed that: "While the dynamics inherited in multipolar systems may tend to be unstable, this aspect is profoundly mitigated by multilateral institutions and a demonstrated respect for international law by the Arctic states."⁷

The Arctic as a Regime

Wegge's view reflects the relatively peaceful approach that all Arctic nations have taken to achieve their interests in the region.

Complimentary to that position, the Arctic can be analyzed as a regime of its own. In the words of Professor of International Relations, Stephen D. Krasner: "Regimes can be defined as sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations."⁸ The next part of this chapter analyses the Arctic in this context of "regime."

There are principles that remain consistent in the recent history of the Arctic. These principles include: 1) the acceptance of national land ownership in the region; 2) a respect for international law and 3) a drive for peaceful conflict resolution. First, there are virtually no disputes over land sovereignty in the Arctic. Hans Island is the one benign exception to

⁶ Njord Wegge, "The Political Order in the Arctic: Power Structures, Regimes and Influence," *The Polar Record; Cambridge* 47, no. 2 (April 2011), 173.

⁷ Wegge, "The Political Order in the Arctic," 174.

⁸ Stephen D. Krasner, "Structural Causes and Regime Consequences: Regimes as Intervening Variables," *International Organization* 36, no. 2 (1982): 186.

this statement. This roughly 1.3 square kilometer rock stands in the Nares Channel between Greenland (Denmark) and Canada and, given its position, is claimed by both countries. The dispute over Hans Island may have garnered media publicity over the years, but it did not interfere with the highly more significant agreement on a maritime boundary between Canada and Denmark.⁹ As assessed by Whitney Lackenbauer, Professor at St-Jerome College and expert in Arctic sovereignty: “The fixation over the Hans Island dispute conceals the very positive diplomatic relations that we [Canada] enjoy with Denmark...”¹⁰ Therefore, Hans Island does not detract from the fact that the Arctic is virtually free of significant land disputes.

Second, the recent history of the Arctic depicts a tradition for the respect of international law and peaceful negotiations/resolve of boundary issues. As reported by Research Fellow in Global Security and Politics, James Manicom, the Arctic has been the theater of many peaceful boundary resolutions in the last few decades.¹¹ Norway and Russia, as well as Canada and Denmark, have successfully negotiated maritime boundary agreements. In 2012, Canada and Denmark achieved a tentative agreement on the Lincoln Sea boundaries, their last maritime boundary dispute.

Other schools of thoughts argue that the Arctic might become an area of conflict where a race to resources might lead to more disputes. As pointed by political scientist Robert Huebert: “... most Arctic nations are beginning to strengthen the ability of their armed forces and coast guards to operate in the North.”¹² There is some level of debate over Russia’s military expansion in the region, especially with events such as

⁹ Byers, *International Law and the Arctic*, 43.

¹⁰ Franklyn Griffiths, Rob Huebert, and P. Whitney Lackenbauer, *Canada and the Changing Arctic: Sovereignty, Security, and Stewardship* (Wilfrid Laurier Univ. Press, 2011), 147.

¹¹ James Manicom, “The Domestic Politics of Disputed Arctic Boundaries: The Canadian Case,” *The Polar Record; Cambridge* 50, no. 2 (April 2014), 165.

¹² Griffiths, Huebert, and Lackenbauer, *Canada and the Changing Arctic*, 67.

the recent opening of a large Russian Arctic base. A report from the Center for Strategic International Studies expresses some concerns over the rate of Russian Arctic military modernization. The same document, however, recognizes Russia legitimate interest in the region, given its vast Arctic territory, and recommends the enhancement of the current Arctic cooperation to mitigate the concerns.¹³ Other experts, such as retired Marine Corps Brig. Gen. Stephen Cheney, CEO of the American Security Project, highlight the fact that the Russian Arctic capabilities are nowhere near that of the Soviet Union in the 1970s and 80s.¹⁴ In all effect, Russia is most likely modernizing a modest amount of capability that was left to rust out after the fall of the USSR.

While an increase in military capability may be a cause for strategic concern, there is no evidence that suggests that Arctic nations would resort to force to expend their claims to access. While Russia has taken an aggressive posture in other regions of the globe, it follows the tradition of cooperation in the Arctic. As assessed by Whitney Lackenbauer: “Russia, as noted, is not counterposed [sic] to the Western states when it comes to governance of the region. On the contrary, it is a member of the innermost circle and thus champions the rule of law in the Arctic international region.”¹⁵ Even through external tensions, Arctic nations have managed to reach peaceful accord. As pointed out by Byers in the case of the Barents Sea Boundary Treaty: “Despite the size and importance of the dispute, and the fact the two countries were on opposite sides of the Cold War, Norway, the Soviet Union and later Russia behaved with commendable restraint.”¹⁶ Overall, the Arctic has enjoyed a recent tradition of peaceful conflict resolution. This tradition

¹³ Heather A. Conley, *The New Ice Curtain: Russia's Strategic Reach to the Arctic* (Washington DC: CSIS, Center for Strategic & International Studies, 2015), 112-115.

¹⁴ Yasmin Tadjdeh, “Russia Expands Military Presence in Arctic,” *National Defense; Arlington* 100, no. 745 (December 2015): 34–35.

¹⁵ Griffiths, Huebert, and Lackenbauer, *Canada and the Changing Arctic*, 189.

¹⁶ Byers, *International Law and the Arctic*, 54.

may change in the future, but the current Arctic regime has developed and is based on principles of peaceful relations and agreements for the last four decades.

In addition to these principles commonly held by the Arctic nations, the Arctic can be best examined as a type of regime because of the shared norms and rules held by state actors in the region. As depicted in Figure 1, the Arctic Ocean occupies a large portion of the entire area. In the absence of land boundary disputes, the Arctic-8 nations have used the United Nations Convention on the Law of the Sea (UNCLOS) as the most important body of regulation pertaining to the region. The latest revision of UNCLOS was codified in a treaty in 1982. The only Arctic nation that has not ratified UNCLOS is the United States. The latest US Arctic strategy, however, recognizes UNCLOS in the region and states the US intention to accede to it.¹⁷ Thus, UNCLOS is practically accepted universally as the body of legislation regulating the Arctic.¹⁸ UNCLOS provides regulation of the extent of Territorial Waters, Economic Exclusion Zones, national jurisdiction over continental shelves, as well as guidance for dividing overlapping areas of jurisdiction. In the Arctic, UNCLOS is instrumental to peaceful division of large bodies of water.

Building on these established rules and norms, Arctic nations have also been able to establish limited governance of the region which, although basic, is present and improving. The Arctic Council is the main international instrument of governance in the region. According to its website: “The Arctic Council is the leading intergovernmental forum promoting cooperation, coordination and interaction among the Arctic States, Arctic indigenous communities and other Arctic inhabitants on common Arctic issues, in particular on issues of sustainable

¹⁷ White House, “National Strategy for the Arctic Region” (White House, May 2013), 9.

¹⁸ Byers, *International Law and the Arctic*, 19.

development and environmental protection in the Arctic.”¹⁹ At the time of writing, the Arctic-8 nations are the members constituting the Arctic Council. Twelve other countries from Europe and Asia, as well a variety of Non-Governmental Organizations, also enjoy observer status to the Council.²⁰

The Arctic Council is not itself a rule-creating body, but it sets the stage for cooperation and discussion between the Arctic nations on topics of importance for the region. A common criticism of the Arctic Council is best voiced by Scandinavian maritime security experts Pauli Järvenpää and Tomas Ries: “... it [the Arctic Council] is a soft law instrument, with no powers to establish internationally legally binding obligations for the participating states.”²¹ The Council is, however, a good stage to enhance and facilitate the creation of bilateral agreements between member states.²² In terms of the establishment of governance, the greatest success of the Arctic Council is the establishment of the Arctic Search and Rescue (SAR) Agreement in 2011, which defines the roles and areas of responsibility of each when a SAR event occurs. As noted by Byers: “It is also significant that the Arctic SAR Agreement was the first legally binding instrument negotiated within the framework of the Arctic Council.”²³ Although the Arctic Council does not constitute of full set of governance mechanisms, its creation and improvements over the years set the stage for international cooperation.

Overall, the Arctic can be analysed as a regime as described by Krasner. It possesses principles, norms, and a certain degree of governance. In this context, regimes are important as they lead to

¹⁹ “About Us - Arctic Council,” accessed April 5, 2017, <http://www.arctic-council.org/index.php/en/about-us>.

²⁰ “Observers - Arctic Council,” accessed April 5, 2017, <http://www.arctic-council.org/index.php/en/about-us/arctic-council/observers>.

²¹ Pauli Järvenpää and Tomas Ries in James Kraska, ed., *Arctic Security in an Age of Climate Change*, 143.

²² Grant, *Polar Imperative*, 191.

²³ Byers, *International Law and the Arctic*, 292.

reasonable expectation of predicted behaviors. Policy and strategy makers need to understand the current setting of the Arctic regime, as it will allow them to realize opportunities that may not be obvious to outside observers.

Canadian Sovereignty in the Context of the Arctic

According an official Canadian government Arctic policy document released in 2009: “Canada’s Arctic sovereignty is longstanding, well established and based on historic title, founded in part on the presence of Inuit and other Aboriginal peoples since time immemorial.”²⁴ As suggested by this policy document, historic occupation is one aspect of Canadian claim to the North. Additionally, in 1880 Canada inherited all possessions of the British Empire in North America, which included the numerous islands that now constitute the Canadian Arctic Archipelago (as depicted on Figure 1).²⁵ This historical occupation and acquisition of historical title both combine to create Canada’s territorial Arctic claim.

The territorial sovereignty of Canada in the North is internationally accepted. With the previously noted exception of Hans Island, there is no part of Canadian territory contested by any other states. Given the insignificance of Hans Island, and the good diplomatic relations between Canada and Denmark, this dispute does not constitute a significant threat to Canadian sovereignty in the region.

It is in the realm of maritime sovereignty that the Canadian claims become less straightforward. As per UNCLOS, Canada claims 12 nautical miles of territorial waters around its Arctic land.²⁶ Furthermore, Canada claims a 200 nautical miles Economic Exclusion Zone in which it

²⁴ Government of Canada, “Canada’s Northern Strategy Our North, Our Heritage, Our Future” (Minister of Indian Affairs and Northern Development and Federal Interlocutor for Métis and Non-Status Indians, 2009), 9.

²⁵ Byers, *International Law and the Arctic*41.

²⁶ “United Nations Convention on the Law of the Sea,” accessed April 18, 2017, http://www.un.org/depts/los/convention_agreements/texts/unclos/part2.htm.

ascertains the right to commercial exploitation of resources. Additionally, Canada will also claim economic exclusion to a distance greater than 200 nautical miles based on the extension of its continental shelf in the Arctic. This will be accomplished by the submission of scientific data establishing the extent of the continental shelf as defined in UNCLOS.²⁷ Finally, Canada decided in 1985 to draw straight baselines around its archipelago in the Arctic claiming all waters inside the baseline as internal waters. This type of designation is roughly equivalent to a river in term of sovereignty, as opposed to international waters, even if they extend over twelve nautical miles from shore. The extent of Canada's maritime claims in the Arctic is depicted on Figure 2 below.

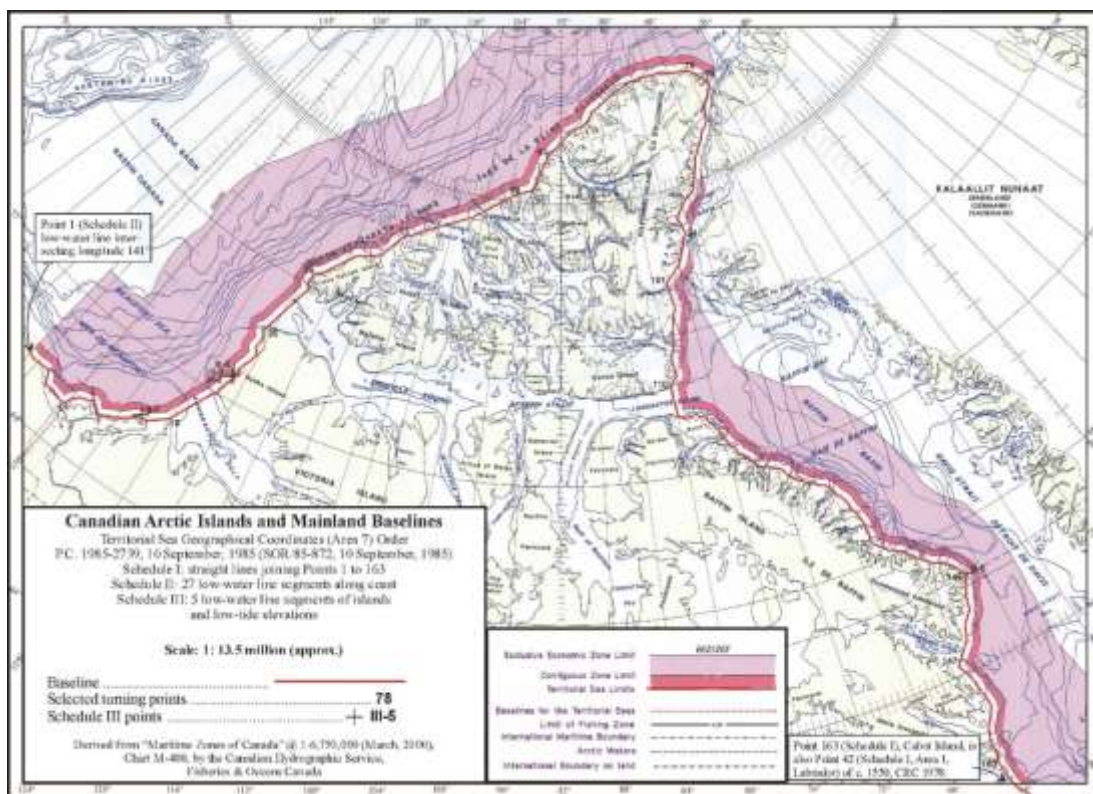


Figure 2 – Canadian Arctic Maritime Claims.

