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## THE LONG ROAD TO A SECURE AND SOVEREIGN CANADIAN ARCTIC: STAYING THE COURSE

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STAYING THE COURSE**

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Par le major Major R. Sexsmith

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## ABSTRACT

The Canadian North holds a special place in the Canadian national identity. It is entrenched in Canada's history, its culture, and in the Canadian soul. An on-going debate over security and sovereignty of the North has raged both within the Canadian public and political realms for the better part of the last century, with little resolution on how best to solve the problems. Due to budgetary and resource limitations, only a fraction of the promises made by federal governments over the years have ever materialized, and those achievements have largely been the result of direct American pressure or investment.

This paper analyzes the historic and perceived threats to both sovereignty and security in Canada's North, and highlights the growing military presence in the region by other Arctic nations. It then assesses Canada's current endeavors in terms of policy and procurement to address these threats, and the risks facing those undertakings. Key findings include a definite, but lower than perceived threat to sovereignty, and that the bulk of security threats mimic those faced in the south of Canada. It also concludes that Canada is on the right track, but that budgetary constraints and procurement delays have the potential to derail the process, and continue the historical trend. Other findings include a call for additional ISR and military response capability, and since the Canadian Forces will generally act as a supporting agency, other security-related government departments will also require a more robust presence in the region. Finally, bilateral agreements with the United States, and an expanded NORAD mandate to include maritime control, are recommended to ensure an adequate military response capability, should it be required in the future.

## CHAPTER 1 - INTRODUCTION

*John George Diefenbaker, like Sir John A. MacDonalld, was a Prime Minister with a dream, not just seeing the great expanse of the country, but the greatness that Canada and Canadians should aspire to. But he understood that to truly fulfill our national dream, we must accept the challenges and seize the opportunities presented by our North.*

...

*Prime Minister Diefenbaker is no longer with us, but the geopolitical importance of the Arctic and Canada's interests in it has never been greater. This is why our government has launched an ambitious Northern Agenda based on the timeless responsibility imposed by our national anthem, to keep the True North strong and free. To this end, we will encourage responsible development of the North's abundant economic resources, we will ensure jobs and opportunity and the health and good governance of Northern communities. We will protect the unique and fragile Arctic ecosystem for the generations yet to come. And of course, we will assert and defend Canada's sovereignty and security in this region.*

-Rt. Hon. Stephen Harper, Inuvik, Northwest Territories, August 28, 2008

The Canadian North holds a special place in the Canadian national identity. It is a vast and majestic land characterized by harsh environments, indigenous peoples, and unique fauna like the polar bear. The North is entrenched in Canadian history, culture, and in the Canadian soul. Notwithstanding this apparent importance, an on-going debate has raged both within the Canadian public and political realms for the better part of the last century, over security and sovereignty of the North, and what Canada must do to ensure both. Due to budgetary and resource limitations, however, only a fraction of the promises made by federal governments over the years have ever materialized, and those achievements have largely been the result of direct American pressure or investment, aimed to counter a perceived threat to North America as a whole.

With the end of the Cold War and the resulting decline in perceived security threats, the federal government largely neglected the North, both in terms of security as well as regional development. In the past decade, however, the global warming phenomenon has greatly revived the interest in the Arctic, both nationally and

internationally. A rapidly receding polar ice cap and the discovery of vast amounts of natural resources are re-fueling the discussion about the future of the Arctic in terms of access, exploitation, and security in the global context. As a result, the current government has committed itself to a renewed concentration on the Arctic, with a focus on development, security and sovereignty.

At the heart of the current government's renewed focus is a stated interest in maintaining sovereignty in the North. In 2007, the phrase "use it or lose it" quickly became Prime Minister Stephen Harper's slogan for the government's campaign to invest in the North, and sovereignty remains the concern most cited in Canadian policy today. Whether a true threat to Canadian sovereignty really exists in the North is debatable, however, so an educated look at the facts surrounding the dispute must be made.

Not all threats to Canada's Arctic region have to do with sovereignty, though. As the region becomes more and more accessible, it is becoming susceptible to the same security threats that affect southern Canada; and though much progress in the realm of international Arctic diplomacy has been made in recent years, some uncertainty still surrounds the intent of other nations towards the plentitude of Canada's Arctic opportunities. In fact, the minuscule population density of the North, combined with a limited surveillance and enforcement capability, make it an ideal point of intrusion for a number of serious security threats, and in addition, the Arctic is becoming home to a rapid build-up of military might. Arctic nations have realized the importance of the region, and appear fully intent on defending their interests; to what extent, has yet to be

seen.

Given the apparent importance of the North to Canadians, and the controversy surrounding what threats do exist, there has been no shortage of literature on the topic, with the vast majority of scholars and analysts falling into one of two categories. The first is characterized by the assumption that the development of the Arctic is playing out extremely well in terms of international cooperation and the settlement of legal disputes, and that the expansion of Arctic military power is merely a reflection of each country's economic and social development in the region. Therefore there is little to worry about in terms of security, and Canada need only focus on its own economic and social development plans. The second category is characterized by those who take a more pessimistic view on the security environment, and generally speaks to a worst-case scenario, where competition for increasingly scarce resources will lead to a power struggle in the North, and each country will need to rely on its military power to protect its interests.

Representative of the first category is an excellent paper written by Dr. P. Whitney Lackenbauer, associate professor and chair of the department of history at St. Jerome's University (University of Waterloo), entitled *From Polar Race to Polar Saga: An Integrated Strategy for Canada and the Circumpolar World*. In it, the author posits that the "Cold War rhetoric" of the Conservative government is hindering the progress which must be made in the realms of sustainable development, multilateral engagements,

and environmental protection.<sup>1</sup> He concludes that there is no military threat in the North, but provides an excellent series of valuable recommendations to improve Canada's response to the Arctic's non-military security threats.

The second category is best represented by Dr. Rob Huebert, an associate professor of Political Science at the University of Calgary, and the associate director of the Centre for Military and Strategic Studies. Dr. Huebert is extensively published on issues of Arctic security and Canadian defence, and his work has appeared in numerous respected journals and in the media. Dr. Huebert believes that while diplomacy is paramount for Canada's future in the Arctic, diplomacy alone will not be enough. He sees the build-up of military power in the region as a warning sign, and that Canada's military must be equally ready to thwart competing nations as demand for scarce resources intensifies.<sup>2</sup> To this end, his criticisms mainly lie in the disparity between the government's political rhetoric and its failure to deliver those capabilities required.

Both camps provide convincing arguments, so this paper endeavors to uncover which side has more merit by evaluating the threats to sovereignty and security, and determining what Canada must do to respond. In doing so, this paper will first provide a brief background on the Canadian North, its peoples, and the federal government's interest in the region, so as to provide a context for further discussion. Next, a closer look

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<sup>1</sup> P. Whitney Lackenbauer, "From Polar Race to Polar Saga: An Integrated Strategy for Canada and the Circumpolar World," *Foreign Policy for Canada's Tomorrow*, No. 3 (July 2009): 1-94.

<sup>2</sup> Rob Huebert, "Arctic Diplomacy is Not Enough," *The Globe and Mail*, 31 August 2012, <http://www.theglobeandmail.com/commentary/arctic-diplomacy-is-not-enough/article4510753>.



at the issues surrounding both Arctic sovereignty and security will be addressed, highlighting the differences and connections between the two topics, and the perceived threats to both. A study of the military capabilities of Canada and its Arctic neighbours will then follow, showcasing the build-up of military force in the region, Canada's underwhelming current capabilities, and provide an analysis of those promised capital investments which are aimed at closing the gap. Finally, recommendations will be provided that could assist the federal government in responding more effectively to these threats in the future.

## CHAPTER 2 - BACKGROUND

The Arctic is an extremely significant region as it relates to the history and identity of Canada. Prior to investigating any specific threats to the security or sovereignty of the North, it is important to first review the region's characteristics and history as it relates to security, so that a proper understanding of the unique challenges associated with the north can be had. The following topics are germane to the discussion that follows, and are therefore provided as a primer.

### Geography

Since 1925, Canada has officially claimed its portion of the Arctic. The region is shared by five other nations, and Canada's portion encompasses over four million square kilometers, or 40% of Canada's total land mass. Its geographic boundaries include the Alaskan / Yukon border to the west, the Atlantic Ocean to the east, and roughly the 60th parallel to the south, though there is no definitive southern boundary.<sup>3</sup> When taking ice melt into consideration, it becomes evident that the region is mostly archipelagic in nature, containing over 19,000 islands, and in fact hosts 64% of Canada's total coastline.<sup>4</sup> The region's continental shelf waters are enormous, and are equivalent to the waters of Canada's Atlantic *and* Pacific 200 mile economic exclusion zones combined.<sup>5</sup> East and west are connected by the Arctic Ocean and the Northwest

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<sup>3</sup> The Atlas of Canada, "Territorial Evolution: 1927," last accessed 16 January 2012, <http://atlas.nrcan.gc.ca/site/english/maps/historical/territorialevolution/1927/1>

<sup>4</sup> Peter Pigott, *From Far and Wide: A History of Canada's Arctic Sovereignty*, (Toronto: Dundurn, 2011), 10.

<sup>5</sup> *Ibid.*

Passage (NWP), which is composed of over 5,000 km of waterways which, as the southern sea ice recedes, will shorten international shipping routes considerably. As compared with routes using the Panama canal, European / Asian routes can be shortened by 8,000 km, and the route between Asia and the East coast of North America can be shortened by as much as 7,000 km<sup>6</sup> (Figure 1). As an additional selling point, the Northwest Passage's deep draft route is capable of supporting larger ships than the Panama Canal.<sup>7</sup>



Figure 1: Shipping Routes<sup>8</sup>

## Population

Though Canada's Northern territory comprises an area larger than India, and represents the second largest landmass of any Arctic country, its total population is less

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<sup>6</sup> Michael Byers, "Build an Arctic Gateway to the World," *Globe and Mail*, last updated 3 April 2009, <http://www.theglobeandmail.com/commentary/build-an-arctic-gateway-for-the-world/article1090382>.

<sup>7</sup> Mariport Group Ltd., *Canadian Arctic Shipping Assessment*, June 2007, last accessed 15 March 2013, <http://www.jointsecretariat.ca/pdf/CASA%20Complete%20Final%20Report%20and%20Annexes.pdf>, 110.

<sup>8</sup> Source: Morris Maduro, "Northern Shortcut: The Temptation of One Warming Line Through the Arctic," last accessed 24 March 2013, <http://www.canadiangeographic.ca/Magazine/ND00/maduro.asp>.

than 110,000. This represents only a mere 2.5% of the roughly four million world-wide Arctic inhabitants, the second lowest of any Arctic nation.<sup>9</sup> As a comparison, Russia's Arctic region is home to over two million.<sup>10</sup> This miniscule population density represents one of the biggest hurdles to Canadian Northern development, since there is little pre-existing infrastructure, and minimal access to local labor. As a result, the costs of development can be enormously high when compared to similar projects in the south.

### **The Arctic Council**

The Arctic Council is a high-level, eight member, intergovernmental forum which was formally established in 1996 by the signing of the Ottawa Declaration, to promote cooperation, coordination, and interaction between the Arctic States and Arctic indigenous communities.<sup>11</sup> The Council was established to focus primarily on the topics of sustainable development and environmental protection, however all topics except for military security are allowed. 2011 saw the signing of the first legally binding Council agreement (on Arctic search and rescue), which set a precedent and elevated the importance and authority of the Council. Currently, the Council's membership is made up of Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States. Permanent status has also been given to three separate Arctic organizations of indigenous peoples in order to ensure active participation and consultation with the

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<sup>9</sup> Statistics Canada, "Population and Dwelling Counts for Canada: Provinces and Territories, 2006 and 2001 Censuses," last accessed 15 March 2013, <http://www12.statcan.gc.ca/census-recensement/2006/index-eng.cfm>.

<sup>10</sup> Russian Geographical Society, "Socio-Demographic Situation in the Arctic," last accessed 15 March 2013, <http://int.rgo.ru/arctic/arctic-overview/socio-demographic-situation-in-the-arctic>.

<sup>11</sup> Department of Foreign Affairs and International Trade, *Declaration on the Establishment of the Arctic Council*, (Ottawa: Canada Communication Group, 1996), last accessed 24 March 2013, <http://www.international.gc.ca/polar-polaire/ottdec-decott.aspx?view=d>.

Arctic's indigenous populations.<sup>12</sup> Observer status has been granted to 26 others, including six states, nine intergovernmental organizations, and 11 non-governmental organizations. Interest in the Arctic Council has grown at such a rate that there are an additional 17 countries and organizations which have applied for observer status, including China and the European Union (E.U.). Though most member countries welcome the expansion of the Council, Canada has vehemently opposed its expansion, most notably by objecting to the inclusion of the E.U.