(Source: Adapted from *Canada: Straight Baseline* (<http://www.marineregions.org/>))

²⁷ "Preamble to the United Nations Convention on The Law of The Sea," accessed April 18, 2017, http://www.un.org/depts/los/convention_agreements/texts/unclos/part5.htm.

Canada's maritime claims have led to a few disputes with some of the neighbouring states, some of which are still outstanding at the time of writing. One of these disputes is with Denmark in the Lincoln Sea, located just north of Greenland and Ellesmere Island. In simple terms, Denmark drew straight baseline around islands in northern Greenland, which resulted in a disagreement with Canada over where to divide the EEZ that would extend further north.²⁸ The dispute centered over access to approximately 200 square kilometers in the Lincoln Sea. In keeping with the Arctic regime described above, Canada and Denmark have been negotiating peacefully for a resolution of this conflict since 1973. While no agreement is formally signed yet, Canada and Denmark declared that they reached a tentative agreement in November 2012.²⁹ Figure 3 illustrates the boundary proposed in this tentative agreement.



Figure 3 – Lincoln Sea Tentative Boundary.
(Source: Adapted from <https://www.ejiltalk.org/canada-and-denmark-reach-agreement-on-the-lincoln-sea-boundary/>)

²⁸ Byers, *International Law and the Arctic*, 60.

²⁹ "Canada, Denmark Forge Tentative Deal on Lincoln Sea Boundary," *CBC News*, accessed April 7, 2017, <http://www.cbc.ca/news/canada/north/canada-denmark-forge-tentative-deal-on-lincoln-sea-boundary-1.1150969>.

The remainder of Canadian sovereignty disputes and disagreements in the Arctic are, perhaps surprisingly, with its closest ally, the United States. The first of these disagreements is a boundary issue that is similar to the Lincoln Sea dispute. In the Beaufort Sea, north of the border between the Yukon and Alaska, Canada and the US have disagreed since 1976 on how the territorial waters (TTW) and EEZ should be divided. As explained by political scientist Michael Byers, Canada argues that the TTW and EEZ should be an extension of the land borders as described in the 1825 treaty between Britain and Russia in establishing the border with Alaska.³⁰ Since both the US purchase of Alaska from Russia and the British concession of their Arctic rights to Canada occurred after the 1825 agreement, the treaty is likely legally binding. The United States, on the hand, argues that the line should run on an equidistant division from the land on both sides.³¹ The result is the triangularly shaped area of contested waters that is depicted in Figure 4. The area is likely rich in hydrocarbon resources, making it important for economic interests. Canada and the US have disagreed on this boundary for over four decades, but given the close ties between the two countries and the tradition of peaceful resolution of the Arctic regime, it is reasonable to expect that both countries will reach a compromise. The US and Canada have a long history of cooperation in the Beaufort Sea. For example, between 2008 and 2011, icebreakers of both nations' Coast Guards met regularly in the Beaufort Sea to support each other in conducting continental shelf mapping research for eventual claims.³²

³⁰ Byers, *International Law and the Arctic*, 77-80.

³¹ Drawing a line on an equidistant division from the land on both sides is the customary method of drawing new coastal sea boundaries between independent states.

³² Byers, *International Law and the Arctic*, 71.



Figure 4 – Canada-US Beaufort Sea dispute.
 (Source: <https://www.theglobeandmail.com/news/national/canadas-territorial-disputes/article5813168/?from=5831571>)

Beyond the disagreement in the Beaufort Sea, a much more complex and ambiguous dispute exists between Canada and the United States on the status of the Northwest Passage. The Northwest Passage refers to the few ice-free channel transit ways through the Canada Arctic Archipelago. In practice, the Passage joins the Atlantic and Pacific Oceans, as depicted in Figure 5. Throughout history, the Northwest Passage has seldom been used as a maritime shipping route, as it has been ice-covered almost year-round. The trend in climate change, resulting in increased activity in the region, is likely to bring substantially more traffic through the Passage in the next few decades.



Figure 5 – The Northwest Passage.

(Source: <https://www.britannica.com/place/Northwest-Passage-trade-route>)

The dispute first flared up in 1969 when an American oil company decided to send its ice-capable supertanker, the *SS Manhattan*, through the Northwest Passage to study the feasibility of the route for shipping oil to the eastern seaboard. While all parties involved (including the Canadian Coast Guard) welcomed the experiment, the Canadian Government suggested that the US Coast Guard vessel accompanying the *Manhattan* request formal permission from Canada to do so. American compliance to this request would constitute an acknowledgement of Canadian sovereignty over the waters of the Passage.³³ Unsurprisingly, the American government refused to do so, which caused a flurry of diplomatic protests on both sides of the border. Ultimately, the *Manhattan* sailed through the Passage and repeated the feat in 1970. These transits demonstrated a high degree of cooperation in the field between Canadian and US forces.³⁴ They did, however, ignite a

³³ John Kirton and Don Munton, in Franklyn Griffiths, ed., and Dalhousie Ocean Studies Programme, *Politics of the Northwest Passage* (Kingston, Ont.: McGill-Queen's University Press, 1987), 71.

³⁴ Kirton and Munton, *Politics of the Northwest Passage*, 73.

spark of Canadian interest in Arctic sovereignty and created an unresolved dispute.

The next incident that re-kindled the conflict happened in 1985, when the United States decided to send the *USCGC Polar Sea* through the Northwest Passage on its return from resupplying the American base of Thule in Greenland. Again, Canada requested that the US ask for formal permission to transit through Canadian waters, while assuring its neighbour that it encouraged the transit and would offer assistance. As in 1969-70, the United States refused to comply. The *USCGS Polar Sea* did transit through the Passage and, as the *Manhattan* before, created another so-called crisis of Arctic sovereignty in Canada.³⁵ Byers even suggests that it was the voyage of the *USCGC Polar Sea* that led Canada to draw straight baselines around the Arctic islands.³⁶

In the spirit of cooperation, and to avoid any further *Manhattan/Polar Sea* disagreements, the US and Canada spent a few years negotiating a compromise. They achieved it with the 1988 Canada United Co-operation Agreement. In general terms, the Agreement states that the US will ask permission to transit US Coast Guard icebreakers through the Northwest Passage, while Canada promises to always grant such permission.³⁷ As assessed by scholar of comparative foreign policy Christopher Kirkey, the Agreement is in no way a recognition of sovereignty by the American government.³⁸ It can be seen as a functional solution that is without prejudice to the legal position of either country. Nevertheless, the 1988 Canada United Co-operation Agreement is an example of collaboration and peaceful conflict resolution in the Arctic regime.

³⁵ Griffiths, Huebert, and Lackenbauer, *Canada and the Changing Arctic*, 98.

³⁶ Byers, *International Law and the Arctic* 150.

³⁷ Byers, *International Law and the Arctic*, 153.

³⁸ Christopher Kirkey, "Smoothing Troubled Waters: The 1988 Canada-United States Arctic Co-Operation Agreement," *International Journal* 50, no. 2 (1995): 418-19.

To this day, however, Canada and the United States still argue on the legal status of the Passage. With the 1985 drawing of straight baselines around its Arctic islands, Canada claims that all waters contained in the archipelago are internal waters, which makes them subject to the full jurisdiction of Canadian legislation, as per Article 47 of UNCLOS.³⁹ The United States, for its part, argues that the Northwest Passage is an international strait. As such, it should be subject to the much less regimented regulations of transit passage.

Both positions are debatable, and there is no simple explanation that can completely justify one or the other. As reported by Professor of Law Donat Pharand, participants in the negotiation of UNCLOS could not fully agree on the definition of an international strait.⁴⁰ As such, the single legal precedent applicable is the case of the *Corfu Channel* of 1949. In this instance, the International Court decided that to be considered an international strait, the body of water must connect two parts of the high sea, and must have been used for international navigation. In his legal assessment, Pharand concludes that the Northwest Passage does not meet the last criteria as it has not been used for international navigation.⁴¹ In his view, the non-consensual transits of the *Manhattan's* escort and the *Polar Sea* do not set a precedent for international navigation. As reported by Huebert: "All other transits have taken place with the explicit agreement of Canadian authorities."⁴² Numerous submarines have likely transited the Passage over the years, maybe even without authorization, but the classified nature of submarine operations precludes their reporting in open sources. Even if such transits occurred, Byers assesses that submerged operations constitute covert actions that

³⁹ "Preamble to the United Nations Convention on the Law of the Sea," accessed April 7, 2017, http://www.un.org/depts/los/convention_agreements/texts/unclos/part4.htm.

⁴⁰ Donat Pharand, "The Arctic Waters and the Northwest Passage: A Final Revisit," *Ocean Development & International Law* 38, no. 1/2 (January 2007): 30-31.

⁴¹ Pharand, "The Arctic Waters and the Northwest Passage," 58-59.

⁴² Griffiths, Huebert, and Lackenbauer, *Canada and the Changing Arctic*, 73.

cannot set precedent in international law.⁴³ In sum, the Canadian position against the recognition of the Northwest Passage as a strait used for international navigation rests on the fact that it has not historically been used as such.

The US position rests on a priority for ensuring freedom of navigation on the high sea across the world. The designation of the Northwest Passage as strait used for international navigation is defensible, as there is no article or case of international law that indicates how many transits establish traditional use for navigation. As described by Byers, the main concern of US authorities is to establish a legal precedent that could be used around the world to restrict freedom of navigation, most notably in Asia and the Middle East.⁴⁴ As the owner of the only global navy, the US causes for caution in recognizing the Canadian claim are understandable. Given the ambiguity of the subject, it is difficult to predict which way the International Court of Justice would lean on the debate. Canadian Law and Geography Professors Suzanne Lalonde and Frédéric Lasserre, however, assessed that the vast majority of strategic straits would not be affected by the Canadian option for the Northwest Passage.⁴⁵

The recognition of the Canadian sovereignty could impact another case that may be relevant to the Arctic, that of Russia and the Northern Sea Route. The Northern Sea Route is the path that follows the Russian territory in the North, and as in the case of the Northwest Passage, it provides a potential shorter route to transit from Europe to Asia. In a manner similar to Canada, Russia drew baselines around certain islands off its coast and claim the waters within as internal. Given the similarity with the Canadian case, Russia does not oppose the Canadian

⁴³ Byers, *International Law and the Arctic* 181.

⁴⁴ Byers, *International Law and the Arctic*. 155.

⁴⁵ Suzanne Lalonde and Frédéric Lasserre, "The Position of the United States on the Northwest Passage: Is the Fear of Creating a Precedent Warranted?," *Ocean Development & International Law* 44, no. 1 (January 2013): 62.

claim over the Northwest Passage.⁴⁶ The recognition of some part of the Northern Sea Route as Russian internal waters may be of concern to the United States, but as explained by Michael Byers, the rate of ice recession and the increasingly opening of the waters north of Russia will likely make these parts of the route irrelevant in the near future.⁴⁷

The European Union position on the status of the Northwest Passage is ambiguous. In 1986, the European Community questioned the validity of historical claim as a justification for maritime boundaries. As recently as 2009, the EU also stated a commitment to freedom of the sea, innocent passage and transit passage in the Arctic.⁴⁸ According to Byers, while this signifies that the EU implies there is at least one international strait in the Arctic, such as the Bering Strait, it makes no direct claims against the Canadian position.⁴⁹ Additionally, no individual European country has openly protested the Canadian claim.

Ultimately, Canada will need support to achieve its sovereignty goal over the Northwest Passage and it is unlikely that it can be reached without acknowledgement, open or tacit, from the United States. Thus, Canada's sovereignty goals may be better achieved with the cooperation of its close ally and neighbour.

Summary

The Arctic is a product of the states that are present within the region. Five countries own land in the high north: Canada, the United States, Denmark, Russia, and Norway. This collective, referred to as the Arctic-5, have the most significant interest in this part of the globe. Due to their access to Arctic waters, Finland, Sweden and Iceland are also

⁴⁶ Byers, *International Law and the Arctic*, 165-167.

⁴⁷ Byers, *International Law and the Arctic*, 155.

⁴⁸ Council of the European Union, "Council Conclusions on Arctic Issues," December 2009.

⁴⁹ Byers, *International Law and the Arctic*, 151-153.

deemed “Arctic nations.” The interactions between these players define international relations in the context of the Arctic.

The Arctic constitutes a regime as defined by Stephen Krasner in that it encompasses principles, norms and some form of governance. The recent history of the Arctic illustrates a tradition of peaceful conflict resolution and the respect of international law as underlying principles of behaviour. As a vast ocean, and because most of its national boundaries are on the water, the most prevalent norms and rules for sovereignty in the Arctic are contained in the United Nations Convention on the Law of the Sea. As such, UNCLOS has been used to clarify and settle boundary disputes between Arctic nations. Finally, with the creation of the Arctic Council, the northern countries now have a forum to communicate and negotiate issues related to the region. While the Arctic Council lacks law-making and regulation enforcement authority, it has opened the door to many successful agreements and set the stage for peaceful and predictable decision-making among the Arctic nations.

With land and waters well above the Arctic Circle, Canada is an integral part of the Arctic region and Canada’s territorial land sovereignty in the Arctic is virtually uncontested. Except for the insignificant issue over Hans Island, no state disputes any part of Canadian soil in the region. The same cannot be said, however, of the oceans in the area, where Canada faces a few challenges to maritime sovereignty. A decades-old dispute with Denmark in the Lincoln Sea is on the verge of resolution, as both countries have agreed on a tentative boundary in 2012. The remaining disputes for Canada are with its closest ally and neighbour, the United States. First, Canada and the US disagree about the location of the boundary between their territorial waters and EEZs in the Beaufort Sea. Given the principle of peaceful resolution and the enduring friendship between Canada and the US, it is likely that this dispute will be resolved through negotiation when the incentive to do so arises. The most complex dispute, however, is over the legal status of the

Northwest Passage through the waters of the Canadian Arctic Archipelago. Canada claims the waters to be internal and subject to the full force of Canadian legislation, while the US argues that it constitutes a strait used for international navigation. While both claims are defensible, it seems unlikely that Canada may achieve its goal of sovereignty over the Passage without some support from US.



Chapter 3

Canada's Arctic and Defense Policies

I see a new Canada - a Canada of the North.

- Prime Minister, John G. Diefenbaker, "A New Vision,"
12 February 1958

In 1958, the Canadian Prime Minister, John G. Diefenbaker, gave a speech to present his *New Vision* for the country. He specifically identified the Arctic as an important region of Canada, described it as an existential interest for the nation, and set the tone for continual northern significance in Canadian politics.

In the decades that followed, the Arctic grew in importance in the discourse of successive Canadian Governments and it gradually took a substantial place in their official policies. The first part of this chapter considers the integration and evolution of Arctic sovereignty inside the official defense policy of Canada. It identifies the trends in assertion and protection of sovereignty. Then, the chapter delves into documents of specific Arctic policy, a relatively new concept in Canadian politics, and identifies how defense fits into the big picture of Canadian reality.

1964 White Paper on Defence

The *1964 White Paper on Defence* is the first defense policy document that was officially released after the Diefenbaker vision speech. In general terms, it focusses on the Cold War and the advent of nuclear weapons as the main threat to Canadian security.¹

This White Paper does not explicitly identify the Arctic in its text. It does, however, describe elements that are applicable to the needs of the North. For example, it identifies the first priority in terms of defense as the need for: "... forces for the direct protection of Canada, which can be

¹ Department of National Defence, "1964 White Paper on Defence" (Government of Canada, March 1964), 5.

deployed as required.”² It also describes the minimum requirements for the defense of Canada as: “... the ability to maintain surveillance of Canadian territory, airspace and territorial waters; the ability to deal with incidents in the ocean areas off the Canadian coasts; and the ability to contribute, within the limit of our resources, to the defence of Canadian airspace.”³ Extrapolating these requirements to the north means that the Canadian military should have the capability to conduct surveillance and be able to react in the Arctic, on land, on the water, and in the air.

In the context of 1964, however, the White Paper perceived little threat to Canada sovereignty in the Arctic, except for Soviet airspace intrusion. As such, the paper mainly focuses on Canada’s involvement in NATO and NORAD. Consequently, it does not go any further in describing ways to enhance Canadian Arctic capabilities.

Defence in the 70s - White Paper on Defence (1971)

In 1971, the Liberal government⁴ under Prime Minister Pierre Elliot Trudeau released the next official defense policy. It followed shortly after the “incidents” relating to the voyages of the *SS Manhattan* and aligned with legal measures that were taken directly as a result of the transits.⁵

The Arctic is mentioned on the first page of the document, where it explains that the Canadian Government’s decision to regulate the development of the North is a national concern that creates a need to

² Department of National Defence, “1964 White Paper on Defence,” 24.

³ Department of National Defence, “1964 White Paper on Defence,” 13.

⁴ The Canadian political arena is mostly shared between three major political parties: the Liberal Party of Canada, the Conservative Party of Canada (formerly called Progressive Conservative Party of Canada), and the New Democratic Party of Canada. Traditionally however, power has mostly rested with the two largest parties, with the Liberal Party on the Left of the Canadian political spectrum and the Conservatives on the Right. In absolute terms, however, both parties can be considered to sit on the Center-Left part of the political spectrum.

⁵ Shelagh D. Grant, *Polar Imperative: A History of Arctic Sovereignty in North America* (D & M Publishers, 2011), 350-354.

review defense policy.⁶ It states that, in a national context, the Canadian Forces have: "... an important and growing role in protecting sovereignty and independence."⁷ It also states the responsibility of the military specifically to conduct these tasks in the North, in conjunction with other departments.⁸ The paper also discusses the rise of commercial interest in the Arctic, assessing that the potential for oil and gas exploitation will likely lead to increased traffic around the Canadian Arctic islands.⁹

In more specific terms, the paper stipulates the Canadian Forces require the means to conduct surveillance and control over Canadian territory and waters, including its northern region.¹⁰ It describes the Forces' capability to conduct surveillance through the use of long-range patrol aircraft, but recognizes their limitation due to weather and light conditions. As such, it formulates the need to further study the challenges of surveillance in the North.¹¹ Additionally, it recognizes the limited capability of naval vessels to operate in ice-covered area, and only through the summer months.¹² For airspace surveillance and control, the paper reiterates the achievements of NORAD in its surveillance infrastructure and mentions the need to maintain interceptor aircraft to affect control.¹³

In essence, the 1971 White Paper made it clear that the Canadian Forces have to play a role in defending sovereignty in the Arctic. While it did not specify any new means of conducting surveillance and control, it

⁶ Department of National Defence, "White Paper on Defence: Defence in the 70s" (Government of Canada, September 1971), 1.

⁷ Department of National Defence, "Defence in the 70s," 4.

⁸ Department of National Defence, "Defence in the 70s," 8.

⁹ Department of National Defence, "Defence in the 70s," 8.

¹⁰ Department of National Defence "Defence in the 70s," 17.

¹¹ Department of National Defence, "Defence in the 70s," 18.

¹² Department of National Defence, "Defence in the 70s," 21.

¹³ Department of National Defence, "Defence in the 70s." 17-18.

sent the message that the Arctic was a priority of the Canadian Government.

Commitment and Challenge: A Defence Policy for Canada (1987)

The next defense white paper came in 1987, and was published by the Conservative government of Prime Minister Brian Mulroney. In what might be another coincidence, it was released not too long after the “crisis” that was the transit of the *USCGS Polar Sea* through the Northwest Passage. Like its predecessor, this white paper dedicated a great deal of attention to the Arctic region.

Commitment and Challenge specifically addresses the importance of defense in maintaining sovereignty. It states that: “After the defence of the country, there is no issue more important to any nation than the protection of its sovereignty.”¹⁴ In a very pointed remark, it follows up by explaining the dispute over the Northwest Passage as a direct challenge to Canadian sovereignty.¹⁵

As its title suggest, the 1987 White Paper assesses the challenges inherent in trying to maintain Canadian defense commitments and interests with limited means. It does so by identifying capability gaps and announcing measures to be taken to remedy them. In terms of sovereignty protection, it focuses on the role of control and surveillance.

In its evaluation of Arctic control capability, the paper is very clear when it states that: “At present, the Canadian navy cannot carry out in the Arctic these roles [to detect and deter underwater hostile intrusions] essential to our security and sovereignty.”¹⁶ For the purpose of controlling the Arctic waters, the white paper makes a case for the procurement of

¹⁴ Department of National Defence, “Challenge and Commitment: A Defence Policy for Canada” (Government of Canada, June 1987), 23.

¹⁵ Department of National Defence, Challenge and Commitment, " 23.

¹⁶ Department of National Defence, “Challenge and Commitment,” 50.

two capabilities: an underwater fixed sonar system and the acquisition of nuclear propulsion submarines.¹⁷

In terms of surveillance capability, *Commitment and Challenge* identifies the problems with maintaining year-round surveillance of Canada's three oceans.¹⁸ This problem is due to the limited number of CP-140 Aurora long-range patrol aircraft (Canadian-modified USN P-3 Orion). To remedy this deficiency, the paper promises Canadian involvement in space-based surveillance programs. More specifically, it emphasises the potential successes of space-based radar and sets the path of the Department of Defence in that direction.¹⁹

The 1987 defense policy makes it clear that the sovereignty of the North and the Arctic is an important Canadian goal. Concurrently, it recognizes that there are significant defense capability gaps related to the accomplishment of this objective, and sets the tone for an ambitious investment program that would bring new capabilities to ensure sovereignty.

1994 White Paper on Defence

The defense policy of 1994 stands out in contrast with its predecessors. Mainly, it explains the governmental reasoning behind, and means of effecting, massive cuts in the defense budget. As such, it is significantly less ambitious about required Arctic capabilities.

The 1994 White Paper on Defence must be understood in the international and domestic context of its time. As the paper itself points out, the Cold War was over, which greatly reduced the threats faced by Canada.²⁰ Additionally, the paper describes the domestic situation as: "At the present time, our prosperity – and with it our quality of life – is

¹⁷ Department of National Defence, "Challenge and Commitment," 51-54.

¹⁸ Department of National Defence, "Challenge and Commitment," 57.

¹⁹ Department of National Defence, "Challenge and Commitment," 59.

²⁰ Department of National Defence, "1994 White Paper on Defence" (Government of Canada, December 1994), Highlights para. 7.

threatened by the steady growth of public sector debt. This situation limits governmental freedom of action in responding to the needs of Canadians.”²¹ Consequently, the paper is a description of what can realistically be accomplished with the limited means available.

The 1994 defense policy does, however, place a great deal of importance on sovereignty. Its very first paragraph includes that: “... a nation not worth defending, is a nation not worth preserving.”²² It specifically states that the Canadian Forces must maintain the means to: “demonstrate, on a regular basis, the capability to monitor and control activity within Canada's territory, airspace, and maritime areas of jurisdiction.”²³ The paper makes few direct references to the Arctic, but it does mention that Canada must maintain the capability to ensure sovereignty and economic jurisdiction in the Arctic region. While it makes very few references to acquisition of new capabilities, the white paper does mention the need to continue to investigate the potential for a space-based surveillance system of North America.²⁴

In summary, the 1994 White Paper stands out by its focus on restraining defense expenditures. It does, however, restate the requirement to conduct surveillance and control of the country as essential to sovereignty.

A Role of Pride and Influence in the World – DEFENCE (2005)

In 2005, the Canadian Government released a series of international policy statements titled: *A Role of Pride and Influence in the World*. The subject of defense was its own section within this holistic policy statement. In all essence, *A Role of Pride and Influence in the World* is the equivalent of any of the previously discussed White Papers. It is

²¹ Department of National Defence, “1994 White Paper on Defence,” Highlights para. 17.

²² Department of National Defence, “1994 White Paper on Defence,” Highlights para. 1.

²³ Department of National Defence, “1994 White Paper on Defence,” Highlights para. 29.

²⁴ Department of National Defence, “1994 White Paper on Defence,” Chap 5.

the first such policy paper released after the end of the budgetary constraints of the 1990s, and the first following the events of 9/11.

Pride and Influence renews the discourse on the specific importance of Arctic sovereignty. In describing the domestic context of defense, it states that: "The demands of sovereignty and security for the Government could become even more pressing as activity in the North continues to rise."²⁵ It breaks away from only perceiving traditional "Cold War era" threats in the region and assesses new security problems such as organized crime, environmental threats, drugs and human smuggling.²⁶ This, in turn, leads to an even greater need for surveillance and control in the North.

In terms of Arctic sovereignty, the paper describes the role the Canadian Forces must be able to fulfill. From a maritime stand point, the armed forces must: "enhance their surveillance of and presence in Canadian areas of maritime jurisdiction, including the near-ice and ice-free waters of the Arctic."²⁷ While the air forces must: "increase the surveillance and control of Canadian waters and the Arctic with modernized Aurora long-range maritime patrol aircraft, unmanned aerial vehicles and satellites..."²⁸ The paper does not provide details on how this should be accomplished, but it sets the tone as to the direction in which the government wants to steer the Department of National Defence.

Pride and Influence also calls for an increase in cooperation with the United States in terms of maritime defense. It suggests that Canada will seek to negotiate bilateral security agreements with the US to increase maritime surveillance, information, and control capability.²⁹

²⁵ Department of National Defence, "A Role of Pride and Influence in the World - DEFENCE" (Government of Canada, April 2005), 17.

²⁶ Department of National Defence, "A Role of Pride and Influence," 17.

²⁷ Department of National Defence, "A Role of Pride and Influence," 19.

²⁸ Department of National Defence, "A Role of Pride and Influence," 19.

²⁹ Department of National Defence, "A Role of Pride and Influence," 22.

Overall, *A Role of Pride and Influence in the World* renews the theme of increasing the ability to monitor and control the Arctic.

Canada First Defence Strategy (2008)

The Conservative Party of Canada, led by Stephen Harper, won the parliamentary election in 2006, ousting the Liberal Party that had been in power since 1993. Following the election, the new Conservative Government worked on updating the defense policy, and released the *Canada First Defence Strategy* (CFDS) in 2008. In general terms, CFDS is a long-term plan that intends to match desired capabilities with projected acquisitions.

CFDS places considerable emphasis on the North. In defining the strategic environment, it identifies climate change and increased activity in the region. It points out that: "These changes in the Arctic could also spark an increase in illegal activity, with important implications for Canadian sovereignty and security and a potential requirement for additional military support."³⁰ It also identifies the Northwest Passage as a point of strategic significance. Additionally, the paper includes the conduct of daily operations in the Arctic as one the six core missions of the Canadian Armed Forces.³¹

To better appreciate the concept of CFDS and its intent in the Arctic, it is necessary to relate it to numerous acquisition promises made by the new Conservative government before it released the policy. As summarized by Huebert: "The Harper government has made a series of promises to considerably expand Canada's northern capability, including: six to eight Arctic offshore patrol vessels that will be able to sail in first-year ice that is up to 1 metre thick; a replacement for the Coast Guard's largest and oldest icebreaker, the *Louis St. Laurent*; the

³⁰ Department of National Defence, "Canada First Defence Strategy" (Government of Canada, June 2008), 6.

³¹ Department of National Defence, "Canada First Defence Strategy," 10.

construction of a deep-water replenishment site at Nanisivik; new replenishment vessels that will have the capability to operate in first-year ice for the naval forces; new long-range patrol aircraft to replace the Aurora (CP-140); and a training base in Resolute.”³² Some of these acquisition projects are explicitly mentioned in CFDS while the others are implied.

In summary, the Conservative government defense policy in the Arctic showed a significant increase of interest in the region. As previous policy documents before, it emphasizes the roles of surveillance and control of the North by the Canadian Forces. It goes further, however, by matching these capability requirements with actual procurement projects, in all effect, turning interests into actions.