Chairmanship of the Council rotates every two years, and 2013 will see Canada take the Chair for the second time, providing a great opportunity to influence the focus of Arctic development, and steer the Council towards Canada's own interests; the United States will follow as Chair in 2015.

## **UNCLOS**

Canada's ocean waters, including those in the Arctic, are governed by the United Nations Convention on the Law of the Sea (UNCLOS), ever since it was ratified by Canada in 2003. This convention defines the rights and responsibilities of nations in their use of the world's oceans, and sets guidelines for businesses, the environment, and the management of marine natural resources. Of all the Arctic nations, only the United States has yet to ratify the convention, though much debate has occurred on this topic within the American Senate, and support is growing. UNCLOS also provides a vehicle

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<sup>12</sup> *Ibid.*

for nations to claim additional economic rights to the seabed of their extended continental shelf. Following ratification, a country has 10 years to submit scientific evidence to support such a claim, and in the Arctic, many claims overlap. The country with the most scientific evidence to support their claim will gain the rights, so most Arctic nations have been very busy over the last decade conducting survey and research missions in support of this endeavor. The infamous planting of Russia's flag on the seabed of the North Pole in 2007 occurred during one of these survey missions. Canada's submission, due this year, is expected to net an increase of close to 1.75 million km<sup>2</sup>.<sup>13</sup>

### **Maritime boundary disputes**

Canada is currently engaged in two disputes over the drawing of maritime boundaries; these are situated in the Lincoln and Beaufort Seas, with Denmark and the U.S., respectively. Canada and Denmark have recently reached an agreement over the Lincoln Sea dispute, which is now awaiting ratification, so the Beaufort Sea has become the lone disagreement over Canadian maritime borders.<sup>14</sup> The Beaufort Sea quarrel has to do with how the border between Alaska and the Yukon should extend into the maritime environment. While Canada believes that it should be a simple extension of the landward border, the United States believes it should be a line drawn perpendicular to the baseline at the shore (Figure 2). The difference equates to a vast area of ocean and seabed roughly

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<sup>13</sup> Randy Boswell, "Canada poised to claim ownership of vast underwater territory bigger than Quebec," *National Post*, last updated 5 October 2012, <http://news.nationalpost.com/2012/10/04/canada-poised-to-claim-ownership-of-vast-underwater-territory-bigger-than-quebec>.

<sup>14</sup> CBC News, "Canada, Denmark forge tentative deal on Lincoln Sea boundary," last updated 29 November 2012, <http://www.cbc.ca/news/canada/north/story/2012/11/29/north-canada-denmark-border.html>.

21,400 km<sup>2</sup>, which is shallow and supposedly contains vast hydrocarbon reserves.<sup>15</sup> The dispute has been ongoing for some time, though active negotiations have taken place in recent years and a joint mapping project is currently underway.<sup>16</sup> Diplomats are hopeful a resolution will be arrived at soon.

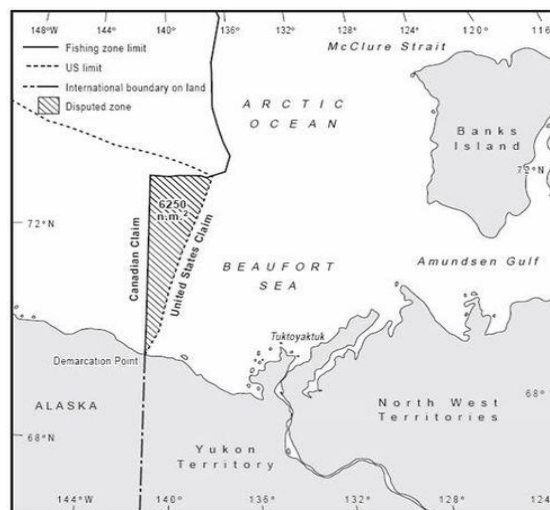


Figure 2: Beaufort Sea Disputed Area<sup>17</sup>

## History of Governmental Interest in the Arctic

The best way to describe the history of Canada's governmental policies on the Arctic would be to call it bi-polar. Political interest in Arctic sovereignty has waxed and waned throughout the last century, and has mainly been reactionary in nature. Generally

<sup>15</sup> James S. Baker and Michael Byers, "Crossed Lines: The Curious Case of the Beaufort Sea Maritime Boundary Dispute," *Ocean Development and International Law*, 43:1 (2012): 71.

<sup>16</sup> John Ibbitson, "Dispute over Hans Island nears resolution. Now for the Beaufort Sea," *The Globe and Mail*, last updated 23 August 2012, <http://www.theglobeandmail.com/news/politics/dispute-over-hans-island-nears-resolution-now-for-the-beaufort-sea/article563692>.

<sup>17</sup> Source: Arctic Economics, "Where is the Beaufort Sea boundary between the U.S. and Canada?", last accessed 24 March 2013, [http://benmuse.typepad.com/arctic\\_economics/2009/08/us\\_canada\\_beaufort\\_sea\\_boundary.html](http://benmuse.typepad.com/arctic_economics/2009/08/us_canada_beaufort_sea_boundary.html).

speaking, the federal government has either used the North as a key platform, or it has ignored it completely. As the book *Arctic Front* describes, "Arctic sovereignty seems to be the zombie - the dead issue that refuses to stay dead - of Canadian public affairs. You think it's settled, killed and buried, and then every decade or so it rises from the grave and totters into view again."<sup>18</sup>

From the building of the Distant Early Warning (DEW) Line in the 1950's, to the sailing of ships through the Northwest Passage, and most recently the planting of the Russian flag on the seabed of the North Pole, singular events have raised the ire of Canadian citizens and spread fear of potentially losing control of our Northern territories. As a result, governments have reacted by focusing policies on development of the North and announcing military procurements designed to effect control over the region, all in an attempt to assert Canadian sovereignty. Thus far, few of these intentions have come to fruition, mainly due to the huge costs involved, or loss of public interest.

Aside from the current government, Prime Minister Diefenbaker represented the most dedication to Northern development through his "Northern Vision." In his 1958 speech on the subject, he stated his intentions by saying that "[Sir John A. MacDonald] opened the West. He saw Canada from East to West. I see a new Canada - a Canada of the North."<sup>19</sup> Though little focus was placed on defence, Diefenbaker promised to "open that northland for development by improving transportation and communication and by

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<sup>18</sup> Ken S. Coates, et al., *Arctic Front: Defending Canada in the Far North*, (Toronto: Thomas Allen, 2008), 1.

<sup>19</sup> John G. Diefenbaker, "A New Vision," (speech, Civic Auditorium, Winnipeg, February 12, 1958).



the development of power, by the building of access roads."<sup>20</sup> Though some minor economic developments were accomplished, more distracting issues during Diefenbaker's tenure ultimately resulted in the North being forgotten, and the development he had envisioned never materialized.

Prime Minister Harper's intentions to develop the North and exert Canadian sovereignty have been equally, if not more, optimistic than Diefenbaker's. Now, five years after Harper's initial intentions were stated, the government is facing substantial delays in its procurement of military assets, and the country is dealing with massive budgetary constraints. Only time will tell whether these distractions will also lead to the government again losing interest in its dedication to the North.

### **History of defence investments**

Canadian defence investments in the Arctic began in World War II, when both Canada and the United States became concerned about an invasion from the north. Following the Japanese seizure of two islands in the Aleutian chain in 1942, both as a Japanese staging base. As such, a line of communication was built, mainly by U.S. engineers, between Edmonton and Fairbanks, Alaska, which would later become the Alaska highway. Combined with this project was a collocated route of airfields and fuel caches, and a petroleum pipeline from the Northwest Territories to Alaska, built to sustain air operations. Finally, a series of weather stations and communications facilities were also built along the North American perimeter. These projects were primarily

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<sup>20</sup> *Ibid.*

funded by the Americans, and were either built by U.S. Army engineers, or private American contractors. Wisely, Prime Minister Mackenzie King ensured that ownership of the various facilities would pass to Canada at the end of the war, in order to avoid a future sovereignty debate.<sup>21</sup>

The Cold War era saw American bilateral cooperation continue with the construction of various early warning radar installations, including the Pinetree Line, Mid-Canada Line, and in 1954, the DEW Line, which primarily ran across Canada's Arctic mainland coastline. These installations were used to monitor northern airspace and warn of an impending Soviet bomber attack, and as with previous projects, these were mainly funded by the United States. NORAD was also established in 1957 as a joint command to control North America's joint interceptor capability, and help thwart a nuclear attack by the USSR over the North Pole. To this day, NORAD continues to be a highly effective joint command, and has recently expanded its mandate to include the monitoring of North America's maritime environment.<sup>22</sup>

Canada's first military icebreaker was the HMCS Labrador, commissioned into the Navy in 1954.<sup>23</sup> That year, it became the first military vessel to transit the Northwest Passage, though four years later it was transferred to the Canadian Coast Guard because of Defence budget cuts, and because it could not counter the growing Soviet submarine

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<sup>21</sup> Mary Simon, "Sovereignty from the North", *The Walrus*, (November 2007), last accessed 16 March 2013,

<http://thewalrus.ca/2007-11-politics>.

<sup>22</sup> NORAD, "About NORAD," last accessed 13 March 2013, <http://www.norad.mil/about/index.html>.

<sup>23</sup> University of Calgary. "Icebreakers in the North," last accessed 15 March 2013, <http://www.ucalgary.ca/arcticexpedition/icebreakers/hmcs-labrador>.

threat.<sup>24</sup> The Labrador continued its service with the Coast Guard until its retirement in 1987, providing Canadian governmental presence in Arctic waters and supporting shipping and scientific research missions. Other Canadian-only investments in northern military capability have shown a more disturbing trend of not materializing at all. These include abandoning a 1965 plan to acquire American Skipjack class nuclear submarines, the cancellation in 1990 of a proposal to build a new heavy icebreaker for the Coast Guard, and the cancellation in 1987 of plans to build 12 nuclear submarines.<sup>25</sup>

Most recently, in 2007, the government announced a number of procurement initiatives to increase defence capability in the North. This level of investment is unprecedented, but many of the projects have already experienced delays or cost overruns, and are in jeopardy of not delivering as expected. A more thorough examination of these projects is provided in chapter 6.

### **Climate Change**

Global climate change is affecting the Arctic more than any other region in the world, with warming occurring at a rate twice that of the global average.<sup>26</sup> The resulting loss of sea ice has accelerated in the past decade, and is already beating estimates from only a few years ago; the summer of 2012 being the most ice-free season yet on record. As warming seas cause its ecosystem to restructure, the Arctic is becoming a very different place, especially from an economic perspective, where less ice will result in

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<sup>24</sup> *Ibid.*

<sup>25</sup> Nancy Teeple, "A Brief History of Intrusions Into the Canadian Arctic," *Canadian Army Journal* Vol. 12,

No. 3 (Winter 2010): 61.

<sup>26</sup> "The Melting North," *The Economist*, 16 June 2012, last accessed 15 March 2013, <http://www.economist.com/node/21556798>.

easier access to vast amounts of untapped resources and shorter shipping routes. Indeed, global interest in the Arctic is soaring, and the resulting debates on security and sovereignty have captured the nation's attention. The following chapters will discuss what Canada's actual threats are in the realms of both sovereignty and security, and then investigate what the government has proposed in response.