The Subject of Defence in Arctic Policy

In the last decade, the Canadian government has released two important pieces of policy to identify its vision of Arctic development: *Canada’s Northern Strategy: Our North, Our Heritage, Our Future* and *Statement on Canada’s Arctic Foreign Policy*. These policies deal with all subjects of importance in the region including: sovereignty, social and economic development, governance, and international relations. The involvement of defense in achieving the government’s objectives is also an integral part of these policies.

Canada’s Northern Strategy: Our North, Our Heritage, Our Future, which was released in 2009, stipulates that sovereignty in the north requires a strong presence. It describes this requirement in the following way: “...putting more boots on the Arctic tundra, more ships in the icy water and a better eye-in-the-sky.”³³ It also identifies the new capabilities

³² Franklyn Griffiths, Rob Huebert, and P. Whitney Lackenbauer, *Canada and the Changing Arctic: Sovereignty, Security, and Stewardship* (Wilfrid Laurier Univ. Press, 2011), 66.

³³ Government of Canada, “Canada’s Northern Strategy Our North, Our Heritage, Our Future,” (Government of Canada, 2009), 9.

announced around the time of the release of CFDS as necessary to properly attain Canada Arctic property.

The *Statement on Canada's Arctic Foreign Policy*, released a year later to amplify the international aspect of Arctic interactions, goes even further, stating: "In our Arctic foreign policy, the first and most important pillar towards recognizing the potential of Canada's Arctic is the exercise of our sovereignty over the Far North."³⁴ It also identifies the Canadian Forces as an important tool to affirm Canadian sovereignty.³⁵ Overall, the role of defense as described in Arctic policy is consistent with the goals established in defense policy.

Summary

An examination of Canadian defense policy since the 1960s reveals consistency in the desired roles of the Canadian Forces in the Arctic. First, all policy documents highlight the responsibility of the military in the surveillance and control of the Arctic. As such, military means are important tools to assert sovereignty. Second, most policy documents state or imply that the capabilities to conduct either task are presently limited and require improvement.

There is also a clear trend observed over time in the growing importance of the Arctic region as a whole in defense policy. With the exception of the 1994 White Paper on Defence, which looked at reducing defense expenditure, each policy document displays more emphasis on the Arctic than its predecessor. Over time, the policy went from not mentioning the Arctic, to defining it as an important strategic area, to finally describing the means of accomplishing surveillance and control in the High North. This trend clearly demonstrates the growing importance of the Arctic in the Canadian political and defense context. Additionally,

³⁴ Government of Canada, "Statement on Canada's Arctic Foreign Policy" (Government of Canada, June 2010), 4.

³⁵ Government of Canada, "Statement on Canada's Arctic Foreign Policy," 5.

the role of defense in the affirmation of northern sovereignty is consistent between the defense policy, and the Canadian grand strategy for the Arctic.



Chapter 4

Canada's Arctic Defense Capability

Robert Huebert reported that the Special Arctic Representative to the Russian President once said that: "Canada talks a lot but does not do much with regard to the Arctic."¹ As discussed in the previous chapter, Canadian policy does indeed talk a lot about the need to properly conduct surveillance and control in the north. Are Canadian actions matching the political rhetoric? This chapter will analyse the efforts that Canada has taken to conduct these roles, first from a materiel point of view, and then from a diplomatic point of view as we examine the physical and legal measures Canada employs to increase the application of sovereignty in the North.

The Canadian Coast Guard

A full appreciation of the Canadian Arctic security context requires an understanding of the role of the Canadian Coast Guard (CCG). Contrary to other countries, the Canadian Guard is not a branch of the military, but, instead, an extension of Department of Fisheries and Oceans. Its mission is to: "...support government priorities and economic prosperity and contribute to the safety, accessibility and security of Canadian waters."² As detailed by Canadian naval aviator Ryan Sexsmith, the Canadian Coast Guard has no responsibility for law enforcement, and no authority to use force to apply its mandate.³ It is, however, responsible for the: "support of other government departments, boards and agencies by providing ships, aircraft and other services."⁴ In

¹ Franklyn Griffiths, Rob Huebert, and P. Whitney Lackenbauer, *Canada and the Changing Arctic: Sovereignty, Security, and Stewardship* (Wilfrid Laurier Univ. Press, 2011), 70.

² Fisheries and Oceans Canada Government of Canada, "CCG Mission, Vision and Mandate," accessed March 31, 2017, <http://www.ccg-gcc.gc.ca/eng/CCG/Mission>.

³ Ryan Sexsmith, "The Long Road to a Secure and Sovereign Canadian Arctic: Staying the Course" (Canadian Forces College, 2013), 73-74.

⁴ Government of Canada, "CCG Mission, Vision and Mandate." accessed April 17, 2017, <http://www.ccg-gcc.gc.ca/eng/CCG/Mission>

this context, the responsibility for defense and law enforcement rests with the Canadian Armed Forces and the Royal Canadian Mounted Police. Sexsmith further argues that the CCG should be expanded to include the roles of defense and law enforcement.⁵ Such arrangement may prove desirable in the future, as the need for such capability increases with greater traffic in the region. At the moment, however, the interactions between the RCMP, the CAF, and the CCG allow for achieving Canada's goal without duplication of efforts.

The support role of the Coast Guard is important given its unique icebreaking capability. As assessed by international studies experts Christian Le Mière and Jeffrey Mazo, the CCG possesses a sizeable icebreaking capability that is usually the lead Arctic presence during the summer months.⁶ Consequently, the CCG plays a significant role in security and sovereignty assurance in the North, but often as a supporting agency.

Surveillance Capabilities

The first important capability highlighted in every piece of defense policy is the means to monitor Canadian territory, waters, and airspace. The first tool available to the Canadian Armed Force to conduct such a role in the Arctic is the CP-140 Aurora long-range patrol aircraft. The Royal Canadian Air Force is currently in the process of modernizing 14 of its original 18 Auroras in order to maintain this capability in light of the degradation of the fleet since its purchase in the early 1980s. This aircraft is capable of conducting "domestic surveillance of the Canadian Atlantic, Pacific and Arctic Oceans, as well as anti-surface warfare, maritime and overland intelligence, surveillance and reconnaissance

⁵ Sexsmith, "The Long Road to a Secure and Sovereign Canadian Arctic: Staying the Course," 82-83.

⁶ Christian Le Mière and Jeffrey Mazo, *Arctic Opening: Insecurity and Opportunity*, Adelphi (Series) (International Institute for Strategic Studies) ; 440 (Abingdon: Routledge for the International Institute for Strategic Studies, 2013), 105-106.

(ISR), strike coordination, and search and rescue (SAR) missions.”⁷ While it is an adequate tool to conduct surveillance, the relatively low number of aircraft is a concern in Canada’s overall ability to monitor its whole area of jurisdiction. As previously mentioned, the Canadian defense policy addressed concerns about the lack of quantity of long-range patrol aircraft back in 1987, but nothing was done to rectify this issue.⁸ With current numbers of aircraft lower than in 1987, this concern is even more valid today. As such, the CP-140 cannot be relied upon exclusively to conduct surveillance of the Arctic.

On the subject of surveillance, all defense policy papers since 1987 also discussed the need to build-up and maintain means of space-based surveillance. As a result of this focus on space, Canada has achieved some commendable success, particularly in the realm of space-based radar. Launched in 2008, RADARSAT-2 is a Canadian satellite that carries a modern synthetic aperture radar for commercial and surveillance imagery collection. As per the Canadian Space Agency, RADARSAT-2 offers: “powerful technical advancements that enhances marine surveillance, ice monitoring, disaster management, environmental monitoring, resource management and mapping in Canada and around the world.”⁹

The Canadian Armed Forces leveraged the potential of RADARSAT-2 with its own Project Polar Epsilon. As described by the Standing Senate Committee on National Security and Defense: “The Polar Epsilon Project uses imagery and other information from RADARSAT 2, to enhance the land and sea surveillance capabilities of the Canadian Forces, giving the

⁷ National Defence Government of Canada, “CP-140 Aurora | Long-Range Patrol | Aircraft | Royal Canadian Air Force,” accessed April 10, 2017, <http://www.rcaf-arc.forces.gc.ca/en/aircraft-current/cp-140.page>.

⁸ Department of National Defence, “Challenge and Commitment: A Defence Policy for Canada,” 57.

⁹ Canadian Space Agency Government of Canada, “RADARSAT-2,” *Canadian Space Agency Website*, accessed April 17, 2017, <http://www.asc-csa.gc.ca/eng/satellites/radarsat2/Default.asp>.

CF an all-weather, day-night eye on the North.”¹⁰ As assessed by Canadian intelligence officer Levon Bond, Polar Epsilon provides the Canadian Armed Forces with data and radar imagery of all of Canada every 10 hours, within approximately 15 minutes of capture.¹¹ Analysts can then use the information from RADARSAT-2 to track and classify Vessels of Interest in the Arctic region, and maintain a clearer picture of all maritime traffic and ice build-up in the North.

Building on the success of RADARSAT-2, the Canadian Space Agency, along with Canadian industry, is developing the next generation of space-based capability. The RADARSAT Constellation is scheduled to become operational in 2018. According to the Canadian Space Agency: “The RADARSAT Constellation Mission (RCM) includes three identical Earth observation satellites and is a paradigm shift from previous RADARSAT missions. Instead of launching a single large, multi-year operations satellite, the capabilities of the system will be distributed across several small satellites, increasing revisit, and introducing a more robust, flexible system that can be maintained at lower cost and launched into orbit using less expensive launch vehicles.”¹² Accordingly, the Canadian Armed Forces launched Project Polar Epsilon 2, which will obtain surveillance data from the RADARSAT Constellation. Little information is publicly available on the actual technical capabilities of the constellation, but a news announcement made by the Government of Canada concerning it states that: “Polar Epsilon 2 will also allow identification of ships by name, in addition to their radar-detected positions, providing an integrated, near-real-time maritime situational

¹⁰ Canadian Senate, “Sovereignty & Security in Canada’s Arctic - Interim Report” (Government of Canada, March 2011), 4.

¹¹ Levon Bond, “JUSTAS and Project Epsilon: Integrated Intelligence, Surveillance, and Reconnaissance of the Canadian Arctic,” *Canadian Military Journal* 11, no. 4 (Autumn 2011): 25.

¹² Canadian Space Agency Government of Canada, “RADARSAT Constellation,” *Canadian Space Agency Website*, accessed April 17, 2017, <http://www.asc-csa.gc.ca/eng/satellites/radarsat/Default.asp>.

awareness capability.”¹³ The ability to monitor traffic in near-real-time will greatly enhance Canada’s surveillance capability in the North.

Canada is also looking to invest in the realm of Unmanned Aerial Systems (UAS) to enhance its surveillance capability. The Joint Unmanned Surveillance Target Acquisition System (JUSTAS) project is expected to deliver a Medium Altitude Long Endurance (MALE) UAS for the Royal Canadian Air Force. At the time of writing, no contract has yet been awarded to procure this capability, but the project is active. In January 2016, Canada released a Request for Information (RFI) to industry to solicit interest in the JUSTAS project. The RFI clearly stipulates the need for JUSTAS to operate in the Arctic region.¹⁴ The high-level mandatory requirements listed in the RFI describe the ability of the UAS to provide vessel tracking and identification, imagery (including full motion video capture), and the ability to transmit the data and imagery in near-real-time both via Line-of-Sight and Beyond-Line-of-Sight means.¹⁵ The RFI also includes an Annex that describes a scenario in which the UAS is tasked with identifying all surface contacts heading east within the Northwest Passage to identify a vessel of interest.¹⁶ As assessed by Levon Bond in the *Canadian Military Journal*, JUSTAS will provide the Canadian Armed Forces with the necessary capacity for surveillance precision and persistence that is required in the Arctic region.¹⁷

Overall, the Canadian Armed Forces possess some capability of conducting surveillance of the Arctic waterways through the use of RADARSAT-2 and the CP-140 Aurora. In near-to-medium terms, this

¹³ National Defence and the Canadian Armed Forces Government of Canada, “Canada News Centre - Polar Epsilon 2 Project,” accessed 4 April 2017 at <http://news.gc.ca/web/article-en.do?nid=1086509>.

¹⁴ Public Works and Government Services, “JUSTAS PROJECT - Request for Information” (Government of Canada, January 2016), 2.

¹⁵ JUSTAS PROJECT - Request for Information, 5-7.

¹⁶ JUSTAS PROJECT - Request for Information, B-1/5-B5/5.

¹⁷ Bond, “JUSTAS and Project Epsilon: Integrated Intelligence, Surveillance, and Reconnaissance of the Canadian Arctic,” 27-28.

capability will be greatly augmented by the addition of the RADARSAT Constellation and JUSTAS.

Control Capabilities

Icebreakers and ice-capable ships are the most reliable means of ensuring control of the waterways in the Arctic. As discussed earlier, icebreaking capability in Canada is the purview of the Canadian Coast Guard. At the time of writing, no other department within the Canadian Government has icebreaking or ice-strengthen capable ships. Ice-strengthen vessels are ships that can operate in vicinity of ice-covered waters, and which can sustain some ice operations, but without the capability for continuous icebreaking. The CCG possesses a fleet of 15 ice-capable ships, which includes: 2 heavy, 4 medium, and 9 light icebreakers.¹⁸ Its largest icebreaker, *CCGS Louis S. St-Laurent*, is able to maintain operation through ice up to three meters thick. It typically operates in the Arctic in the summer and in the Gulf of St-Laurent in the winter. Classified as an Arctic Class 4 ship (an older Canadian classification), it has limited capacity to handle heavy multi-year ice.

The remedy this capability gap, the Canadian Government has commissioned Seaspan Marine Corporation to design and build a Polar Class icebreaker for the coast guard, the *CCGS John G. Diefenbaker*. It is expected to enter service in the early 2020s. According to Lloyd's Register, the leading consultant agency in the marine industry, the new icebreaker will carry a Polar Class 2+ (PC-2+) rating.¹⁹ This rating, under the *International Association of Classification Societies*, signifies that the *Diefenbaker* will be able to conduct: "Year-round operation in moderate

¹⁸ Fisheries and Oceans Canada Government of Canada, "Icebreaking," accessed April 4, 2017, <http://www.ccg-gcc.gc.ca/Icebreaking/home>.