### CHAPTER 3 - THREATS TO ARCTIC SOVEREIGNTY

*You don't defend national sovereignty with flags, cheap election rhetoric or advertising campaigns. You need forces on the ground, ships in the sea, and proper surveillance.*

Prime Minister Stephen Harper, Winnipeg, December 22, 2005

Sovereignty in the Arctic has been a hallmark of Canadian politics for more than half a century. The subject touches a nerve with Canadians, invoking thoughts of occupation by foreign states, a loss of Canadian heritage, and threats to Canada's northern indigenous peoples. It is a topic which returns to the public and political consciousness from time to time, and has done so rather aggressively in recent years. In fact, Arctic sovereignty has become such a concern for Canadians lately, that it was ranked as the "country's top foreign policy priority" in a 2011 poll.<sup>27</sup>

So what is it that Canadians are so concerned about? Well, to begin a discussion on sovereignty, it is first necessary to define it, since the word can have a number of different meanings. It can be framed in political, economic, legal, and social contexts, but almost universally, it relates to the idea of independence. Sovereignty, at least in the Westphalian sense which this paper will focus on, refers to the concept of territoriality and a state's inherent right to independent authority over a geographic area. The United Nations Charter, the Declaration on Rights and Duties of States, and the charters of various international organizations, all recognize the right of states to determine their own political status and exercise permanent sovereignty within the limits of their

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<sup>27</sup> Jill Mahoney, "Canadians rank Arctic sovereignty as top foreign-policy priority," *The Globe and Mail*, last updated 24 January 2011, <http://www.theglobeandmail.com/news/politics/canadians-rank-arctic-sovereignty-as-top-foreign-policy-priority/article563348>.

territorial jurisdictions. For a state's sovereignty to remain valid over a defined jurisdiction, however, there is a requirement for control, authority, and perception; meaning that the state must not only exercise its control and authority over the jurisdiction, but it must also be perceived to be doing so by other states.<sup>28</sup> From a Canadian military perspective, the concept of sovereignty is explained in its domestic operations doctrine manual as "the result of surveillance, presence, and control. It is knowing who is in, and who is approaching, sovereign territory and what their intentions may be."<sup>29</sup>

Canada's Department of Foreign Affairs and International Trade (DFAIT) echoes the findings of the aforementioned poll and professes that "exercising sovereignty over Canada's North, as over the rest of Canada, is our number one Arctic foreign policy priority."<sup>30</sup> Indeed, there is no mistaking the importance placed on "exercising sovereignty," as the phrase is liberally peppered throughout the department's official Arctic policy statement.<sup>31</sup> Combined with the Prime Minister's "use it or lose it" slogan, or his comments which open this chapter, the government is clearly projecting a unified message, which unfortunately has the effect of insinuating that the loss of Arctic sovereignty is a clear and present danger. Going back to the validation criteria for sovereignty, it is evident that the perception of other states is one of the fundamental

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<sup>28</sup> Mathew Carnaghan and Allison Goody, *Canadian Arctic Sovereignty*, (Ottawa: Library of Parliament, 26 January 2006), 5.

<sup>29</sup> Department of National Defence, B-GJ-005-300/FP-001, *CFJP 3.0 Operations*, (Ottawa: DND Canada, 2011), 7-10.

<sup>30</sup> Department of Foreign Affairs and International Trade, *Statement on Canada's Arctic Foreign Policy: Exercising Sovereignty and Promoting Canada's Northern Strategy Abroad* (Ottawa: Canada Communications Group, 2013), 2.

<sup>31</sup> *Ibid.*

requirement for the maintenance of sovereignty; so whether intentional or not, statements like these can be detrimental in that they can become self-fulfilling prophecies. In fact, Dr. Lackenbauer has stated that instead of helping the situation, the Prime Minister's comment "reveals a chronic lack of confidence and encourages a disproportionate emphasis on national defence."<sup>32</sup> There are varying opinions on whether a true threat to sovereignty actually exists in the Canadian Arctic, so a closer look at the facts surrounding the issue will follow.

Surprisingly, research reveals that, despite the government's apparent insecurity, the scope of Arctic sovereignty disputes is rather limited. There are in fact no disagreements on claims of sovereignty over Canada's Arctic landmass or its archipelago at all, except for the "longstanding and almost insignificant boundary dispute" with Denmark over Hans island, a 1.3 km<sup>2</sup> piece of uninhabited rock which Canada and Denmark both claim as their own.<sup>33</sup> Ultimately, this dispute is relatively friendly, and both countries have been actively engaged in working towards a long term solution since 2005.<sup>34</sup> Since this is the sole dispute over land in the Arctic region, it means that, legally, the whole of the Arctic landmass and the islands which make up the archipelago are no different than any other part of Canada. As Donald McRae has written, "the idea that

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<sup>32</sup> P. Whitney Lackenbauer, "Chill out on Arctic Strategy; Contrary to Popular Belief, There is No Sovereignty or Security Crisis in the North," *Toronto Star*, 4 September, 2008.

<sup>33</sup> Adrian Humphreys, "New proposal would see Hans Island split equally between Canada and Denmark," *The National Post*, 11 April 2012, last accessed 31 January 2013, <http://news.nationalpost.com/2012/04/11/new-proposal-would-see-hans-island-split-equally-between-canada-and-denmark>.

<sup>34</sup> Parliamentary Information and Research Service, PRB 08-05E, *The Arctic: Canada's Legal Claim*, (Ottawa: Library of Parliament, 2008), 4.

Canada could lose its sovereignty over Cape Breton or Vancouver Island is simply nonsensical; equally so with the islands of the Canadian Arctic."<sup>35</sup>

Unfortunately, the same good news does not exist for the Canadian portion of the Arctic Ocean and its adjacent waters. Canada's claims on the waters in and around the archipelago are far from secure and have been the subject of much debate for decades. As was briefly discussed in chapter 2, there are currently two disputes over maritime boundaries: an ongoing debate over rights to the Arctic's extended continental shelves through UNCLOS; and a much more profound disagreement on the status of Canada's Arctic waters in general, including the contested status of the Northwest Passage. This dispute in particular takes the lion's share of attention, and represents Canada's greatest threat to sovereignty.<sup>36</sup>

### **The Northwest Passage**

The Northwest Passage has long been the backdrop for sovereignty discussions over the Canadian North, with two incidents in particular most commonly used to illustrate the threat. Specifically, these are the sailing of the American ships *SS Manhattan* and the *USCGC Polar Sea* through the Northwest Passage, in 1969 and 1985, respectively. Since both these voyages are often misunderstood, a brief summary of events surrounding them follows.

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<sup>35</sup> Donald McRae, "Arctic Sovereignty? What is at Stake?", *Behind the Headlines*, Vol. 64, No. 1 (Jan 2007): 3.

<sup>36</sup> Cal Mofford, "What exactly do we mean by Canadian arctic sovereignty and is it at risk?," *Canadian Naval Review*, last updated 1 March 2012, <http://www.navalreview.ca/2012/03/what-exactly-do-we-mean-by-canadian-arctic-sovereignty-and-is-it-at-risk>.



## 1969 - SS Manhattan

Any study into Canadian Arctic sovereignty will undoubtedly include reference to the sailing of the *SS Manhattan* through the Northwest Passage in the summer of 1969. That year, following the discovery of oil in the North Slope region of Alaska, the United States sent the oil tanker *SS Manhattan* to attempt a sailing through the Northwest Passage, in order to test the feasibility of delivering oil from Alaska to the U.S. eastern seaboard.<sup>37</sup> Even though she was accompanied by two American ice breakers, the *Manhattan* got stuck in the ice a number of times throughout the voyage, and ultimately required the assistance of a Canadian icebreaker, the *CCGS John A. MacDonald*, to complete the trip.<sup>38</sup>

To this day, controversy still exists over this voyage and whether or not it represented a violation of Canadian territorial sovereignty. The reason for this is due to the United States refusing to request permission to sail through the passage, a fact which the media latched onto and sensationalized. While the media's accusations were inherently true, evidence shows that both the USCG and the *Manhattan's* owners engaged Canadian officials and requested Canadian icebreaker support for the sailing well in advance of the sailing.<sup>39</sup> Additional reports show that not only did the Canadian government support the voyage, but in return for its support, scientific data collected

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<sup>37</sup> Coates, et al., *Arctic Front*: . . . , 94.

<sup>38</sup> *Ibid.*

<sup>39</sup> *Ibid.*, 95.

during the trip was shared between the two nations.<sup>40</sup> The Trudeau government even announced its support of the trip publically, and specifically claimed that the voyage did not represent a sovereignty challenge to Canadian territory.<sup>41</sup> Notwithstanding these assurances, though, the *Manhattan's* voyage shone a light on the uncertain legal status of the Northwest Passage, highlighting that both sides of the argument have merit. While Canada views the passage as Canadian internal waters, like the Bay of Fundy or the Gulf of St. Lawrence, the United States views it as an international straight, which allows for freedom of navigation, and does not require permission to use. The fact that the United States did not request permission to transit through the passage in 1969, actually set a dangerous precedent which could be cited by other nations against Canada's claim of internal waters, and directly impact Canada's ability to control the passage in the future. Unfortunately, there was no hope of America reversing its position on this point, since the justification for their actions is strategic in nature, and has wide-reaching legal consequences. In fact, a 1970 document from the U.S. State Department sums up their stance quite well by stating "We cannot accept the assertion of a Canadian claim that the Arctic waters are internal waters of Canada . . . Such acceptance would jeopardize the freedom of navigation essential for the United States naval activities worldwide."<sup>42</sup>

The *Manhattan* incident acted as the the trigger for Canada to finally make an official claim of sovereignty over the Northwest Passage - along with all the waters

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<sup>40</sup> *Ibid.*

<sup>41</sup> Christopher Kirkey, "The Arctic Waters Pollution Prevention Initiatives: Canada's Response to an American Challenge," *International Journal of Canadian Studies*, 13 (Spring 1996): 42.

<sup>42</sup> Parliamentary Information and Research Service, PRB 05-61E, *Canadian Arctic Sovereignty*, (Ottawa: Library of Parliament, 2006), 4.

within the Arctic Archipelago - four years later in 1973, claiming them as part of its historic internal waters. It is important to note, though, that while this claim was made in parliament, the government did not follow it up with any official treaty or legislation. In 1985, however, the claim was more formally legitimized through the implementation of straight baselines.<sup>43</sup>

#### 1985 - USCGC Polar Sea

The second event occurred in August 1985, when Canada witnessed an almost identical incident to that of the *SS Manhattan*. This time, instead of an oil tanker, the vessel in question was the American Coast Guard icebreaker *Polar Sea*. Originally scheduled to conduct a resupply mission to the American air base in Thule, via the Panama Canal, time constraints forced the *Polar Sea* to be routed via the Northwest Passage instead.<sup>44</sup> As with the *Manhattan*, plans of the voyage were discussed ahead of time with the U.S. State Department and with Canadian Coast Guard officials, confirming that the voyage posed no threat to Canadian sovereignty.<sup>45</sup> In fact, two Canadian Coast Guard "observers" took part in the voyage aboard the *Polar Sea*, and once again the Canadian icebreaker *John A. MacDonald* escorted the *Polar Sea* for a portion of its voyage.<sup>46</sup>

As with the *Manhattan* voyage, the Canadian government sanctioned the trip

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<sup>43</sup> Elizabeth B. Elliot-Meisel, "Still Unresolved After Fifty Years: The Northwest Passage in Canadian-American Relations, 1946-1998", *American Review of Canadian Studies* 29, Vol. 3 (Fall 1999): 409.

<sup>44</sup> Coates, et al., *Arctic Front: . . .*, 113.

<sup>45</sup> *Ibid.*

<sup>46</sup> *Ibid.*, 114.

beforehand, even though no official request for permission was made.<sup>47</sup> The trouble came, however, when Canadian media, academics, and various other civilian groups, banded together to accuse the Americans of openly challenging Canada's Arctic sovereignty - again. A private group calling themselves "The Council of Canadians" even flew over the ship at one point, dropping a Canadian flag and a letter stating that the voyage insulted Canadians and was a threat to its sovereignty.<sup>48</sup> The Canadian government reacted quickly to this public outrage by officially demanding that the U.S. request permission to transit through the passage. As was expected, the Americans continued to refuse, and so Canada granted permission anyway in order to make a point and avoid escalation.<sup>49</sup>

As with the *Manhattan*, this event also became a catalyst for government action. Later that year, the government announced that the sovereignty of Canada's Arctic waters was being confirmed by the implementation of straight baselines. In a speech to the House of Commons, then Secretary of State Joe Clark said "Canada's sovereignty in the Arctic is indivisible. It embraces land, sea, and ice. It extends without interruption to the seaward facing coasts of the Arctic islands. These islands are joined and not divided by the waters between them."<sup>50</sup> This action led to official objections from the United States and the European Community, but ultimately an agreement was reached in 1988 with the U.S., whereby the Americans would be required to consult with the Canadian

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<sup>47</sup> *Ibid.*

<sup>48</sup> *Ibid.*, 115.

<sup>49</sup> *Ibid.*

<sup>50</sup> Franklin Griffiths, *Politics of the Northwest Passage*, (Montreal: McGill-Queen's University Press, 1987), 270.

government before sailing its icebreakers through the Northwest Passage.<sup>51</sup> Conveniently, this middle-ground arrangement of "you'll never have to ask permission, and we'll never have to say no," allowed the two nations to cooperate without impacting either country's stance on the Northwest Passage, politically or legally.<sup>52</sup>

In the specific case of American vessels traversing the NWP, the 1988 agreement still makes a lot of sense and is beneficial to both parties, since it avoids the disputed legal status of the passage entirely. This does not alleviate the bigger issue, however, since other nations or organizations will eventually want to exploit the shorter routes of the NWP, and may not be as accommodating as the U.S. in terms of providing warnings and consultation beforehand. It is this scenario where Canada can expect the sovereignty debate to reappear in the future, and likely require a legal decision to be made, once and for all. In order to fully understand the possible outcomes of a legal battle over the status of Canada's northern waters, and their associated risks to Canadian sovereignty, the governing conventions and various legal arguments will now be discussed.

### **Legal Dispute over the NWP**

As discussed previously, the sovereignty of Canada's ocean waters has been governed by the 1982 United Nations Convention on the Law of the Sea (UNCLOS), since it was ratified by Canada in 2003. According to UNCLOS, there are five zones of waterspace which Canada can claim rights to, and these include:

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<sup>51</sup> Parliamentary Information and Research Service, PRB 05-61E . . . , 5.

<sup>52</sup> *Ibid.*

- Internal waters, landward of baseline;<sup>53</sup>
- Territorial seas, up to 12 NM from baselines;
- a Contiguous Zone, from 12 to 24 NM from baselines;
- an Exclusive Economic Zone (EEZ), to 200 NM from baselines; and
- an Extended Continental Shelf, outside of the EEZ to no more than 350 nautical miles from baselines, subject to technical determinations.

Each of these zones has varying levels of rights and control afforded to the state. Put simply, though, a state's extent of sovereignty in the areas listed will decrease as the distance away from shore increases. According to UNCLOS Article 8, the full extent of Canadian law applies in both its internal waters and territorial seas, however a "right to innocent passage" exists within the territorial seas.<sup>54</sup> Within the contiguous zone, Canada can take action to protect its laws, customs, and regulations, but must allow aircraft and vessels (including submarines, so long as they are surfaced and flying their nation's flag) to transit through those waters. Within the EEZ, Canadian sovereignty is restricted to the right to manage, exploit, and regulate the living and non-living resources, and enact anti-pollution regulations. Finally, within the extended continental shelf area, a state's sovereignty allows only for the managing, exploitation, and regulation of the non-living resources located on or below the sea bed.

As described previously, Canada considers the Northwest Passage to be internal waters of Canada. To justify this claim, it relies on two different legal foundations. First

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<sup>53</sup> A baseline is the limit from which a state may begin measurements in order to determine its portion of the adjacent oceans or continental shelf. The baseline is normally the low-water line along the coast, however special rules apply for determining the baselines of archipelagic nations. More details on how baselines are measured can be found in UNCLOS Articles 5-7 and 9-14.

<sup>54</sup> United Nations, "Convention on the Law of the Sea, Part II, Article 8," last accessed 31 January 2013, [http://www.un.org/Depts/los/convention\\_agreements/texts/unclos/closindx.htm](http://www.un.org/Depts/los/convention_agreements/texts/unclos/closindx.htm).

and foremost, Canada contends that the Northwest Passage be considered internal waters by virtue of historic title. This assertion was first made in 1973, but has not been officially declared in any treaty or legislation. In 2002, DFAIT reaffirmed this argument, justifying the claim for historic title by stating that the Inuit people have used and occupied the covering ice of the Northwest Passage "from time immemorial."<sup>55</sup> This remains Canada's primary argument.

The second legal foundation relies on the fact that the passage lies inside of straight territorial baselines which were drawn in 1985 around the Arctic archipelago. While the use of straight baselines is recognized in UNCLOS article 7, and would therefore provide for Canadian sovereignty over the Northwest Passage, it does not provide for absolute sovereignty. UNCLOS provides a caveat in article 8, which gives other states a right to innocent passage when straight baselines did not previously exist. What this means is that even though Canada can establish and enforce laws and regulations regarding the use of the straits within the Arctic archipelago as internal waters, other nations' vessels can still transit "innocently," so long as they do so expeditiously and without prejudice to the peace, good order, or security of Canada. Submarines can also transit, but must do so on the surface, and fly their nation's flag, as they must while transiting through a state's contiguous zone. Further limitations on foreign vessels are also stipulated in article 8, and include prohibitions on polluting, fishing, and conducting research and survey activities, amongst others. So while the

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<sup>55</sup> Hugh M. Kindred et al., *International Law Chiefly as Interpreted and Applied in Canada*, 7th ed., (Toronto: Montgomery Publications, 2006), 461.

articles of UNCLOS recognize Canada's claim and allow for a great deal of control over the naval activity within the strait, Canada would lose the right to limit access or close the strait completely to vessels of its choosing, if it adhered to UNCLOS in its entirety. It is for this reason that Canada is pursuing its primary argument based on historic title and, as a result, largely avoiding UNCLOS.

On the other side of the argument, the United States, the European Union, and various others claim that these waters cannot be considered internal - by either of the aforementioned bases - because they connect two international bodies of water and should therefore be classified as international straits, which provide for a right of transit passage. The difference between safe passage (associated with UNCLOS and territorial seas) and transit passage (associated with an international strait) is that the latter allows for both vessels *and* aircraft to expeditiously transit in their *normal modes of operation*, meaning that submarines can remain submerged, and aircraft can fly through the airspace above the strait. It is important to note that the argument in support of an international strait is in most other nations' interest, since it provides them the most navigation rights. This is also the same argument used to justify transit through other contested straits like that of the Strait of Hormuz, off of Iran. For the United States to give in to Canada's claim would mean contradicting its own arguments in more strategic parts of the world, so it is unlikely this would ever happen. Some have argued, however, that American concerns over North American security could prevail and actually lead to support of the Canadian stance, since full control of the passage would be beneficial "as a way of



securing the North American perimeter.”<sup>56</sup> However, given that the latest American Arctic policy, published in 2009, clearly challenges Canada's claims of sovereignty over the Northwest Passage, and states that "freedom of the seas is a top national priority," it is more likely that the United States will continue with their opposing stance.<sup>57</sup>

Canada has not yet been legally challenged over the status of its Arctic waters or the Northwest Passage, though with increasing accessibility and the promise of shorter shipping routes, it is only a matter of time. A legal examination of Canada's two arguments for claiming the Arctic waters as internal, exposes a robust case that has good potential to prevail.<sup>58</sup> The argument against the Northwest Passage being considered an international strait, however, is on much shakier ground. Legally, an international strait is determined by its geography and its function. Geographically, there is little for Canada to deny; the Northwest Passage does indeed connect two international bodies of water, namely the Atlantic and Pacific Oceans. But to be deemed an international strait, the passage must also be shown to be "used for international navigation."<sup>59</sup> This is where it gets tricky, because there is no legal definition for this. The precedent setting case on which the requirement is based, proved that the Corfu channel was "used for international navigation" because there had been close to 3,000 trips made in one year. In contrast, the Northwest Passage has only seen about 100 surface transits in the past 100 years, and

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<sup>56</sup> Andrea Charron, "The Northwest Passage: Is Canada's Sovereignty Floating Away?," *The International Journal* Vol.60, No.3 (Summer 2005): 847.

<sup>57</sup> The United States Office of the President, *National Security Presidential Directive 66*, 9 January 2009, last accessed 25 January 2013, <http://www.fas.org/irp/offdocs/nspd/nspd-66.htm>.

<sup>58</sup> Donald McRae, "Arctic Sovereignty . . .", 14.

<sup>59</sup> United Nations, "Convention on the Law of the Sea, Part II, Article 34," last accessed 31 January 2013, [http://www.un.org/Depts/los/convention\\_agreements/texts/unclos/closindx.htm](http://www.un.org/Depts/los/convention_agreements/texts/unclos/closindx.htm).

almost all of those required Canadian icebreaker support.<sup>60</sup> The unknown variable in this argument is the number of underwater transits. If it could be shown that the Northwest Passage has been used regularly by submarines for transit passage - and this *is* suspected to be the case - then Canada could potentially lose its bid to maintain full control of the passage.<sup>61</sup> In the meantime, the challenge for Canada will be to ensure that any transits through the NWP are with Canada's knowledge and consent, otherwise its argument will be weakened with every voyage.

### **Recommendations**

Given the preceding analysis, it is clear that, at least from a legal perspective, there is little threat to Canada's sovereignty in the North. In the case of the Northwest Passage, however, there is a very distinct danger that it could be deemed an international strait, which in turn would take away much of Canada's ability to restrict access and exercise full control over it. In most Canadian's minds, as evidenced by the *Manhattan* and *Polar Sea* events, this situation would indeed appear like a loss of sovereignty, regardless of the legal definition.

In order to mitigate the risk of this outcome, it is recommended that Canada pursue two distinct policies in relation to the Northwest Passage. First, it must vehemently maintain its stance that the waters of the Northwest Passage are internal waters of Canada. What this means is that Canada must be prepared to fight any public

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<sup>60</sup> Donald McRae, "Arctic Sovereignty? . . .", 15.

<sup>61</sup> *Ibid.*

challenge to the nature of the strait, legal or otherwise, since acquiescence in any forum could be used to show a lack of control and would ultimately harm Canada's legal case. What it does not mean is that Canada should actively seek out a legal settlement, since the outcome is inherently unknown and there is no point in forcing the issue. Along this vein, Canada should also seek to establish bilateral arrangements like the 1988 agreement with the United States, which would decrease the likelihood of a legal challenge in the first place. Less challenges will also result in a stronger overall case for Canada, when it is required.

The second policy stance Canada should take is to treat - and be seen as treating - the Arctic waters as internal waters of Canada. This means conducting proper surveillance of all traffic - both surface and subsurface, ensuring that all transits are taking place with the consent of Canada, and ensuring that Canada has the capability to enforce its laws when vessels do not comply. Just as it would be unthinkable that foreign traffic could transit without permission through the Gulf of St. Lawrence, so should it be with the Northwest Passage. Canada does not currently possess these capabilities, but it is pursuing them. A detailed analysis of these procurements will follow in Chapter 6. In addition, the government's current rhetoric on Arctic sovereignty should be tempered such that international perception does not mimic that of the average Canadian, and lead to the belief that Canada will literally need to fight to retain its sovereignty in the Arctic.

Briefly returning to the definition of sovereignty discussed earlier, we are reminded that to be valid, the three criteria of control, authority, and perception must be

satisfied. While perception is important, the foundation of this trinity is ultimately control, because without it, the remaining two pillars become moot. Since control is most easily represented through the nation's ability to counter security threats and enforce its laws, the discussion will now shift to the topic of regional control and threats to Arctic security.

## CHAPTER 4 - THREATS TO ARCTIC SECURITY

Security is a wide ranging topic when it comes to the Arctic. As global warming expands its influence and the Arctic ice continues to melt, increased accessibility is already combining with rising resource prices and advancements in technology to make the Arctic ever more attractive for exploitation. International actors, both legitimate and not, will be attracted by potential economic gain, and therefore Canada must ensure it is up to the challenge of countering the resulting strain on Arctic security. To determine how best to mitigate these risks, however, requires a critical analysis of the potential threats, and an assessment of what capabilities and agencies are most appropriate to respond.

Various analysts and pundits have concluded that Canada has no direct military threat in the North. In fact the Department of National Defence echoes this sentiment in its official Arctic policy, but does provide a caveat by stating that there are no *current* military threats in the North.<sup>62</sup> While this does describe the current state of affairs, to outright deny any future potential for militant hostile actors taking advantage of Canada's vast and practically undefended North would be pure folly. The Arctic region is in fact seeing a rapid build-up of military forces, as countries perceive the need for extended national defence coverage and vie for positions of strength. To determine the impact of this build-up on Canada, a detailed assessment and comparison of the Arctic nations' northern policies and capabilities will follow in the next chapter, highlighting the

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<sup>62</sup> Department of National Defence, *Arctic Integrating Concept*, (Winnipeg: 17 Wg Publishing Office, 2010), 23.

growing imbalance of trust and military power in the region.

In the meantime, however, there are numerous non-military threats to northern security which must be addressed as well, and which Canada is ill prepared for. Unless serious capability gaps are filled, a lack of adequate surveillance and interception capabilities, combined with increasingly easy access to the North, could easily lead to a region characterized by illegal immigration, drug trafficking, unlawful fishing, and environmental disaster.<sup>63</sup> By providing real-world historical examples, this chapter will showcase the various types of risk that pose a security threat to Canada's Arctic region, and provide recommendations on what Canada can do to mitigate those threats.

### **Physical Security**

In Canada's current *National Security Policy*, released in 2004, the nation's top priority was identified as “protecting Canada and the safety and security of Canadians at home and abroad.”<sup>64</sup> This generic statement was not a new concept, but in the *Defence Policy Statement* issued a year later, the most significant security issue was narrowed down to the “ability to conduct surveillance of our vast territory, airspace, and maritime approaches.”<sup>65</sup> This very telling statement clearly reflects the challenges associated with the maintenance of physical security throughout Canada, since awareness represents the

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<sup>63</sup> Parliamentary Information and Research Service, PRB 08-13E *The Arctic: Canadian Security and Defence*, (Ottawa: Library of Parliament, 2008).