¹⁹ "Icebreaker for Canadian Coast Guard | News | News and Insight | Lloyd's Register," accessed March 23, 2017, <http://www.lr.org/en/news-and-insight/news/lr-to-class-versatile-icebreaker-for-canadian-coast-guard.aspx>.

multi-year ice conditions.”²⁰ This new capability will give Canada a means to reach any waters within its boundaries at practically any time of the year.

On the naval side, not much has changed since the 1987 Defence White paper. The Royal Canadian Navy does not currently possess any ice capable vessels, and as such, can only operate in the southern part of the Arctic during the summer months. This gap is currently being addressed through the procurement of an Arctic/Offshore Patrol Ship (AOPS) for the Navy. The *Harry DeWolfe* class ice-capable patrol ships are currently under construction in Halifax, Nova Scotia. As announced by the Conservative Government around the time of the *Canada First Defence Strategy*, Canada has procured six ice-capable naval vessels, with first delivery due in 2018.²¹ As assessed by a leading naval capability website, the *Harry DeWolfe* class ships will meet the requirement for Polar Class 5+ (PC 5+) rating.²² In terms of capability, this translates to the conduct of “year-round operation in medium first-year ice which may include old ice inclusions.”²³ Thus, AOPS will provide the Canadian government with the ability to conduct armed surveillance and control of its waters at any time that traffic can be expected in the region, including in the Northwest Passage.

About the same time as it promised AOPS, the government also announced that it would procure replenishment vessels that could operate in first year ice. This commitment did not materialize. Instead, the Government went ahead with the procurement of the *Joint Support Ship* (JSS) as a replenishment vessel. JSS will not have icebreaking

²⁰ IACS, “Requirements Concerning POLAR CLASS” (International Association of Classification Societies, 2016), I1-2.

²¹ National Defence Government of Canada, “Arctic/Offshore Patrol Ship | Fleet & Units | Royal Canadian Navy,” accessed April 19, 2017, <http://www.navy-marine.forces.gc.ca/en/fleet-units/aops-home.page>.

²² “Harry DeWolf-Class Arctic/Offshore Patrol Ships (AOPS),” *Naval Technology*, accessed March 23, 2017, <http://www.naval-technology.com/projects/harry-dewolf-class-arcticoffshore-patrol-ships-aops/>.

²³ IACS, “Requirements Concerning POLAR CLASS,” I1-2

capability, but will instead have: “ice edge capability to access Nanisivik Naval Facility in the summer navigation season.”²⁴ This lack of icebreaking capability will reduce the range and autonomy of AOPS, but nonetheless, the ability to operate around Arctic waters in the summer is still a force multiplier.

As pointed out by Sexsmith in his studies of naval arctic capabilities, the Canadian Armed Forces lack the capacity to conduct sustained anti-submarine warfare (ASW) in the North.²⁵ AOPS itself will not have the capability of conducting underwater surveillance and control. It will, however, be able to carry a CH-148 Cyclone maritime helicopter that is ASW capable.²⁶ Additionally, the fixed underwater sonar installation and the procurement of nuclear propulsion submarines called for in the 1987 White Paper never materialized. Instead, Canada settled for acquiring four diesel-electric submarines from the UK. These boats are not equipped with Air Independent Propulsion (AIP) technology, and as such, cannot operate under the ice for any extended period of time. The only other ASW asset owned by the Canadian Armed Forces is the CP-140 Aurora. As discussed earlier however, the small number of aircraft cannot guarantee continuous surveillance and control in the Arctic, largely leaving Canada with an ASW capability gap in the North.

Overall, the Canadian Coast Guard and the Canadian Armed Forces have some capability to conduct surveillance and control in the high north. These capabilities will be greatly increased in the next decade with the addition of the RADARSAT Constellation, the *John G. Diefenbaker* icebreaker, the Arctic/Offshore Patrol Ships, and the

²⁴ National Defence Government of Canada, “Defence Acquisition Guide 2016,” accessed April 4, 2017, <http://www.forces.gc.ca/en/business-defence-acquisition-guide-2016/naval-systems-31.page>.

²⁵ Sexsmith, “The Long Road to a Secure and Sovereign Canadian Arctic: Staying the Course,” 42-43

²⁶ Department of National Defence, “Harry DeWolfe-Class Arctic/Offshore Patrol Ship Fact Sheet” (Government of Canada, January 2015).

JUSTAS UAS. The only remaining Canadian capability limitation will be in the domain of underwater surveillance and control.

Legal Means of Surveillance and Control

The voyage of the *Manhattan* revealed the possibility of commercial traffic through Canadian Arctic waters, including the Northwest Passage. As such, it also highlighted the potential risk for pollution or environmental disaster in the region. On 8 April 1970, the Canadian government introduced a bill to the House of Commons to increase its capability to mitigate the environmental risk in the Arctic.

The Arctic Waters Pollution Prevention Act (AWPPA) established a zone in and around Canadian Arctic waters in which the Canadian Government gave itself the authority to regulate traffic. In *Polar Imperative*, historian Shelagh Grant provides a good summary of the AWPPA: “Ships entering the contiguous zone were required to conform to Canadian standards of construction and navigation procedures. Regulations regarding icebreaking capabilities differed according to the season and ice conditions in sixteen designated Shipping Safety Control Zones. Pollution prevention officers were given the authority to halt vessels failing to meet the requires standards, and if appropriate, to seize their cargo.”²⁷ At the same time, the Canadian government also increased its territorial waters and exclusive fishing zone from three to twelve miles. As assessed by political scientist John Kirton and Don Munton, these measures were in effect a: “...three-tiered approach to protecting the sovereignty and marine environment of the Canadian Arctic.”²⁸ The establishment of AWPPA was met with protest from outside Canada, most notably, from the United States.²⁹

²⁷ Grant, *Polar Imperative*, 356.

²⁸ John Kurton and Don Munton in Griffiths, ed., and Dalhousie Ocean Studies Programme, *Politics of the Northwest Passage*.67.

²⁹ Grant, *Polar Imperative*, 356-358.

To legitimize the foundation of AWPPA, Canada negotiated arduously in the following decade to include provisions for environmentally sensitive areas in the third United Nations Convention on the Law of the Sea. These efforts led to the inclusion of Article 234 to UNCLOS, which is now colloquially known as the “Canadian exception.” Nested under the *Protection and Preservation of the Marine Environment* section of UNCLOS, Article 234 stipulates that: “Coastal States have the right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels in ice-covered areas within the limits of the exclusive economic zone.”³⁰ The inclusion of Article 234 was a tremendous success in securing the legitimacy of the AWPPA. As best assessed by Professor of Law D.M. McRae: “In the space of six years, Canada went from the assertion of a claim to jurisdiction in domestic legislation that was protested by other states, [...] to international recognition of that legislation.”³¹

In 1977, Canada took a practical application of AWPPA through the establishment of a voluntary reporting system called NORDREG. As such, all ships of a certain size transiting through the area depicted in Figure 5 could register the details of their transit with the Canadian Coast Guard. In exchange, Canada would provide weather, ice conditions, and navigation information and assistance. In 2010, the Canadian Government moved even further and made NORDREG mandatory for specific high-risk vessels, for example vessels of 300 gross tonnage or more and vessels carrying dangerous cargo.³²

³⁰ “Preamble to the United Nations Convention on the Law of the Sea,” accessed April 10, 2017, http://www.un.org/depts/los/convention_agreements/texts/unclos/part12.htm.

³¹ Donald M. McRae in Griffiths, ed., and Dalhousie Ocean Studies Programme, *Politics of the Northwest Passage*, 110.

³² Legislative Services Branch, “Consolidated Federal Laws of Canada, Northern Canada Vessel Traffic Services Zone Regulations,” accessed April 4, <http://laws-lois.justice.gc.ca/eng/regulations/SOR-2010-127/page-2.html#h-6>.

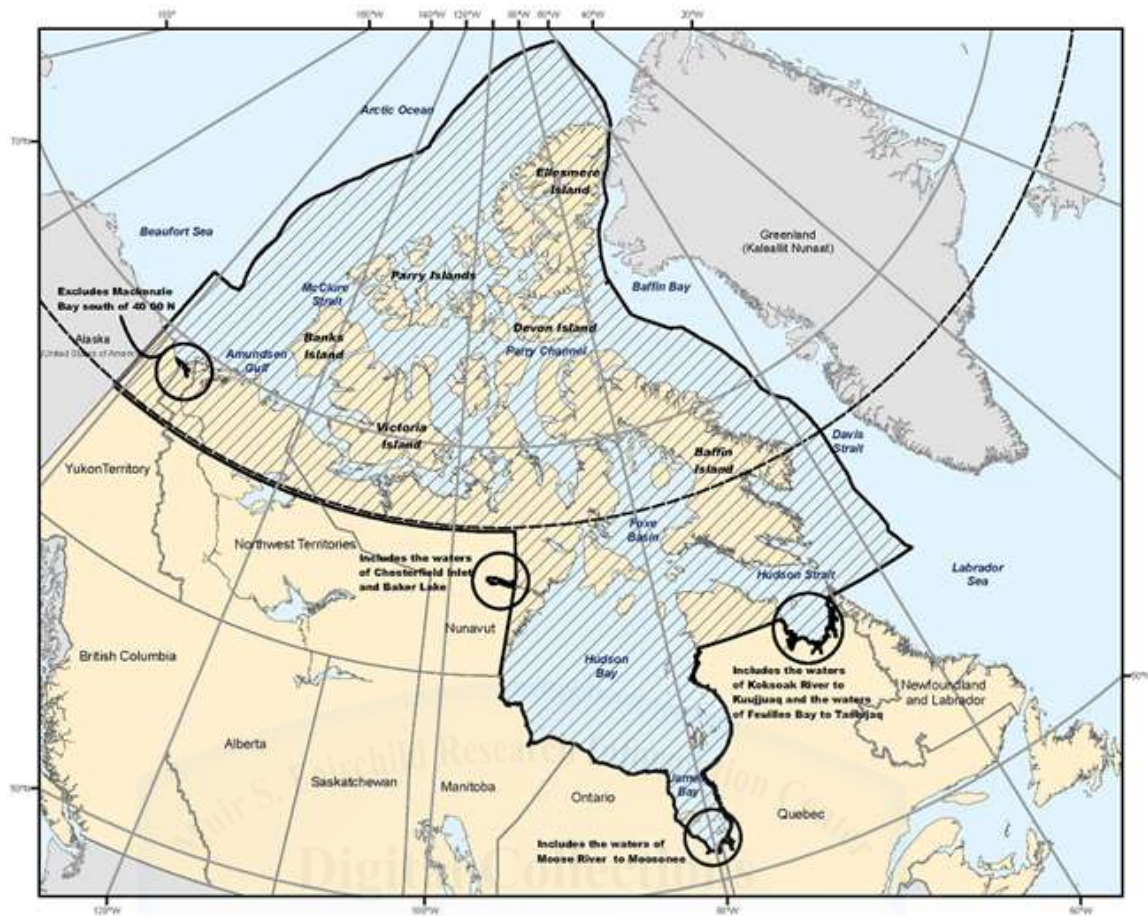


Figure 6 – NORDREG zone.
 (Source: Canadian Coast Guard (<http://www.ccg-gcc.gc.ca/Marine-Communications/RAMN-2015/Atlantic-Part3-Vessel-Traffic-Services>))

The AWPPA and NODREG have stood the test of time. In a master's thesis on the law of the seas produced for the University of Tromsø, "the Arctic University of Norway," Andreas Raspotnik concluded that the mandatory application of NORDREG was consistent with Article 234 of UNCLOS, and as such, fully justified under international law.³³ As for its applicability to the Northwest Passage, even if it was to be considered a strait used for international navigation, NORDREG is mandatory prior to entering the zone in Figure 6, and consequently, would be necessary well ahead of any Passage transit. Overall, AWPPA and NORDREG provide the

³³ Andreas Raspotnik, "Unilateral Pollution Control in the Northwest Passage: The Canadian NORDREG Regulations in the Context of UNCLOS, Article 234" (Universitetet i Tromsø, 2011), 47.

Canadian Government with a functional approach to assert sovereignty in the Arctic.

Summary

What is Canada doing to ensure its sovereignty in the Arctic? Overall, Canada currently possesses some capabilities to conduct both surveillance and control in the High North. Through space-based surveillance (RADARSAT-2) and long-range patrol aircraft, Canada can monitor the traffic in its Arctic waters. This capability is somewhat limited by RADARSAT-2 revisit time (10 hours) and the relatively low number of CP-140 Aurora aircraft. The Canadian Coast Guard employs a fleet of 15 icebreakers, which operate in the region through the summer months. Although the Canadian Coast Guard does not have law enforcement authority, it can support the Royal Canadian Mounted Police or the Canadian Armed Forces in this role.

Canadian Arctic capability will be greatly enhanced in the next decade through a series of acquisition programs. The RADARSAT Constellation, the evolution of the previous space-based surveillance system, will provide greater capability to monitor traffic in near-real-time. The procurement of an unmanned aerial system through Project JUSTAS will also improve the capability to conduct persistent surveillance of vessels of interest. On the control capability front, the addition of a Polar Class 2+ icebreaker will provide the country with the ability to reach most of its Arctic waters year-round. The acquisition of first-year ice capable naval vessels will also improve Canada's ability to control traffic during the season of expected navigability.

The greatest deficiency in Canadian Arctic control capability is in the area of underwater surveillance and control. Canada does not own nuclear propulsion submarines and its diesel-electric boats are not able to sustain under-ice operations. Canada's limited underwater resources in the region will rest with its CP-140 Aurora and the potential for

embarked maritime helicopters on ice-capable naval vessels in the future.