<sup>64</sup> Privy Council Office, *Securing an Open Society: Canada's National Security Policy*, (Ottawa: Privy Council Office, 2004), last accessed 8 March 2013, <http://www.publicsafety.gc.ca/pol/ns/secpol04-eng.aspx>.

<sup>65</sup> Department of National Defence, *Defence Policy Statement*, (Ottawa: Canada Communications Group, 2005), 2.

first and most fundamental step in reacting to any intrusion. In no area of Canada is this challenge more apparent than in the North, where the harsh environment, miniscule population, and lack of government representation from government organizations make dealing with security threats so difficult. The following historic incidents provide an illustration of the threats that exist, and Canada's consistent inability to manage them properly.

The voyages of the *Manhattan* and the *Polar Sea* illustrated how foreign ships can pose a potential threat to Canadian sovereignty, but they also pose a significant threat to its security as well. In 1999, more than ten years after the *Polar Sea* event, Canada's continued lack of Arctic maritime awareness was again showcased when the *Snow Dragon (Xue Long)*, a Chinese icebreaking research vessel, entered Canadian waters without the government's knowledge.<sup>66</sup> The incursion was officially downplayed as an insignificant event, because the Chinese had advised Canadian officials in China prior to the trip, and poor communication within the Canadian government was to blame for the information not reaching the proper domestic authorities in time. In addition to the blatant lesson learned about internal government communications, a number of security issues were also underscored by this event. Primarily, the fact that an icebreaker sized ship was able to sail into Canadian waters, and then continue on to Tuktoyaktuk, NWT, without being detected. The ship's unexpected arrival in the Northwest Territories highlighted Canada's utter lack of response capability, both in terms of surveillance *and* law enforcement. When RCMP officials did finally investigate the vessel, they found an

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<sup>66</sup> Nancy Teeple, "A Brief History . . .", 53.

excessive amount of weapons and ammunition, and one extra passport onboard.<sup>67</sup> As Nancy Teeple points out, by not providing a proper response to this incident, be it from the RCMP, the Canadian Border Services Agency (CBSA), or Citizenship and Immigration Canada (CIC), the government left the door open for a number of potential physical threats, which included smuggling of illegal weapons, human trafficking, and the potential to introduce infectious diseases into Canada.<sup>68</sup>

What this event really demonstrated to Canada was essentially twofold: that maritime awareness was severely lacking; and that as the North opens up, its ports are subject to the same requirements for security and immigration as those in the south. To rectify this deficiency, various government agencies, including those listed above, will need to expand their operations to include a larger presence in the North. Just because the demand for these services will be much lower, does not mean Canada can afford to leave the area unprotected. Just as important as law enforcement, surveillance capabilities must also be bolstered to provide adequate maritime domain awareness and warnings for these government agencies to react.

### Illegal Immigration

As alluded to previously, illegal immigration represents a distinct portion of the physical threat to Canada in the North. In 2006, a Romanian citizen, previously removed from Canada due to a number of criminal charges, re-entered Canada in a small motor

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<sup>67</sup> *Ibid.*, 65.

<sup>68</sup> *Ibid.*



boat, departing from Greenland and arriving at Grise Fiord, Nunavut.<sup>69</sup> His arrival in Grise Fiord was not anticipated, and the man was initially met only by curious Inuit locals; evidence that the maritime awareness gap continued to be a challenge for Canada seven years after the *Snow Dragon* incident. Luckily, the local Inuit residents knew to contact the RCMP, who then arrested the man. He was sentenced to seven months jail time, and then deported.<sup>70</sup> The same year, two Turkish sailors jumped ship in Churchill, Manitoba, to avoid being arrested by Canadian police. Upon their ship's arrival in Canada, the pair purchased train tickets to Winnipeg, but were luckily detained by a suspicious rail employee, following which they attempted to claim refugee status.<sup>71</sup>

Illegal immigration is not limited to entry via boat, however. Canada's northern airports are just as susceptible to intrusions, mainly due to the poor distribution of policing and government services. In 1997, two separate groups of Chinese nationals were arrested in Iqaluit, after arriving by air from Greenland. The passengers held fake Japanese passports and had one-way tickets to Montreal.<sup>72</sup> Reports suggest that in this instance, authorities were tipped off by airline personnel who became suspicious after a number of similar groups had recently entered Canada in the same fashion.<sup>73</sup> In fact, airline employees estimated that "around 100" others had arrived under identical

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<sup>69</sup> Siku News, "Border Hopper has Day in Court," last updated 16 Nov 2006, <http://www.webcitation.org/query?url=http%3A%2F%2Fwww.sikunews.com%2Fart.html%3Fartid%3D2278%26catid%3D5&date=2008-08-10>.

<sup>70</sup> Siku News, "Jail for Border Hopper," last updated 22 November 2006, <http://www.webcitation.org/query?url=http%3A%2F%2Fwww.sikunews.com%2Fart.html%3Fartid%3D2317%26catid%3D5&date=2008-08-10>.

<sup>71</sup> Michael Byers, *Intent for a Nation: What is Canada For?*, (Vancouver: Douglas & MacIntyre, 2007), 155.

<sup>72</sup> Jason Van Rassel, "Iqaluit May Be Gateway for Refugees," *Nunatsiaq News*, Jan. 12 1998, last accessed 1 March 2013, <http://www.nunatsiaqonline.ca/archives/back-issues/week/60112.html#1>.

<sup>73</sup> *Ibid.*

circumstances in the months prior.<sup>74</sup> The individuals apprehended did not carry visas, and applied for refugee status once they were caught. It is impossible to know just how many illegal immigrants enter Canada undetected each year, but it is clear that Northern ports of entry are actively being used for these activities.

The preceding incidents prove that there is already widespread abuse of northern air and sea ports being used for entrance into Canada by foreign nationals. As such, the risk of illegal immigration and human smuggling are just as potent as they are with Canada's ports of entry in the south. The RCMP, CBSA, CIC, and the Canada Customs and Revenue Agency (CCRA), must therefore expand their operations to provide more support to these Northern ports and reduce the associated risks. In both the case at Grise Fiord and in Churchill, however, the cooperation between the local population and the RCMP is what ultimately allowed the illegal aliens to be captured. The importance of this cooperation cannot be understated, and ties like these must be encouraged throughout the North, as a valuable and cost effective layer of surveillance. As with the man in Grise Fiord, though, not all illegal acts will be attempted at a recognized port. It is therefore essential that all maritime traffic, no matter its size, be identified prior to arrival. This can be accomplished through a number of means, including the use of satellites, airborne intelligence, surveillance, and reconnaissance (ISR), radar, and acoustic listening posts, to name a few. The capability gaps in maritime domain awareness continue to be substantial, so it is essential that Canada focus its efforts in this area.

## Organized Crime

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<sup>74</sup> *Ibid.*

Another area of physical security which must be addressed is the threat of organized crime. In November 1998, a Russian IL-76 freight plane flew across the Arctic from Russia, and landed in Churchill, Manitoba.<sup>75</sup> Ground personnel from the Churchill airport reported that the plane turned off its landing lights immediately after touching down, which was suspicious given the poor weather conditions.<sup>76</sup> After a short period of time, a small helicopter arrived at the airport and was loaded onto the Russian plane. It then subsequently took off and, according to media reports, flew back to Russia, landing in a region known for organized crime. Airport employees confirmed that neither the Canada Customs and Revenue Agency, nor Citizenship and Immigration Canada, intercepted the crew to check passports or question their activities.<sup>77</sup>

A large plane such as this would most certainly have been tracked by NORAD as it entered North American airspace, so it is unknown why it was allowed to continue all the way to Churchill. The two most likely reasons are that NORAD was either unable to respond with an interceptor in a timely manner, or that the flight was intentionally allowed to continue - possibly to gather intelligence on its activities.<sup>78</sup> Open source literature cannot confirm either of these two theories, though what stands out most about this event is the alleged connection it had with organized crime.

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<sup>75</sup> Ed Struzik, "Who will Guard Our Gaping Back Door," *Edmonton Journal*, 18 November 2007, last accessed 3 March 2013, <http://www2.canada.com/edmontonjournal/features/thebigthaw/story.html?id=df997504-b305-46f9-bd83-a2b11bc6a591>.

<sup>76</sup> *Ibid.*

<sup>77</sup> *Ibid.*

<sup>78</sup> *Ibid.*

The exploitation of Canada's Arctic region for the benefit of organized crime has serious potential. In fact, the Russian mafia already has extensive dealings in the Asian illicit diamond trade, so extending their reach to include Canadian diamond production - the third largest diamond industry in the world - is not farfetched. Drug trafficking is also a growing concern in the north, and as industry and disposable incomes grow, so will the demand for illicit drugs. In 2007, a report issued by the RCMP identified a number of instances where Canadian ports of entry were used by organized crime syndicates, and in 2004, a CSIS report explained that:

Organized crime exploits any potential conduit to move illicit commodities from source or transit countries to their illegal consumer markets in Canada, in particular marine ports, airports and land border areas . . . illicit commodities are either concealed within the large volume of legitimate commercial and traveler movement entering through designated customs entry points or smuggled surreptitiously through the vast stretches of less controlled border areas . . . organized crime will exploit the less-monitored areas between the designated customs ports of entry.<sup>79</sup>

Northern ports of entry like the air and sea ports in Iqaluit and Churchill are prime examples of these susceptible access points, and as the North continues to open up, and wealth continues to amass due to resource development, criminal activity will only increase. The answer, yet again, must be a combination of adequate ISR and law enforcement - both of which remain lacking.

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<sup>79</sup> Criminal Intelligence Service of Canada, "Organized Crime at Marine Ports, Airports and Land Border Areas", *CISC Annual Report 2004*, last accessed 2 March 2013, [http://www.cisc.gc.ca/annual\\_reports/annual\\_report\\_2004/ports\\_2004\\_e.html](http://www.cisc.gc.ca/annual_reports/annual_report_2004/ports_2004_e.html).

## Foreign Military Incursions

Though there may not be an immediate threat of war breaking out, that does not mean there is no threat of foreign military assets invading Canadian sovereign territory. In addition to being a serious threat to Canadian sovereignty, these actions would also pose a tremendous security risk. In the previous chapter, it was shown how foreign submarine traffic in the Northwest Passage could pose a challenge to Canada's claim of control over its internal waters. As it turns out, this type of activity is believed to be quite wide-spread. China has reportedly operated submarines in the Canadian Arctic, and British and American submarines have long been suspected of transiting through Canadian Arctic waters without permission.<sup>80</sup> Unfortunately, there is little in the way of hard evidence to support these suspicions. Since detecting and tracking a submarine in the North is so difficult, a visual sighting would be required to prove an incursion.

There are, however, two incidents involving actual sightings which can be drawn upon, including the 1999 sighting of a French submarine near Iqaluit during a visit to the area by French president Jacques Chirac.<sup>81</sup> The most relevant example of a foreign submarine threatening Canadian security, though, happened in 2008. That summer, an Inuit hunting party at a camp on Baffin Island witnessed a large explosion, followed by a cloud of thick black smoke emanating from the water at the eastern

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<sup>80</sup> Dianne Demille and Stephen Priestly, "Stephen Harper Announces the New Defence Policy as Put Forward by the Conservative Party," *Canadian American Strategic Review*, (Dec 2005), last accessed 31 January 2013,

<http://www.casr.ca/ft-harper1-3.htm>.

<sup>81</sup> Alanna Mitchell, "The Northwest Passage Thawed," *The Globe and Mail*, last updated 5 January 2000, <http://www.carc.org/whatsnew/writings/amitchell.html>.

entrance to the Northwest Passage.<sup>82</sup> The event was relayed to an Inuit member of the Canadian Rangers, who reported the incident and also that a hunter at the camp saw several dead whales on shore when he went to investigate the explosion. Ten days later, hunters also witnessed a surfaced foreign submarine only 10-15 km from the site of the explosion.<sup>83</sup> Though a Canadian Forces Aurora long range patrol aircraft was dispatched to investigate, DND has not commented on either the explosion or the submarine sighting, and a connection between the two has not been proven.

This very recent incident highlights a number of important issues. First and foremost is that Canada need not speculate about the continued presence of covert foreign submarines in its waters - they clearly exist. Their mere presence poses a considerable spectrum of threats to Canada, mainly because their intentions are unknown. At one end of the spectrum, they represent an obvious breach of international law and Canadian sovereignty, and at the other end, there exists potential security threats to Canadian citizens, the Arctic environment, and the strategic interests of North America. Canada's inability to detect and quickly react to these submarine sightings highlights a serious gap in Anti-Submarine Warfare (ASW) capability, as well. With Canada's fleet of primary ASW aircraft, the CP-140 Aurora, stationed far to the south in Comox and Greenwood, transit times to the Arctic will greatly limit any chance of successful deterrence or prosecution. An expanded fleet and a permanent CP-140 detachment in the North could

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<sup>82</sup> "Military probes mystery blast in Arctic," *Edmonton Journal*, 7 August 2008, last accessed 6 February 2013, <http://www.canada.com/topics/news/national/story.html?id=46bcc3e3-d4d1-4cb4-a024-902ef385a602>.

<sup>83</sup> *Ibid.*

help alleviate this deficiency, but Canada's plans to replace its aging Aurora fleet do not include a northern staging base, and in fact involve a decrease in fleet size.<sup>84</sup>

Attention must also be paid to the unknowns in this situation, like what was the cause of the explosion, what were the environmental impacts, and how many other submarines conduct operations in Canadian waters without the government's knowledge? On a positive note, however, the reporting method of this particular incident showcased the effectiveness of the Canadian Rangers program and their integration with the local Northern residents. Had that level of integration and trust not existed, the Canadian government would likely have never become aware of this event in the first place.

The physical security threats described above fall into categories such as illegal immigration and human trafficking, organized crime, and even foreign military intrusions. These examples clearly indicate that the Canadian Arctic region is not as secure as some might hope or imply, particularly due to the many difficulties inherent with maintaining proper surveillance and control mechanisms in such a vast region. Add to this the region's increasing attractiveness for exploitation, and the wide ranging scope of international interests, and the problem becomes that much more difficult. Regardless of the inherent challenges, though, Canada must focus on minimizing the persistence of intrusions like those described above, if it wants to retain control over its North. ISR is the first, and most important area which must be addressed since, to put it simply, Canada

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<sup>84</sup> Department of National Defence, *Canada First Defence Strategy*, (Ottawa: Canada Communications Group, 2008), 17.

doesn't know what it doesn't know. Ignorance is no excuse for allowing incursions to continue, and having proper awareness will also provide warning to law enforcement and military, thus decreasing the level of resources required to adequately respond. Not all security threats to the Arctic have to do with physical intrusions, however. Environmental security also poses a sizeable threat to the North.

### **Environmental Security**

As discussed previously, climate change is a global phenomenon that will affect the Arctic more than any other region in the world. The most obvious effect will be increasing average temperatures, with surface temperatures in the Arctic predicted to increase up to ten degrees by the end of this century.<sup>85</sup> The effects of this temperature rise will be wide ranging and very significant throughout the region. They include rapid melting of sea ice, precipitation increases of up to 30%, rising water levels, and potential changes to ocean currents which could greatly impact global heat distribution.<sup>86</sup> From a Canadian security perspective, the most immediate and urgent of these effects will be the opening up of waterways like the Northwest Passage, whose security challenges have already been discussed.

The follow on effects of these pending environmental changes, will pose a serious threat to the security of the region in a number of ways. Rapidly increasing

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<sup>85</sup> Arctic Monitoring and Assessment Programme, *Arctic Climate Impact Assessment: Key Findings*, (Cambridge: Cambridge University Press, 2004), 27, last accessed 3 March 2013, <http://amap.no/acia>.

<sup>86</sup> *Ibid.*



erosion caused by melting permafrost and increasingly violent storm activity, will destroy animal and waterfowl breeding areas in coastal areas, and directly affect coastal communities. This is already being seen in Alaska, where the U.S. Army estimates the entire town of Shishmaref will have to be relocated in the next decade.<sup>87</sup> Already in Tuktoyaktuk, erosion is impacting various cultural and archaeological locations, and has resulted in having to abandon a number of homes and a school.<sup>88</sup> Polar bear populations will continue to decline as their traditional hunting grounds melt, and the resulting increase in seal populations could put tremendous strain on the entire food web, impacting local populations that rely on subsistence hunting and fishing to survive.<sup>89</sup>

Melting permafrost will also have tremendous impacts economically. Infrastructure like roads, railways, and pipelines will face swift destruction as the ground shifts. This impediment will greatly increase the cost and time required to build additional infrastructure, too; costly challenges which the government must take into account as it promotes development the North. Similarly, the reliability and duration of ice roads in the winter - a critical factor in Arctic resupply - will become ever less dependable, increasing the costs and demand for sea and aviation based delivery, which the government will need to compete for against local populations and industry.

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<sup>87</sup> US Army Corps of Engineers, *Shishmaref Relocation and Collocation Study*, Dec. 2004, last accessed 27 March 2013, [http://www.cakex.org/sites/default/files/relocation\\_shishmaref.pdf](http://www.cakex.org/sites/default/files/relocation_shishmaref.pdf).

<sup>88</sup> Arctic Monitoring and Assessment Programme, *Climate Impact Assessment . . .*, 940.

<sup>89</sup> Karen Wood, "Future Retreat of Arctic Sea Ice Will Lower Polar Bear Populations and Limit their Distribution," US Geological Survey Newsroom, last accessed 3 March 2013, <http://www.usgs.gov/newsroom/article.asp?ID=1773>.

## Pollution

Another key environmental threat on which the government must focus its attention is that of pollution. The Arctic is a highly unique ecosystem which is extremely susceptible to pollution, acting like a sponge for toxic substances.<sup>90</sup> While a great deal of pollution enters the region from long distances via uncontrollable vectors like wind, precipitation, or water currents, the Arctic nations themselves are mostly to blame. Russia, for example, is responsible for contaminating tremendous amounts of its own Arctic territory. Twenty years ago, it was reported that more than half of Russia's rivers had been contaminated by various pollutants like PCB's, DDT, and heavy metals.<sup>91</sup> Additionally, Russia has historically used the North as a dumping ground for nuclear waste. Over a 25 year period ending in 1988, the Soviet Union used the remote Kara Sea as a nuclear waste dump, sinking some "17,000 containers and 19 vessels with radioactive waste, as well as 14 nuclear reactors, five of which contain hazardous spent fuel. Low-level liquid waste was simply poured into the sea."<sup>92</sup> In total, it is estimated that this activity represents two thirds of all radioactive material to have ever entered the World's oceans.<sup>93</sup> One disposal in particular still represents a sizeable threat to the Arctic to this day. The K-27, a Russian nuclear submarine which killed nine crew

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<sup>90</sup> The Governments of NWT, Nunavut, and Yukon, *Developing a New Framework for Sovereignty and Security in the North*, April 2005, 42, last accessed 5 March 2013, [http://www.gov.nt.ca/research/publications/pdfs/sovereignty\\_and\\_security\\_in\\_the\\_north.pdf](http://www.gov.nt.ca/research/publications/pdfs/sovereignty_and_security_in_the_north.pdf).

<sup>91</sup> Kathleen Crane, Peter deFur and Stephanie Pfirman, "Arctic Contaminant Distribution," Canadian Arctic Resource Committee, last accessed 5 March 2013, <http://www.carc.org/pubs/v21no4/contamin.htm>.

<sup>92</sup> Laurence Peter, "Russia explores old nuclear waste dumps in Arctic," *BBC News*, last updated 25 January 2013, <http://www.bbc.co.uk/news/world-europe-21119774>.

<sup>93</sup> "Dumped Russian nuclear sub shows no radioactive leaks, but still presents chain reaction dangers, research says," *Bellona*, last updated 25 September 2012, [http://www.bellona.org/articles/articles\\_2012/submarine\\_research\\_trip](http://www.bellona.org/articles/articles_2012/submarine_research_trip).

members following a 1968 reactor leak, was sunk in 1981 after failed attempts to repair it. Due to its unique reactor design, the K-27 has the potential for an uncontrolled nuclear chain reaction, which could lead to massive heat and radiation releases.<sup>94</sup> Recent investigations indicate that Russia and Norway are monitoring the site where it was scuttled, and that the K-27 will likely be raised so the reactor can be retired properly ashore. The risks of unintentionally causing a chain reaction during the recovery, however, are being assessed before a decision is made.<sup>95</sup>

Russia is not alone in having produced deleterious effects such as these on its own soil, though. Canada is just as guilty when it comes to locations such as 5 Wing Goose Bay, where extensive ground water contamination has occurred from decades of petroleum product leakage, and all across the DEW Line, where soil contamination by PCB's and lead has been widespread. The downstream effects of this contamination include PCB's being found in polar bears, DDT being discovered in whales, and various other contaminants causing long term harm to the fragile ecosystem.<sup>96</sup> Conservative cost estimates for Canada to clean up these sites are estimated at \$300 million for Goose Bay<sup>97</sup> and \$575 million for the DEW line.<sup>98</sup>

While it is unlikely that any Arctic state would continue to intentionally conduct activities such as these in the future, the situation does highlight the wide-

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<sup>94</sup> *Ibid.*

<sup>95</sup> *Ibid.*

<sup>96</sup> Kathleen Crane, Peter deFur and Stephanie Pfirman, "Arctic Contaminant . . ."

<sup>97</sup> Peter Kenter, "\$300-million clean up takes flight in Goose Bay, Labrador," *Daily Commercial News*, last updated 26 November 2009, <http://www.dcnonl.com/article/id36517>.

<sup>98</sup> Sandro Contenta, "DEW Line: Canada is cleaning up pollution caused by Cold War radar stations in the Arctic," *The Toronto Star*, last updated 4 August 2012, [http://www.thestar.com/news/insight/2012/08/04/dew\\_line\\_canada\\_is\\_cleaning\\_up\\_pollution\\_caused\\_by\\_cold\\_war\\_radar\\_stations\\_in\\_the\\_arctic.html](http://www.thestar.com/news/insight/2012/08/04/dew_line_canada_is_cleaning_up_pollution_caused_by_cold_war_radar_stations_in_the_arctic.html).

spread impact that poor planning can have on the fragile ecosystems of the North, as well as on other states. The lesson for the Canadian government is that future developments in the North will require more extensive environmental assessments, more stringent environmental controls, and cost considerably more than similar projects in the south. Unfortunately, the Canadian government's recent move to streamline the environmental assessment process by shifting responsibility for environmental assessments to the provinces, and eliminating reviews for small projects, seems to run opposite to this conclusion.

These conclusions also highlight the importance of seeking out multi-lateral cooperation to ensure future risks are shared and minimized among the Arctic nations. As an example, ensuring that the dangerous nuclear materials dumped into the Kara Sea get disposed of properly is in the interest of all Arctic states. Indirectly helping to achieve this goal, the Global Partnership Program was set up to work with 23 other partners, primarily to disarm weapons of mass destruction and their various technologies, and reduce their proliferation by ensuring proper disposal. This year, Canada reestablished its commitment to the program by investing an additional \$367 million over the next five years, an excellent example of the government directly impacting the security of the Arctic by investing wisely outside of it.<sup>99</sup>

At the present time, the environmental threat which poses the largest risk to a rapidly opening Arctic is that of an oil spill. While petroleum exploration is assessed to

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<sup>99</sup> Department of Foreign Affairs and International Trade, *Global Partnership Program*, last accessed 10 February 2013, [http://www.international.gc.ca/gpp-ppm/global\\_partnership-partenariat\\_mondial.aspx](http://www.international.gc.ca/gpp-ppm/global_partnership-partenariat_mondial.aspx).

be more challenging in the North than in any other environment, the combination of high oil prices, rapidly increasing accessibility to the region, and advances in drilling technology, have resulted in increased interest from industry.

In 2008, a study released by the United States Geological Survey concluded that the Arctic contained as much as 20% of the world's undiscovered, recoverable oil and gas reserves, and called the Arctic region "the largest unexplored prospective area for petroleum remaining on earth."<sup>100</sup> The effects of this assessment have been swift, with most major petroleum companies now actively engaged in surveying or conducting trial drilling in the North. The USGS predicts that 84% of the reserves lie offshore, though, which unfortunately represents the highest risk type of extraction, since rigs will need to contend with the harsh realities of the Arctic, ranging from city-sized icebergs to severe weather, 24 hour darkness, and bitter cold.<sup>101</sup>

This past summer, Royal Dutch Shell was forced to temporarily abandon its attempt to drill the first well in Alaska in twenty years, following the damage of a vital piece of safety equipment. It has since decided to put the operation on hold and opt out of the 2013 drilling season, to continue only when it feels it is safe to do so.<sup>102</sup> This highlights how unpredictable operations can be in the North, even after Shell had spent

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<sup>100</sup> U.S. Department of the Interior, USGS Fact Sheet 2008-3049, *Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle*, 2008, last accessed 27 March 2013, <http://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf>.

<sup>101</sup> Guy Chazan, "Total warns against Arctic oil drilling, says spill risk is too high," *The Globe and Mail*, last updated 25 September 2012, <http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/total-warns-against-arctic-oil-drilling-says-spill-risk-is-too-high/article4568334/>.