From a legal stand point, Canada enacted legislation that allows for a strict control of commercial shipping through the Arctic region, for the purpose of environmental protection. Additionally, all vessels of 300 gross tonnage or above are mandated to register the details of their transits with the Canadian Coast Guard. The legal measures taken by Canada to protect the marine environment in the North are fully justified under Article 234 of UNCLOS, legitimizing Canada's involvement thus far.

Overall, Canada currently has a modest capability to monitor and control the flow of traffic in the Arctic. These capabilities are set to increase greatly within the next decade.



Chapter 5

Implications for Canada Sovereignty and the Northwest Passage

*Westward from the Davis Strait 'tis there 'twas said to lie
The sea route to the Orient for which so many died;
Seeking gold and glory, leaving weathered, broken bones*
- Stan Rogers, Canadian Folk Singer, "Northwest Passage," 1981

As mentioned in Chapter 2, Canada's remaining sovereignty disputes in the region are with the United States. Notably, the most controversial disagreement is over the legal status of the Northwest Passage as Canada's internal waters. This chapter addresses this issue by comparing the objectives and capabilities of each nation in order to offer an effective future resolution for both parties. First, the chapter considers the US security, defense, and Arctic policies to identify the American goal in the region. Then, the chapter provides an overview of the limits of America's Arctic capabilities. Finally, it examines potential ways ahead in order to achieve both Canadian and American objectives.

The Arctic in US policy

Two US Presidents in the last decade released official pieces of Arctic policy. Under President George W. Bush in 2009, the *National Security Presidential Directive/NSPD-66* officially established the policy of the US Government in the Arctic. In a broad sense, NSPD-66 discusses a variety of subjects such as national interests, security concerns, scientific research and governance.

NSDP-66 identifies national security interests as an important part of Arctic policy. It points out the potential threats of terrorism and crime as a concern for the region.¹ It also recognizes the predominant aspect of the maritime domain in the Arctic region, and directs improvements of

¹ White House, "National Security Presidential Directive/NSPD-66" (White House, January 2009), 3.

response capability and maritime domain awareness. With its close proximity to Canada, a large undefended border between the two countries, and the large Alaskan state situated in the Arctic, it is clear that concerns over northern security affect the American homeland.

NSPD-66 is also very clear on the American position regarding the Northwest Passage. It states that: "Freedom of the seas is a top national priority. The Northwest Passage is a strait used for international navigation..."² It further explains the concern about setting a precedent for the freedom of navigation for other strategic straits around the world.

In 2013, the Administration of Barack Obama released the *National Strategy for the Arctic Region*. As an overarching goal, the strategy states that: "We [the United States] seek an Arctic region that is stable and free of conflict..."³ It defines US actions in region in terms of three lines of efforts: 1) advance United States security interests, 2) pursue responsible Arctic region stewardship, and 3) strengthen international cooperation.⁴ In many ways, this strategy reflects a view that is consistent with the Arctic Regime of peaceful conflict resolution described in Chapter 2.

On the subject of security, the *National Strategy* mentions the need to develop and maintain the capability to positively influence the safety and stability in the region. It further states that such goals could be reached via bilateral or multilateral arrangements. Consistent with the previous NSPD-66, the strategy indicates that the freedom of the sea in an important US objective in the Arctic.⁵ Contrary to the previous document, however, it makes no specific reference to the Northwest Passage as an international strait. The document does not either commit or preview any acquisition project to bolster Arctic capabilities.

² White House, "NSPD-66," 3-4.

³ White House, "National Strategy for the Arctic Region." (White House, May 2013), 3.

⁴ White House, "National Strategy for the Arctic Region," 2.

⁵ White House, "National Strategy for the Arctic Region," 6-7.

Shortly after President Obama's strategy, the Department of Defense released its own Arctic policy in 2013. It identifies the American end-state in the region as: "a secure and stable region where U.S. national interests are safeguarded, the U.S. homeland is protected, and nations work cooperatively to address challenges."⁶ In general terms, this policy reiterates the objectives of NSPD-66 and the *National Strategy*. It does, however, make two points that are noteworthy in the context of this study. First, it states that: "Fiscal constraints may delay or deny needed investment in Arctic capabilities, and may curtail Arctic training and operations."⁷ It also states that: "Being too aggressive in taking steps to address anticipated future security risks may create the conditions of mistrust and miscommunication under which such risks could materialize."⁸

US Arctic Capabilities

The United States Navy and Coast Guard have a very limited capability to operate surface vessels in ice water conditions. In its *U.S. Navy Arctic Roadmap for 2014 to 2030*, the USN recognises that: "Surface ship operations will be limited to open water operations in the near-term. Even in open water conditions, weather factors, including sea ice, must be considered in operational risk assessments."⁹ A report to Congress conducted by the Department of Defense in 2011 found that: "U.S. Navy surface ships are not ice-strengthened and, therefore, are not available for employment in first year ice, or even in the marginal ice zone."¹⁰

⁶ Department of Defense, "Arctic Policy" (United States Government, November 2013), 2.

⁷ Department of Defense, "Arctic Policy," 12.

⁸ Department of Defense, "Arctic Policy," 13.

⁹ United States Navy, "U.S. Navy Arctic Roadmap for 2014 to 2030" (United States Government, February 2014), 18.

¹⁰ Department of Defense, "Report to Congress on Arctic Operations and the Northwest Passage" (United States Government, May 2011), 17.

The United States Coast Guard icebreaking capability is also very limited. As assessed by Le Mière and Mazo, the three USCG ice-capable vessels (one heavy icebreaker, one medium icebreaker, and one cutter) are insufficient to ensure the Coast Guard constabulary role.¹¹ The USCG Arctic strategy also highlights the need for greater presence on the Arctic waters.¹²

The US makes up for its lack of capability in Arctic surface vessels with its fleet of aerial assets and nuclear propulsion submarines. In describing its near-term goal, the USN Arctic roadmap states that: “The Navy will continue to provide capability and presence primarily through undersea and air assets.”¹³ These means alone, however, are not adequate to ensure the control of maritime shipping. While providing the United States with a reasonable ability to conduct surveillance around the Arctic islands, aircraft and submarines alone cannot affect proper control of the potential increase in surface shipping.

Security Implications of the Legal Status of the Northwest Passage

Ultimately, the goals of achieving homeland protection and preserving the freedom of the seas may be in conflict when it comes to the US position on the status of the Northwest Passage. Whether the Passage is considered a strait used for international navigation or Canadian internal waters would dictate the rights of transit that vessels can use to sail through it.

For example, if the Northwest Passage were deemed a strait for international navigation, the regime of *transit passage* would apply to it, which would cause additional security challenges in the region. Based on

¹¹ Christian Le Mière and Jeffrey Mazo, *Arctic Opening: Insecurity and Opportunity*, Adelphi (Series) (International Institute for Strategic Studies) ; 440 (Abingdon: Routledge for the International Institute for Strategic Studies, 2013), 103.

¹² United States Coast Guard, “United States Coast Guard Arctic Strategy” (United States Government, May 2013), 23.

¹³ United States Navy, “U.S. Navy Arctic Roadmap for 2014 to 2030, 18.

UNCLOS: "Transit passage means the exercise in accordance with this Part of the freedom of navigation and overflight solely for the purpose of continuous and expeditious transit of the strait between one part of the high seas or an exclusive economic zone and another part of the high seas or an exclusive economic zone."¹⁴ While this definition may appear benign, it signifies that any vessel or aircraft has the right of transit through the strait without the coastal state's permission.¹⁵ Additionally, it implies that a vessel may use its normal mode of navigation to do so, meaning that submarines may remain submerged for the transit.¹⁶ In practical terms, it would allow China, Russia or any other state to send military vessels through the Passage to conduct freedom of navigation exercises.

If the Northwest Passage is deemed Canadian internal waters, there are two possible options that may regulate transits. First is the right of innocent passage. As per UNLCOS: "... ships of all States, whether coastal or land-locked, enjoy the right of innocent passage through the territorial sea."¹⁷ Internal waters are not considered territorial seas as per the definition above, and as such, the right of innocent passage does not apply to them. One exception to this rule is that if innocent passage existed prior to the drawing of straight baseline, this right remains in effect.¹⁸ It is unclear if the travels of the *Manhattan* and *Polar Sea* established a precedent for innocent passage. Professor of Law Donat Pharand concludes that there was no such right of passage before or after 1985.¹⁹ Even if such an exception existed, the regime of

¹⁴ "United Nations Convention on the Law of the Sea," accessed April 12, 2017, http://www.un.org/depts/los/convention_agreements/texts/unclos/part3.htm.

¹⁵ Byers, *International Law and the Arctic*, 156.

¹⁶ Donat Pharand, "The Arctic Waters and the Northwest Passage: A Final Revisit," *Ocean Development & International Law* 38, no. 1/2 (January 2007), 45.

¹⁷ "United Nations Convention on the Law of the Sea," accessed April 12, 2017, http://www.un.org/depts/los/convention_agreements/texts/unclos/part3.htm.

¹⁸ Pharand, "The Arctic Waters and the Northwest Passage," 40-42.

¹⁹ Pharand, "The Arctic Waters and the Northwest Passage," 42-44.

innocent passage is still more restrictive than transit passage, offering more control and monitoring rights. It requires submarines to transit on the surface, and is not extended to aircraft.

The other possible option if the Northwest Passage is deemed Canadian internal waters would be that the full force of Canadian legislation applies to the area. In practical terms, this means that Canada's permission would be required for any vessels entering, and that all ships in the Passage would be subject to Canadian law. As such, Canada could regulate who can transit the Passage, and under which conditions. Additionally, foreign military vessels would require diplomatic clearance to enter Canadian internal waters.

Common North American Security Interests

While the opening of the Arctic may allow for new profitable trade routes, it also represents a new avenue for potential North American security risks. As recognized in the DoD Arctic Policy: "From the U.S. perspective, greater access afforded by the decreasing seasonal ice increases the Arctic's viability as an avenue of approach to North America for those with hostile intent toward the U.S. homeland, and the Department will remain prepared to detect, deter, prevent, and defeat threats to the homeland."²⁰ Furthermore, as assessed by Pharand: "... a virtually unrestricted freedom of navigation, which applies in an international strait (as the United States considers the Northwest Passage to be), could well bring dangerous visitors and catastrophic consequences for either or both countries."²¹ With an international strait going right through North America, the United States' chances of detecting, preventing, or defeating threats in the Arctic would be much

²⁰ Department of Defense, "Arctic Policy," 8.

²¹ Pharand, "The Arctic Waters and the Northwest Passage," 51.

less than if the waters were under complete control of a very close ally, such as Canada.

Given the peaceful resolution of conflict so far seen in the Arctic regime, it is unlikely that either Canada, or the United States, would face potential military conflict with Arctic neighbours. Consistent between both American and recent Canadian defense policies, the main source of security concerns in the region revolves around crime, smuggling, and environmental disasters. With greater access due to climate change and little lawful means of control, it is possible that Arctic routes could present terrorists with an easy way to smuggle people and weapons in North America.

The true security problem lies with the capability of applying proper surveillance and control measures. As discussed previously, American ability to do so is extremely limited. Thus, it is unlikely that the US could provide enough control of an international Northwest Passage to ensure the security of North America. Given its current assets and capability development, it is improbable that the United States could reach its security goals in the Arctic by itself.

The NATO Option

A multilateral security solution, such as the inclusion of NATO assets to protect the North, could mitigate *some* of the problems listed above. In his thesis for the School of Advanced Air and Space Studies, Major Mikkel N. Behrens of the Royal Danish Air Force concludes that: “NATO should staff and promulgate a new strategic concept reflecting a strategic shift toward geostrategic control, deterrence, and cooperation...”²² A great involvement of NATO in the region could increase the maritime situation awareness and provide better means to

²² Mikkel N. Behrens, “Trouble in Niflheim? Elements of a NATO Arctic Strategy” (School of Advanced Air and Space Studies, 2015), 96.

affect control over the Arctic waters. Additionally, it would allow for sharing the cost of Arctic security between partner states.

The problem with bringing NATO into the Arctic is that it is likely to offset the current balance of the Arctic regime. It would transform the multi-polar system described earlier by Wegge by further polarizing the region along old Cold War lines. Norwegian expert of northern geopolitics, Rofl Tammes, reports that Russia opposes NATO spreading in the Arctic, and that such actions could undermine the present climate of cooperation.²³ Additionally, there is also a risk that NATO countries would, within the context of the Alliance, see Russia as a traditional enemy, creating an atmosphere of hostility which would further impede the prospect of cooperation.²⁴

A unified NATO strategy would provide four out of the Arctic-5 states with a separate forum for discussing topics of interest in the region, isolating Russia and breaking down the well-established open dialogue of the regime. As such, it would undermine the Arctic Council and its increasing importance as instrument of governance in the north. As pointed out by Danish Military Analyst Major Henrik Jedig Jørgensen: “... with Russia being the only non-NATO state [within the Arctic-5], there is a particular risk that actions undertaken by individual states will be perceived as part of a coordinated alliance gesture directed against Russian interests.”²⁵ Thus, the involvement of NATO in Arctic affairs run the risk of marginalizing Russia, which in turn, would be less likely to cooperate as willingly has it has previously.

²³ Rofl Tammes in James Kraska, ed., *Arctic Security in an Age of Climate Change* (Cambridge: Cambridge University Press, 2013), 55-56.

²⁴ Henrik Jedig Jørgensen in Barry Scott Zellen, ed., and Arctic Institute of North America, *The Fast-Changing Arctic: Rethinking Arctic Security for a Warmer World*, Northern Lights Series (Calgary, Alta.) (Calgary, AB: University of Calgary Press, 2013), 144-145.

²⁵ Henrik Jedig Jørgensen in Zellen, ed., and Arctic Institute of North America, *The Fast-Changing Arctic*, 144.

Overall, a unified NATO Arctic strategy and the commitment of resources by member states could improve *some* aspects of maritime security in the north. It would, however, undermine the principle of peaceful cooperation and the growing levels of governance in the Arctic. This would be counter to the American goals of a stable region where nations work cooperatively as stated in NSPD-66 and the *National Strategy*. It could even be the first step towards a security dilemma, which appears to be curbed by the current Arctic regime of cooperation.

The Case for a Bilateral Arrangement on Arctic Security

Canada and the United States have a long history of defense and security cooperation. Even with their on-going dispute about the legal status of the Northwest Passage, Canada and the US were able to come to a peaceful interim solution. A formalized, bilateral agreement on the status of the Northwest Passage could quell the Canadian need for sovereignty, while addressing American security concerns arising in the North. Indeed, Canada is in a unique position to enforce more restrictive transit through the Arctic, and it has a better (and growing) capability to monitor and control the northern maritime domain than the US does. As such, an agreement towards a Canadian controlled Northwest Passage would ultimately lead to increased security.

In legal terms, the ability to enforce Canadian law presents the optimal option for ensuring North American defense in the North. Michael Byers considered the problem, and concluded that: "Today, Washington is more concerned about terrorists sneaking into North America, or rogue states using the oceans to transport WMD. And these challenges would best be addressed through a domestic legal system's criminal, customs and immigration laws..."²⁶ Byers' argument is that the

²⁶ Michael Byers, "Unfrozen Sea: Sailing the Northwest Passage," *Policy Options*, 33, accessed March 25, 2017, <http://policyoptions.irpp.org/magazines/the-arctic-and-climate-change/unfrozen-sea-sailing-the-northwest-passage/>.

full extent of Canadian law and jurisdiction over the Northwest Passage would address American security concerns better than the loose regulations surrounding transit passage.

While legislation is one aspect of security, Canada must also possess a credible means to enforce its laws in the region to fully achieve security. As discussed in Chapter 4, Canada's capabilities to affect surveillance and control of surface maritime shipping in the Arctic are already greater than that of the US. In addition, Canada's ability to monitor and control the Arctic is expected to improve in the coming decade with the fruition of recent Canadian procurement plans. Consequently, with both the best legal precedent to create security measures and the best capability to enforce them, Canada is an ideal US partner for a bilateral arrangement on North American Arctic security.

Beyond Canada's expanding ability to monitor and control the Northwest Passage independently, its capabilities uniquely complement current American assets, suggesting that cooperation could lead to the best overall balance of security capability. The Canadian deficiency in conducting underwater surveillance and control could easily be offset by US nuclear submarines. The Canadian efforts into developing space-based radar, icebreaking, and ice-strengthened naval vessels compensate for the American lack of surface ships capable of operating in the area.

Ultimately, it would be in the best interests of both nations to take advantages of each other's strengths in order to enhance the overall security and stability of the Arctic. The achievement of a security agreement would allow both parties to benefit from increased surveillance and defense capabilities, whether the agreement be an extension of existing alliances or completely new policy. By accepting, or at the very least not opposing, Canada's claim that the Northwest Passage is contained within Canada's internal waters, the United States would actually enhance its security in the North. By allowing the maximum level of Canadian control over the Northwest Passage, the US

would also be enabling the maximum level of defensibility and surveillance of those waters. For its part, Canada also needs to compromise with measures such as allowing some guaranteed access for American vessels through the Passage as part of whatever treaty is achieved.

Such agreement could be based on (or even be an extension of) NORAD, for example, where an integrated defense system between the two countries oversees the maritime control of the Arctic waters. Since its renewal in 2006, NORAD already includes the responsibility of maritime domain awareness. As such, maritime traffic warning information is easily shared between the two countries.²⁷ NORAD is a lasting example of military and defense cooperation between Canada and the United States and could serve as a good model for further Arctic maritime security integration. As assessed by War Studies Professor Andrea Charron, the greatest challenge of NORAD in the domain of Arctic maritime security is in its response capability.²⁸ She suggests that should the Arctic continues to increase as an area of strategic significance, there will likely be a need to expand NORAD linkages to facilitate a better response from either Canada or the US to any potential threat. As such, additional areas of responsibility could be negotiated in any bilateral security agreement that includes Arctic waters.

If a bilateral security agreement is a bridge too far, International lawyer Brian Flemming proposes an alternative functional arrangement similar to what Canada has accomplished with the AWPPA.²⁹ This approach would, in effect, create a US-Canada Northwest Passage Management Authority that would regulate the flow of traffic in the

²⁷ Joseph T. Jockel and Joel J. Sokolsky, "NORAD Does Not Need Saving," *International Journal*; Toronto 70, no. 2 (June 2015): 192.

²⁸ Andrea Charron, "Canada, the Arctic, and NORAD: Status Quo or New Ball Game?," *International Journal* 70, no. 2 (2015): 215–231.

²⁹ Brian Flemming, "Canada-U.S. Relations in the Arctic: A Neighbourly Proposal" (Canadian Defence & Foreign Affairs Institute, December 2008), 2.

Passage, such as is the case in the Great Lakes and St. Lawrence Seaway. The waters of these maritime ways are internal to either the US or Canada, and as such, are under the full extend of national laws. The management of these waters is a great example of cooperation, where the two nations came together to promote, regulate and ensure safe maritime traffic jointly. A proposal based on such partnership would avoids the legal question surrounding the status of the waters, and focusses on the means required to increase security. While it does not solve the fundamental sovereignty problem, it could be an initial step in the alignment of security needs between the two countries.

In the end, one point remains clear: Canada and the United States both have a lot to gain by cooperating in the North. The status of the Northwest Passage remains a point of contention between the two nations, but Canada's best approach for enticing its neighbour to accept its sovereignty claim should focus on its inherent security benefits.

Implications for Canadian Strategy in the Arctic

In order to be a viable partner in a bilateral agreement, Canada must ensure the means to provide surveillance and control of its Arctic waterways. As such, the following principles should guide the Canadian strategy towards securing its sovereignty goals.

- 1) Canadian defense policy should continue the growing trend of clearly stating the importance of the Arctic in defense, and define clear means of achieving adequate surveillance and control in the region.
- 2) Canada should ensure its current Arctic surveillance and control capabilities are properly maintained and ready.
- 3) Canada should ensure the prompt delivery, and entry in service, of its new heavy icebreaker, the *John G. Diefenbaker*, to provide a credible year-round icebreaking capability.

- 4) Canada should ensure the prompt delivery, and entry in service, of the *Harry DeWolfe* class Arctic/Offshore Patrol Ships, to provide an armed patrol capability during the navigable season.
- 5) Canada should pursue and accelerate Project JUSTAS to improve its capability for persistent surveillance in the foreseeable future.
- 6) Canada should continue to invest in space-based surveillance program, and leverage as much as possible from the RADARSAT Constellation and Polar Epsilon 2.
- 7) Canada should maintain, and further develop, a credible long-range patrol aircraft capability for the North.
- 8) Canada should continue to foster the Canadian Coast Guard support role in security in the Arctic and consider the possible requirements for expanded roles in defense and law enforcement.
- 9) Canada should engage with the United States on the subject of Arctic security, focussing on Canadian capabilities to conduct surveillance and control, and the added security advantages of Canadian law in the Northwest Passage.

Summary

Canada and the United States have a vested interest in the security of the Arctic. The US defense policy states the need for a stable region to preserve homeland protection and national interests. American defense spending and posture, however, show a lack of significant investment in the means to ensure proper security in the region. The United States currently lacks an adequate capability in icebreaking or even in ice-strengthen patrol vessels. There is no clear indication in American policy that the US plans on rectifying these deficiencies, despite their stated security concerns in the Arctic. While the USCG calls for increasing its capability in the region, no acquisition projects are currently planned to reach this goal.

American policy does clearly state the country's position on the status of the Northwest Passage as a strait used for international navigation. If such a fact were recognized internationally, it could have important security repercussions on North America. The regime of transit passage that applies to an international strait would allow virtually any vessels or aircraft to go through the Passage with minimal level of national oversight, or any oversight at all. This could potentially open the door to terrorists, illegal immigrants, and criminal organizations able to exploit the Arctic as an entrance point into North America. Given the American maritime shipping control capability in the Arctic, cooperation with other countries should be considered as a means of alleviating the problem.

A unified NATO strategy and the use of NATO assets in the region *could* increase the maritime situation awareness and means of control. It would, however, alienate Russia, which is the only non-NATO Arctic-5 country. As such, a NATO advance in the Arctic could undermine the principle of peaceful conflict resolution that has been present in the North thus far. It would also impede the growth of Arctic governance and cooperation created by the Arctic Council.

A better option for Canada and the United States is to negotiate a bilateral security agreement that could serve the needs of both countries. Such an arrangement could take advantage of the strengths of both states and result in better security for North America. Canada's ability to monitor and control the traffic in the Northwest Passage should be considered an enticement for the United States to accept, or at least not oppose, Canada's sovereignty claim over it. Ultimately, it is in the best interest of Canada to maintain and continue to develop its means to provide security in the Arctic.

Chapter 6

Conclusion

The Arctic is an area shared by five bordering nations, where climate change and projected resource access promise a great deal of strategic consideration in the near future. Canada is one of those nations, and has long proclaimed great interest in its northern region.

Canadian Arctic sovereignty is contested only by its closest ally, the United States of America. The most significant of those disputes involve the legal status of the Northwest Passage, a collection of channels that link the Atlantic to the Pacific through the Canadian Arctic Archipelago. Divergence of position between Canada and the US on the subject has been on-going for several decades, and the dispute is likely to become more significant as the shipping route through the Passage become more navigable, and thus more crowded.

Canada needs to maintain, and further develop, its capability to adequately monitor its Arctic waters if it hopes to present the United States with incentives to recognize the Canadian sovereign claim. In all essence, Canada needs to “sell” its Arctic defense capability as the best way to protect American security and interests in the region, under a fully Canadian controlled Northwest Passage.

Summary of Findings and Conclusion

A pattern of behaviour between Arctic nations has developed in the last several decades. The region can be described as a regime as defined by Stephen Krasner in *Structural Causes and Regime Consequences*, as the Arctic nations have adhered to principles and norms when dealing with each other.¹ The first principle that applies to North is that the territorial sovereignty of each state is recognized by the others (with the

¹ Stephen D. Krasner, “Structural Causes and Regime Consequences: Regimes as Intervening Variables,” *International Organization* 36, no. 2 (1982), 186

insignificant exception of Hans Island). Consequently, the disagreements between countries have revolved around maritime boundaries. The numerous treaties that were negotiated over the years have established a customary principle of peaceful conflict resolution in the region. Given the maritime nature of potential conflict, the Arctic states have recognized that the United Nations Convention on the Law of the Sea as the overarching set of norms that dictate interactions between them. Also in line with the definition of regime, the northern nations created an instrument of Arctic governance through the establishment of the Arctic Council. Although limited in its law making or enforcing ability, the Council provides a forum that enhances cooperation among its members, leading to a growing level of governance in the region. The achievement of an Arctic Search and Rescue Agreement is a good example of this developing governance mechanism. With principles, norms, and an improving system of governance, the Arctic uniquely constitutes a regime that explains and helps predict the behaviour of actors in the region.

Canada is an integral part of the Arctic and its regime. As such, it has already reached peaceful agreements with some of its neighbours, notably Denmark, on the establishment of fair boundaries. Canada's only remaining significant disputes are with the United States. One of those disagreements is about the boundary of territorial waters and Economic Exclusion Zone in the Beaufort Sea, north of Alaska and the Yukon. Given the principles and norms of the Arctic regime, and the nature of Canada-US relations, it is likely that this issue will be amicably resolved when the incentive to do presents itself. The most significant dispute revolves around the status of the Northwest Passage. Canada claims that the waters contained between its Arctic islands are internal, while the United States asserts that the Passage is a strait used for international navigation. This legal difference dictates the rules under which ships and aircraft can transit through the Passage. In summation, the only truly

problematic sovereignty claim for Canada in the Arctic is the Northwest Passage.

Canadian defense policy has, over time, shown a great deal of interest in the Arctic region, possibly in reaction to the contest over the Northwest Passage. Following the voyages of a few American ships in the Passage, in 1969-70 and 1985, Canada has increasingly indicated the need to properly monitor and control its Arctic waters. A trend in Canadian Defense policy shows the increasing importance of the Arctic region. Official documents also demonstrate growing commitment to the development of Arctic capabilities.

In light of government procurement promises and policy documents, Canada has developed a modest, but effective, capability to conduct both surveillance and control of its northern region. First, the country possesses a credible icebreaking fleet within its Coast Guard, allowing presence and control in the North. While the Canadian Coast Guard is not a military organization, nor holds defense or constabulary powers, it works with the Canadian Armed Forces and the Royal Canadian Mounted Police in a supporting role as required. Second, Canada also has the means to conduct surveillance in the north. Investment in space-based radar technology in the 1980s and 90s have paid off, and Canada is able to monitor the entire region every ten hours with imagery from RADARSAT-2. Canada's fleet of CP-140 Aurora, although very limited in number, can also operate in the Arctic.

Additionally, the Canadian ability to defend its northern waters is set to improve greatly in the next decade through various acquisition projects. By early the 2020s, the Canadian Coast Guard will take possession of a new icebreaker capable of operating anywhere within Canadian waters at practically all times of the year. The Royal Canadian Navy will also receive of a new class of ice-strengthened Arctic/Offshore Patrol Ships that will provide a capability for armed presence during the navigable season. Space-based surveillance will be enhanced through the

RADARSAT Constellation, which will give Canada the ability to monitor its waters in near-real-time. Finally, Canada is investigating the procurement of an unmanned aerial system that would allow for a greater degree of persistence in Arctic surveillance. With no submarines capable of under-ice operations, Canada's main limitation in arctic defense is in underwater surveillance and control. Overall though, Canadian ability to monitor and control the northern waters will evolve significantly in the near future.