<sup>102</sup> CBC News, "Shell says it will 'pause' drilling in Arctic Ocean for 2013," last updated 27 February 2013, <http://www.cbc.ca/news/business/story/2013/02/27/us-shell-oil-drilling-pause-arctic-safety.html>.

\$4.5 billion and seven years preparing for it.<sup>103</sup>

The disaster of the Exxon Valdez provided a glimpse into what an Arctic oil spill could entail, and now some petroleum companies are even beginning to acknowledge the high risk of drilling in the North. Just recently, the Chief Executive of Total SA told the Financial Times that the risk of an oil spill in such an environmentally sensitive area was simply too high, and that drilling for oil should not be pursued at all - though he believed the recovery of natural gas was still viable since gas leaks are "easier to deal with than oil spills."<sup>104</sup> In fact, a study commissioned by the National Energy Board in 2011 stated that current methods for cleaning up an oil spill would be largely ineffective due to Arctic weather, temperature, and sea ice.<sup>105</sup> As one expert put it, "oil spills into the Arctic environment in any quantity cannot be recovered with the means currently available. It's kind of like unscrambling an egg."<sup>106</sup>

Even with such high risks being identified, the Canadian government is still committed to reducing the barriers to Arctic development with such initiatives as fast-tracking the regulatory approval process for major energy projects, and streamlining the environmental assessment process.<sup>107</sup> Just this past summer, Ottawa put Arctic

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<sup>103</sup> Guy Chazan, "Total warns..."

<sup>104</sup> *Ibid.*

<sup>105</sup> Bob Weber, "Arctic oil spill cleanup impossible one day in five: energy board report," *The Globe and Mail*, last updated 6 September 2012, <http://www.theglobeandmail.com/news/national/arctic-oil-spill-cleanup-impossible-one-day-in-five-energy-board-report/article588949>.

<sup>106</sup> *Ibid.*

<sup>107</sup> Shawn McCarthy, "Budget bill gives Harper cabinet free hand on environmental assessments," *The Globe and Mail*, last updated 18 June 2012, <http://www.theglobeandmail.com/news/politics/budget-bill-gives-harper-cabinet-free-hand-on-environmental-assessments/article4105864>.

exploration rights to an area half the size of Lake Ontario up for bid, following a two year freeze caused by the BP oil spill in the Gulf of Mexico.<sup>108</sup> It is clear that the Canadian government is intent on promoting Northern development, so these substantial risks must be mitigated to the fullest extent possible.

As shown, even a cursory review of the primary environmental threats provide evidence that this category poses a significant threat to the Arctic region. For continued development of the North, environmental concerns must be a primary consideration, with the government taking the lead in establishing legislation, enforcing breaches, and planning effective whole of government responses to environmental emergencies before they happen. Given the high risk nature of the environment, it is not a matter of "if" it happens, it is a matter of "when."

### **Economic Threat**

The final security threat which will be discussed is that of the economic threat. For the most part, resource exploitation in the North is not something that can be accomplished quickly or covertly, and therefore a total loss of regional control would be necessary before foreign entities could threaten Canada's Northern economic potential. One area that does pose a threat, however, is that of illegal fishing. In fact, there are a number of ways in which illegal fishing can manifest itself in the North, whether it be

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<sup>108</sup> Nathan Vanderklippe, "Reviving Arctic oil rush, Ottawa to auction rights in massive area," *The Globe and Mail*, last updated 4 June 2012, <http://www.theglobeandmail.com/news/politics/reviving-arctic-oil-rush-ottawa-to-auction-rights-in-massive-area/article4184419>.

foreign fishing in the contested waters of the Beaufort Sea, approved Canadian fisheries operating beyond their legal catch limits, or foreign operators fishing in Canadian Arctic waters without permission. Of these three scenarios, the last one represents the biggest security concern, and demands that Canada have adequate capability to detect, intercept, and prosecute the offenders.

Though the first line of defence will always be through international treaties and laws aimed at protecting the long term prosperity of Northern fisheries, Canada has first-hand experience with the way these treaties can be overlooked in the face of national interests. The conflict with Spain in 1995, more affectionately known as the "Turbot War," illustrates the potential risk quite well. In that event, Canada became aware that Spanish fishing vessels were overfishing their quotas just outside of the Canadian EEZ, to the point where it began impacting Newfoundland fisheries. Despite being in violation of various internationally recognized treaties like the North Atlantic Fishery Organization, which limits the quantities of fish a country can harvest, Spain's fishing fleets continued to abuse their quotas. When diplomacy failed, Canada had to resort to using Coast Guard and Navy assets, including a submarine, to escort a Spanish trawler to St. John's. The UK and Ireland supported Canada's stance, while the remainder of the EU backed Spain in asserting that this act represented an unlawful detainment of its citizens. The situation escalated, with both countries providing military escorts for its fishing fleets, and Canada even providing the Navy with Rules Of Engagement (ROE) to fire upon the Spanish Navy if it exposed its guns. Ultimately, no shots were fired and the UK were able to broker a deal between Canada and Spain, effectively ending the



conflict.<sup>109</sup>

The Turbot War illustrates how, as Rob Huebert describes, "international agreements do not always protect fish stocks. Military strength is often needed to back up our words."<sup>110</sup> The future prospects of Arctic fisheries are widely unknown and are currently a contentious issue, with scientists and environmentalists urging for a moratorium on Arctic fishing until adequate data can be gathered on the sustainability of the resource.<sup>111</sup> If it does prove profitable, however, large scale international fishers will come, and Canada must be ready. Already, fishing vessels from Greenland are alleged to regularly harvest from Canadian waters, and in 2009, a Danish ship from the Faroe Islands was witnessed fishing in Canadian waters near Nunavut. Unfortunately, the only response Canada could muster was to issue a warrant for the vessel's seizure, and to this date, no other action has been taken.<sup>112</sup> As with the other security threats identified in this chapter, being ready in the Arctic will ultimately equate to having an adequate level of surveillance so that any threats can be identified and tracked, and also having sufficient and timely enforcement assets available to intercept and respond to the threat. When fisheries patrols are conducted in southern waters, it is the responsibility

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<sup>109</sup> Elizabeth DeSombre and J. Samuel Barkin, "Turbot and the Tempers in the North Atlantic," in *Conserving the Peace: Resources, Livelihoods and Security*, (Winnipeg: International Institute for Sustainable Development, 2002), 325-360.

<sup>110</sup> Rob Huebert, "Arctic Diplomacy is Not Enough," *The Globe and Mail*, 31 August 2012, <http://www.theglobeandmail.com/commentary/arctic-diplomacy-is-not-enough/article4510753>.

<sup>111</sup> "Arctic fishing moratorium needed, scientists say," *CBC News*, last updated 22 April 2012, <http://www.cbc.ca/news/canada/north/story/2012/04/22/arctic-fishing-moratorium-scientists.html>.

<sup>112</sup> "Canada gets warrant to seize Faroese ship," *CBC News*, last updated 7 May 2010, <http://www.cbc.ca/news/canada/newfoundland-labrador/story/2010/05/07/canada-fishing-warrant-507.html#ixzz0nN5pg0rb>.

of the Department of Fisheries and Oceans to carry out any inspections or arrests, and since this department has no vessels of its own, it must hitch a ride with the Canadian Coast Guard (CCG) or with the Navy, and since the CCG does not maintain an armed response capability, the Navy is the preferred response platform. Therefore, the proposed Arctic/Offshore Patrol Vessels identified in the CFDS will be critical for this mission, as the Navy does not yet have a robust Arctic capacity.

Canada's Arctic is facing a considerable number of non-military security threats as global warming opens up the region to exploitation at a remarkable rate. Physical security risks such as illegal immigration, organized crime, and even military incursions, have not only occurred, but are becoming more likely with the disappearing ice coverage. The economic threat of illegal fishing may also be of concern if Arctic fisheries prove to be as bountiful as predicted. To respond to these threats, Canada must be able to maintain control over its Arctic territories, and that means maintaining an adequate level of surveillance, as well as ensuring a proper enforcement capability once a threat has been identified. As discussed, this enforcement capability entails a wide range of government departments and agencies, ideally working together to maximize their effectiveness. Canadian Arctic policy includes a substantial focus on the expansion of military forces in the North, and as such, a thorough assessment of the Canadian Forces' current and proposed capabilities will be provided in chapter 6. DND, however, is just one piece of the puzzle needed to address these security threats, so it is recommended that Canadian policy and funding be revisited to identify a more robust Arctic response, emphasizing that DND primarily plays a supportive role to other

departments. Finally, when compared to the rest of Canada, the Arctic's unique characteristics make it much more susceptible to environmental threats. The government must tread carefully as it proceeds with Northern development, so that its goals of fast-tracking the environmental assessment process and promoting industrial expansion, do not come with a much higher price tag in the future. International forums like the Arctic Council are excellent venues for establishing standards which will not only benefit Canada on a domestic level, but will also mitigate the risk of other nations impacting Canada with poor standards of their own. Regrettably, as Canada takes over as Chair of the Arctic Council this year, the environment is not one of its priorities.<sup>113</sup>

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<sup>113</sup> Bob Weber, "Canada to Focus on Development at Arctic Council; Experts Fear Wrong Approach," *CTV News*, last updated 3 December 2012, <http://www.ctvnews.ca/sci-tech/canada-to-focus-on-development-at-arctic-council-experts-fear-wrong-approach-1.1063161>.

## CHAPTER 5 - ARCTIC POSTURING

The previous two chapters identified a number of threats that exist in Canada's Arctic region. Threats to sovereignty, at least from a legal perspective, are very much limited to the level of control Canada will continue to retain over the use of the Northwest Passage, and whether it will be Canada or the United States that retains the disputed portion of the Beaufort Sea. Neither of these disputes affect the retention of land, but each have significant economic opportunities at stake. From a security perspective, however, a number of challenges exist, mostly representative of pan-Canadian security concerns exacerbated by a distinct lack of northern capability in the realms of ISR and law enforcement. What has not been addressed yet is the threat, if any, associated with the build-up of military power in the region.

As previously mentioned, the Canadian government's view towards a direct military threat in the Arctic is that it simply does not exist. Even the Department of National Defence's *Arctic Integrating Concept*, which provides the strategic framework for the development of Arctic military capabilities, assesses that "there are no current military threats to Canada in the Arctic."<sup>114</sup> In line with these claims, Arctic cooperation does appear to be on the rise, at least at first glance. This is evidenced by the increasing importance being given to the Arctic Council by member states, and progress made on international disputes and treaties. In the last few years, Canada has settled its dispute with Denmark over the Lincoln Sea, and Russia has done the same with Norway

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<sup>114</sup> Department of National Defence, "Arctic Integrating Concept" . . . , 23.

regarding the use of the Berents Sea - a 175,000 km<sup>2</sup> area rich in oil and gas. And in 2011, an historic Arctic search and rescue treaty was signed by all eight members of the Arctic Council. Vladimir Putin even stated at an international conference, that "it is well known that if you stand alone, you cannot survive in the Arctic. Nature alone, in this case, demands that people, nations and states help each other."<sup>115</sup>

Given this evidence, one could assume that the Arctic nations are indeed working towards a common goal, and instead of focusing on disagreements, they are cooperating to ensure a safe and equitable future in the North. Nevertheless, concerns of military conflict in the Arctic continue to be voiced. In 2010, NATO's Supreme Allied Commander for Europe, U.S. Admiral James Stavridis, was quoted as saying "for now, the disputes in the north have been dealt with peacefully, but climate change could alter the equilibrium."<sup>116</sup> Russia's ambassador to NATO, it would seem, agrees with this assessment, as he was quoted the same year as saying "The twenty-first century will see a fight for resources, and Russia should not be defeated in this fight . . . NATO has sensed where the wind comes from. It comes from the North."<sup>117</sup> As the ice melts, and economic interests increase, military presence in the region is also on the rise. Canada, Denmark, and Norway have all begun to resume regular military exercises in the Arctic, a practice that each of these countries had either cancelled or drastically reduced after

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<sup>115</sup> Michael Byers, "Canada Can Help Russia with Northern Sea Route," *The Moscow Times*, 9 June 2012, last accessed 28 February 2013, <http://www.themoscowtimes.com/opinion/article/canada-can-help-russia-with-northern-sea-route/460127.html>.

<sup>116</sup> Terry Macalister, "Climate change could lead to Arctic conflict, warns senior NATO Commander," *The Guardian*, last updated 11 Oct 2010, <http://www.guardian.co.uk/environment/2010/oct/11/nato-conflict-arctic-resources>.