Canada also endowed itself with legal means to better protect its northern waters. The Arctic Waters Pollution Prevention Act of 1970 set strict ice-strengthening construction norms for vessels operating in areas of Canadian jurisdiction. It also gives officials the ability to arrest vessels and confiscate their cargo if they do not comply. To legitimize its legislation internationally, Canada negotiated the inclusion of provisions in UNCLOS to allow coastal states of ice-covered areas to enforce non-arbitrary norms for environmental protection. In 2010, Canada also made mandatory a previously voluntary reporting system, NORDREG, which compels all vessels of a certain size to submit the details of their transit to the Canadian Coast Guard. Thus, Canada has already been conducting control of Arctic waters in and around the northern archipelago.

The United States, on the other hand, has shown a lesser level of interest in the Arctic. Its official policy calls for a stable region, where protection of the homeland and national interests are the goals to achieve. American actions in the North, however, show little commitment. The current US capability for operating in the Arctic are very limited. The US has a very small fleet of icebreakers (with only one heavy icebreaker), and in all effect, can only conduct limited operations for a short period of the year. Additionally, the US Navy surface fleet has no capability to operate in any ice condition. The country does make up for its lack of surface capability with air assets, and nuclear submarines

capable of operating under the ice. This is, however, inadequate for the control of maritime surface shipping. No major acquisition projects are scheduled to improve these capabilities.

Ultimately, the balance between protecting freedom of the sea and achieving national security might lead to some problems in the Arctic. If the Northwest Passage were designated as an international strait in support of American goals to protect freedom of the sea, it would allow virtually any vessel or aircraft to transit it unimpeded, without the consent of either the US or Canada. With greater accessibility to the Arctic waters, this could open the door of North America to terrorists, criminals, and illegal immigrants. Given the American limited capability to operate in the region, it is unlikely that the US could achieve the desired level of control over the northern traffic, especially if all other legal control measures were effectively removed. As such, a Northwest Passage under the full extent of Canada law would be desirable to both countries.

One option for addressing the problem would be the inclusion of NATO in the region, through a unified NATO Arctic strategy and the commitment of members' assets to the region. While this would increase the level of maritime situational awareness and control, it runs a serious risk of alienating Russia, which is the only Arctic-5 nation that is not part of NATO. In turn, this would likely create new security concerns in the region, which would be self-defeating.

The best way to achieve security around the North American Arctic waters would be through a bilateral agreement between Canada and the United States. Such an agreement could leverage the strengths of both countries and allow for optimum use of resources. By recognizing or not contesting the Canadian claim of internal waters, the United States would increase its homeland security. Canada having the full extent of legal powers to regulate the Northwest Passage is in the best American

security interest. The impetus then resides with Canada to prove that it can adequately conduct surveillance and control of such waters.

Implications for Canadian Policy

Canada needs to maintain, and further develop, credible means to provide security of the waters in and around its northern archipelago. It needs to follow through on the delivery of new capabilities such as; the Polar Icebreaker; the Arctic/Offshore Patrol Ships; and the next generation of space-based radar. It also needs to expedite the acquisition of a new unmanned aerial system capable of improving Arctic surveillance.

With a credible maritime surveillance and control force, Canada can be in a position to provide meaningful protection of North America. As this is fully compatible with American homeland protection goals, Canada would be bringing concrete security measures to the table in order to negotiate over sovereignty claims. Canada should engage the United States with increased security potential as the most important aspect of recognizing the Northwest Passage as Canadian internal waters.

Ultimately, Canada needs to continue to “put its money where its mouth is” in term of Arctic capabilities. Only then, can it possibly provide the United States with enough security incentive to recognize that the Passage is, indeed, as Canadian as it gets.

Bibliography

- "About Us - Arctic Council." Accessed April 5, 2017. <http://www.arctic-council.org/index.php/en/about-us>.
- Arctic Monitoring and Assessment Programme. "Arctic Climate Issues 2011: Changes in Arctic Snow, Water, Ice and Permafrost." Arctic Monitoring and Assessment Programme, 2011.
- "Arctic Monitoring and Assessment Programme | AMAP." Accessed April 5, 2017. <http://www.amap.no/>.
- Behrens, Mikkel N. "Trouble in Niflheim? Elements of a NATO Arctic Strategy." School of Advanced Air and Space Studies, 2015.
- Bird, Kenneth J. "Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle." *US Geological Survey Fact Sheet 2008-3049*, 2008. <https://pubs.usgs.gov/fs/2008/3049/>.
- Bond, Levon. "JUSTAS and Project Epsilon: Integrated Intelligence, Surveillance, and Reconnaissance of the Canadian Arctic." *Canadian Military Journal* 11, no. 4 (Autumn 2011): 24–29.
- Branch, Legislative Services. "Consolidated Federal Laws of Canada, Northern Canada Vessel Traffic Services Zone Regulations," July 1, 2010. <http://laws-lois.justice.gc.ca/eng/regulations/SOR-2010-127/page-2.html#h-6>.
- Byers, Michael. *International Law and the Arctic*. Cambridge University Press, 2013.
- . "Unfrozen Sea: Sailing the Northwest Passage." *Policy Options*. Accessed March 25, 2017. <http://policyoptions.irpp.org/magazines/the-arctic-and-climate-change/unfrozen-sea-sailing-the-northwest-passage/>.
- "Canada, Denmark Forge Tentative Deal on Lincoln Sea Boundary." *CBC News*. Accessed April 7, 2017. <http://www.cbc.ca/news/canada/north/canada-denmark-forge-tentative-deal-on-lincoln-sea-boundary-1.1150969>.
- Canadian Senate. "Sovereignty & Security in Canada's Arctic - Interim Report." Government of Canada, March 2011.
- Charron, Andrea. "Canada, the Arctic, and NORAD: Status Quo or New Ball Game?" *International Journal* 70, no. 2 (2015): 215–231. doi:10.1177/0020702015572998.
- Council of the European Union. "Council Conclusions on Arctic Issues," December 2009.
- Department of Defense. "Arctic Policy." United States Government, November 2013.
- . "Report to Congress on Arctic Operations and the Northwest Passage." United States Government, May 2011.
- Department of National Defence. "1964 White Paper on Defence." Government of Canada, March 1964.

- . “1994 White Paper on Defence.” Government of Canada, December 1994.
- . “A Role of Pride and Influence in the World - DEFENCE.” Government of Canada, April 2005.
- . “Canada First Defence Strategy.” Government of Canada, June 2008.
- . “Challenge and Commitment: A Defence Policy for Canada.” Government of Canada, June 1987.
- . “Harry DeWolfe-Class Arctic/Offshore Patrol Ship Fact Sheet.” Government of Canada, January 2015.
- . “White Paper on Defence: Defence in the 70s.” Government of Canada, September 1971.
- Flemming, Brian. “Canada-U.S. Relations in the Arctic: A Neighbourly Proposal.” Canadian Defence & Foreign Affairs Institute, December 2008.
- Government of Canada. “Canada’s Northern Strategy Our North, Our Heritage, Our Future.” Minister of Indian Affairs and Northern Development and Federal Interlocutor for Métis and Non-Status Indians, 2009.
- . “Statement on Canada’s Arctic Foreign Policy.” Government of Canada, June 2010.
- Government of Canada, Canadian Space Agency. “RADARSAT Constellation.” *Canadian Space Agency Website*, February 18, 2011. <http://www.asc-csa.gc.ca/eng/satellites/radarsat/Default.asp>.
- . “RADARSAT-2.” *Canadian Space Agency Website*, September 12, 2008. <http://www.asc-csa.gc.ca/eng/satellites/radarsat2/Default.asp>.
- Government of Canada, Fisheries and Oceans Canada. “CCG Mission, Vision and Mandate,” March 31, 2008. <http://www.ccg-gcc.gc.ca/eng/CCG/Mission>.
- . “Icebreaking,” March 31, 2008. <http://www.ccg-gcc.gc.ca/Icebreaking/home>.
- Government of Canada, National Defence. “Arctic/Offshore Patrol Ship | Fleet & Units | Royal Canadian Navy,” April 19, 2013. <http://www.navy-marine.forces.gc.ca/en/fleet-units/aops-home.page>.
- . “CP-140 Aurora | Long-Range Patrol | Aircraft | Royal Canadian Air Force,” April 10, 2013. <http://www.rcf-arc.forces.gc.ca/en/aircraft-current/cp-140.page>.
- . “Defence Acquisition Guide 2016,” March 12, 2015. <http://www.forces.gc.ca/en/business-defence-acquisition-guide-2016/naval-systems-31.page>.
- Government of Canada, National Defence and the Canadian Armed Forces. “Canada News Centre - Polar Epsilon 2 Project.”

- Backgrounders, 16:00:00.0. <http://news.gc.ca/web/article-en.do?nid=1086509>.
- Grant, Shelagh D. *Polar Imperative: A History of Arctic Sovereignty in North America*. D & M Publishers, 2011.
- Griffiths, Franklyn, and Dalhousie Ocean Studies Programme. *Politics of the Northwest Passage*. Kingston, Ont.: McGill-Queen's University Press, 1987.
- Griffiths, Franklyn, Rob Huebert, and P. Whitney Lackenbauer. *Canada and the Changing Arctic: Sovereignty, Security, and Stewardship*. Wilfrid Laurier Univ. Press, 2011.
- "Harry DeWolf-Class Arctic/Offshore Patrol Ships (AOPS)." *Naval Technology*. Accessed March 23, 2017. <http://www.naval-technology.com/projects/harry-dewolf-class-arcticoffshore-patrol-ships-aops/>.
- Heather A. Conley. *The New Ice Curtain: Russia's Strategic Reach to the Arctic*. Washington DC: CSIS, Center for Strategic & International Studies; Lanham, MD, 2015.
http://csis.org/files/publication/150826_Conley_NewIceCurtain_Web.pdf.
- IACS. "Requirements Concerning POLAR CLASS." International Association of Classification Societies, 2016.
- "Icebreaker for Canadian Coast Guard | News | News and Insight | Lloyd's Register." Accessed March 23, 2017.
<http://www.lr.org/en/news-and-insight/news/lr-to-class-versatile-icebreaker-for-canadian-coast-guard.aspx>.
- Kraska, James. *Arctic Security in an Age of Climate Change*. Cambridge: Cambridge University Press, 2013.
- Jockel, Joseph T., and Joel J. Sokolsky. "NORAD Does Not Need Saving." *International Journal*; Toronto 70, no. 2 (June 2015): 188–95.
- Kirkey, Christopher. "Smoothing Troubled Waters: The 1988 Canada-United States Arctic Co-Operation Agreement." *International Journal* 50, no. 2 (1995): 401–26.
- Krasner, Stephen D. "Structural Causes and Regime Consequences: Regimes as Intervening Variables." *International Organization* 36, no. 2 (1982): 185–205.
- Lalonde, Suzanne, and Frédéric Lasserre. "The Position of the United States on the Northwest Passage: Is the Fear of Creating a Precedent Warranted?" *Ocean Development & International Law* 44, no. 1 (January 2013): 28–72.
doi:10.1080/00908320.2012.726832.
- Le Mière, Christian. *Arctic Opening: Insecurity and Opportunity*. Adelphi (Series) (International Institute for Strategic Studies); 440. Abingdon: Routledge for the International Institute for Strategic Studies, 2013.

- Manicom, James. "The Domestic Politics of Disputed Arctic Boundaries: The Canadian Case." *The Polar Record; Cambridge* 50, no. 2 (April 2014): 165–75.
- "Observers - Arctic Council." Accessed April 5, 2017. <http://www.arctic-council.org/index.php/en/about-us/arctic-council/observers>.
- Pharand, Donat. "The Arctic Waters and the Northwest Passage: A Final Revisit." *Ocean Development & International Law* 38, no. 1/2 (January 2007): 3–69. doi:10.1080/00908320601071314.
- Protection of the Arctic Environment. "Arctic Marine Shipping Assessment." Protection of the Arctic Environment, 2009.
- "Preamble to the United Nations Convention on the Law of the Sea." Accessed April 18, 2017. http://www.un.org/depts/los/convention_agreements/texts/unclos/part5.htm.
- "Preamble to the United Nations Convention on the Law of the Sea." Accessed April 7, 2017. http://www.un.org/depts/los/convention_agreements/texts/unclos/part4.htm.
- "Preamble to the United Nations Convention on the Law of the Sea." Accessed April 10, 2017. http://www.un.org/depts/los/convention_agreements/texts/unclos/part12.htm.
- Public Works and Government Services. "JUSTAS PROJECT - Request for Information." Government of Canada, January 2016.
- Raspotnik, Andreas. "Unilateral Pollution Control in the Northwest Passage: The Canadian NORDREG Regulations in the Context of UNCLOS, Article 234." Universitetet i Tromsø, 2011. <http://www.ub.uit.no/munin/bitstream/10037/3892/2/thesis.pdf>.
- Sexsmith, Ryan. "The Long Road to a Secure and Sovereign Canadian Arctic: Staying the Course." Canadian Forces College, 2013.
- Tadjdeh, Yasmin. "Russia Expands Military Presence in Arctic." *National Defense; Arlington* 100, no. 745 (December 2015): 34–35.
- "United Nations Convention on the Law of the Sea." Accessed April 18, 2017. http://www.un.org/depts/los/convention_agreements/texts/unclos/part2.htm.
- "United Nations Convention on the Law of the Sea." Accessed April 12, 2017. http://www.un.org/depts/los/convention_agreements/texts/unclos/part3.htm.
- United States Coast Guard. "United States Coast Guard Arctic Strategy." United States Government, May 2013.
- United States Navy. "U.S. Navy Arctic Roadmap for 2014 to 2030." United States Government, February 2014.

- Wegge, Njord. "The Political Order in the Arctic: Power Structures, Regimes and Influence." *The Polar Record; Cambridge* 47, no. 2 (April 2011): 165–76.
- White House. "National Security Presidential Directive/NSPD-66." White House, January 2009.
- . "National Strategy for the Arctic Region." White House, May 2013.
- Zellen, Barry Scott, and Arctic Institute of North America. *The Fast-Changing Arctic: Rethinking Arctic Security for a Warmer World*. Northern Lights Series (Calgary, Alta.); 15. Calgary, AB: University of Calgary Press, 2013.