<sup>117</sup> "The Economist Special Report: The Arctic, 'Too much to fight over'," *The Economist*, 16 June 2012, last accessed 28 February 2013, <http://www.economist.com/node/21556797>.

the end of the Cold War. Even nations outside the Arctic, like France, are now showing interest in expanding their Arctic military capability.<sup>118</sup> And as the military forces increase, the political rhetoric is becoming more reminiscent of the Cold War, with NATO nations on one side, and Russia, the only non-NATO Arctic nation, on the other. A breakdown of the other Arctic nations' policies and northern military capabilities is now provided.

## **Russia**

In 2009, the Kremlin publicly released its Arctic policy statement entitled *The Foundations of Russian Federation Policy in the Arctic until 2020 and Beyond*. It speaks to Russia increasing its presence in the High North in order to support its political, economic, and security interests, and asserts that the region will represent Russia's main resource base by 2020.<sup>119</sup> While one of the primary aims of the plan is "an increase in the effectiveness of cooperation with the border guard of neighboring states on the issues of maritime terrorism, contraband, illegal migration, and the protection of sea-based resources," the document also highlights concern about increasing militarization in the North, and thus prescribes plans to develop a dedicated military force "capable of ensuring security under various military and political circumstances."<sup>120</sup> There are other somewhat contradictory themes such as this within the document, but what is made abundantly clear is the value Russia has placed on the High North for its economic future.

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<sup>118</sup> Rob Huebert, et al., *Climate Change & International Security: The Arctic as a Bellwether*, (Arlington, VA: Center for Climate and Energy Solutions, 2012), 3.

<sup>119</sup> Maxim Rusnak and Ilan Berman (Translators), "The Foundations of Russian Federation Policy in the Arctic until 2020 and Beyond", *The Journal of International Security Affairs*, No. 18 (Spring 2010).

<sup>120</sup> *Ibid.*, 102.

The other important take away from this policy is the level of commitment that Russia is making to it. Within it, is a very detailed, three phase implementation schedule; and so far, Russia is right on track.

For decades over the course of the Cold War, the Canadian Arctic region acted as the initial barrier between Russia and the United States. The threat of Russian bomber aircraft and nuclear ballistic missile submarines was a constant throughout the period, and though Russian military activity has subsided since then, it is seeing a rapid resurgence in recent years. Russia's armed forces are undergoing a streamlining process in terms of personnel and organizational structure, and defence expenditures have been growing consistently over the last decade. In 2011, Russia took third place in the ranking of global military expenditures, overtaking Britain and France for the first time since the early 1990s.<sup>121</sup> Their most recent announcement identified plans to further increase spending by an additional 59% by 2015, with the bulk of this spending being aimed at capital investment, as the country replaces much of its dated military equipment.<sup>122</sup> The Russian Navy, split between its Northern and Pacific Fleets, will see the lion's share of this investment, in the form of new submarines, escort ships, and amphibious assault / helicopter carriers.<sup>123</sup> To put this investment into perspective, Russia plans to spend \$137 billion to build up its Navy by 2020, which completely

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<sup>121</sup> Stockholm International Peace Research Institute, *Recent Trends in Military Expenditure*, last accessed 28 Jan 2013, <http://www.sipri.org/research/armaments/milex/resultoutput/trends>.

<sup>122</sup> "Russia to Boost Defense Spending 59% by 2015," *Ria Novosti*, 17 October 2012, last accessed 25 March 2013, [http://en.rian.ru/military\\_news/20121017/176690593.html](http://en.rian.ru/military_news/20121017/176690593.html).

<sup>123</sup> S. Saunders (ed.), *Jane's Fighting Ships 2011-2012*, (London: Jane's Information Group, 2011), 684.

dwarfs Canada's proposed \$33 billion shipbuilding program.<sup>124</sup>

Russia's land forces will also grow, with its number of Army brigades increasing from 70 to 109 by 2020. These include two specially trained and equipped Arctic Brigades, whose establishment is scheduled for 2015, when specialized vehicles will be delivered.<sup>125</sup> One of these Arctic Brigades will be located in the settlement of Pechenga, just 10km from the Norwegian border, a move intended to "balance the situation" of an increasing western military presence, according to a prominent Russian newspaper.<sup>126</sup>

Following the western uproar caused by the planting of the Russian flag on the seabed of the North Pole in 2007, Russia began conducting regular flights in the Arctic with its TU-95 "Bear" bomber aircraft. A select number of notable incidents since then have appeared in the media, highlighting Canada's interception of these aircraft before they could enter Canadian airspace. In 2009, Canada's Chief of Defence Staff, General Walter Natynczyk, stated that prior to these flights resuming in 2007, "we had not seen anything for decades."<sup>127</sup> While the exact number and details of each interception are not publicized, Defence Minister Peter MacKay stated in 2010 that NORAD fighter

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<sup>124</sup> Daniel Proussalidis, "Russian naval build-up towers over Canadian shipbuilding," *Toronto Sun*, 3 August 2012, last accessed 8 February 2013, <http://www.torontosun.com/2012/08/03/russian-naval-build-up-towers-over-canadian-shipbuilding>.

<sup>125</sup> Trude Pettersen, "Russian Arctic brigades put off to 2015," *The Barents Observer*, last updated 22 February 2012, <http://barentsobserver.com/en/topics/russian-arctic-brigades-put-2015>.

<sup>126</sup> Viktor Myasnikov, "Ground Forces of Varying Severity," *Nezavisimaya Gazeta*, last updated 16 March 2011, [http://www.ng.ru/nvo/2011-03-16/2\\_army.html](http://www.ng.ru/nvo/2011-03-16/2_army.html).

<sup>127</sup> Mike Blanchfield, "Harper Warns Russians After Two Bombers Intercepted," *National Post*, last updated 28 February 2009, <http://www.nationalpost.com/news/story.html?id=1335735>.



aircraft had intercepted between 12 and 18 Russian bombers per year since 2007.<sup>128</sup>

Though there has yet to be an incursion into Canadian sovereign airspace, Russian bombers have repeatedly breached the Canadian Air Defence Identification Zone (CADIZ), violating international regulations which require them to announce their position and intentions, and triggering NORAD fighters to intercept them. Following one such interception in 2009, which took place three days prior to a visit by the American President, Minister MacKay noted the "strong coincidence that the flight occurred around the same time that Canadian security and defence assets were concentrated in Ottawa for President Obama's visit."<sup>129</sup> Though Russian officials denied any wrongdoing, Prime Minister Harper decreed that these incursions were a "real concern" and added that:

I have expressed at various times the deep concern our government has with increasingly aggressive Russian actions around the globe and Russian intrusions into our airspace . . . we also have obligations of continental defence with the United States. We will fulfill those obligations to defend our continental airspace and we will defend our sovereignty and we will respond every time the Russians make any kind of intrusion on the sovereignty in Canada's Arctic.<sup>130</sup>

It is unknown what the true intent of these flights is, though in conducting them, Russia is able to witness NORAD's detection capability in the Arctic, and also their ability to respond. Canada has admittedly been extra sensitive to Russia's Arctic activities since

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<sup>128</sup> Brian Lilley, "Canadian jets repel Russian bombers," *Toronto Sun*, 30 July 2010, last accessed 8 February 2013, <http://www.torontosun.com/news/canada/2010/07/30/14874221.html>.

<sup>129</sup> Nancy Teeple, "A Brief History . . .", 57.

<sup>130</sup> Steven Chase, "Ottawa rebukes Russia for military flights in Arctic," *The Globe and Mail*, last updated 10 April 2009, <http://www.theglobeandmail.com/news/national/ottawa-rebukes-russia-for-military-flights-in-arctic/article1154748>.

their invasion of Georgia in 2008, and Prime Minister Harper has stated that Russia seems to have returned to a "Soviet-era mentality."<sup>131</sup>

Another Russian capability worth discussing is that of its submarine fleet. Notwithstanding the mass decommissioning of Russian submarines following the Cold War, the country still maintains a sizeable fleet, including 39 nuclear submarines capable of operating under the polar ice cap. The most recent class of submarine to enter service is the Borei, a "super-modern, powerful and almost noiseless" strategic cruiser that has the capability to operate autonomously for up to three months, and is armed with 16 Bulava intercontinental ballistic missiles.<sup>132</sup> In 2011, the Russian Defense Ministry reported a successful test of the Bulava's maximum range and indicated that the missile flew 9,300 km in just 33 minutes.<sup>133</sup> Russian media sources have stated that these underwater-launched missiles are extremely difficult to detect, fly unpredictable paths at hypersonic speeds, and evade missile defense systems by projecting a cloud of false targets.<sup>134</sup> It is expected that this missile system will form the basis of Russia's advanced nuclear deterrent force until 2045.<sup>135</sup> These submarines will no doubt be deployed in the Arctic, where their missiles' range will allow them to threaten both the United States and Europe. A strategic threat such as this cannot go

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<sup>131</sup> Andrew Mayeda, "Canada to Keep Watch on Russia's Arctic Activities," *Canwest News Service*, last updated 19 August 2008, <http://www.canada.com/vancouver/news/story.html?id=a1f76815-b29e-492a-850b-b95bdd75492e>.

<sup>132</sup> "Silent sub: Russian noiseless Borei class nuclear submarine immersed," *RT News*, last updated 30 December 2012, <http://rt.com/news/russian-noiseless-borei-submarine-106>.

<sup>133</sup> *Ibid.*

<sup>134</sup> Oleg Nekhai, "Bulava Missile to Overcome Any Missile Defence System," *The Voice of Russia*, last updated 31 July 2012, [http://english.ruvr.ru/2012\\_07\\_31/Bulava-Missile-to-overcome-any-missile-defence-system](http://english.ruvr.ru/2012_07_31/Bulava-Missile-to-overcome-any-missile-defence-system).

<sup>135</sup> *Ibid.*

unnoticed by NATO, and will likely lead to an increased presence of western submarines in the Arctic as a result.

On the diplomatic front, Russia continues to send mixed signals, especially concerning its relationship with NATO, whose public opinion of Russia has noticeably shifted from friendly to suspicious. As far back as 1996, following a meeting with the Norwegian and Russian Defence Ministers, the United States Secretary of Defense stated "NATO is not a threat to Russia, any more than Russia is a threat to NATO."<sup>136</sup> And then in 2003, the NATO Secretary General, following a meeting of the NATO-Russia Council, talked about a "future in which the relationship between NATO allies and Russia would be defined not by rivalry and mutual suspicion, but by a spirit of genuine partnership."<sup>137</sup> Recently, though, these statements of peace and cooperation have not been the norm. In 2007, Russian president Vladimir Putin threatened to re-orient its nuclear arsenal and "acquire new targets in Europe," if NATO were to deploy its proposed missile defence system in Europe.<sup>138</sup> Additionally, in response to Kosovo's succession plans in 2008, Russia's NATO envoy, Dmitry Rogozin, stated that "in order to be respected, we must use brute force, in other words armed force" in reference to backing Serbia's bid to retain the territory.<sup>139</sup> The conflict over missile defence systems has continued to escalate the tensions between Russia and the west, with the Chief of

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<sup>136</sup> "New Russian Defense Chief Meets Western Counterparts," American Forces Press Service, 3 October 1996, last accessed 28 Jan 2013, <http://www.defenselink.mil/news/newsarticle.aspx?id=40690>.

<sup>137</sup> Lord George Robertson (speech, NATO-Russia Council Meeting of Foreign Ministers, Madrid, 4 June 2003), last accessed 28 Jan 2013, [http://www.nato-russia-council.info/htm/EN/documents/04jun03\\_2.shtml](http://www.nato-russia-council.info/htm/EN/documents/04jun03_2.shtml).

<sup>138</sup> "Putin in nuclear threat against Europe," *The Telegraph*, last updated 4 June 2007, <http://www.telegraph.co.uk/news/worldnews/1553593/Putin-in-nuclear-threat-against-Europe.html>.

<sup>139</sup> Steven Edwards, "Russia Warns it Will Use Force to Back Serbia," *National Post*, 23 February 2008.

Russia's General Staff, General Nikolai Makarov, recently threatening that "a decision to use destructive force preemptively will be taken if the situation worsens."<sup>140</sup>

Statements like these indicate that Russia still feels threatened by the NATO nations, and is fully aware that military capability plays a large role in being taken seriously on the international stage.

It is highly unlikely that Russia would start a shooting war in the North, but as the sole non-NATO country in the Arctic, Russia is clearly intent on ensuring it can deter any rivals, if required. Unfortunately, the resulting brinkmanship is fuelling a substantial arms build-up in the region, which in turn could change a peaceful situation into a powder keg just through its existence.

### **Denmark (Including Greenland)**

Denmark's defence policy has also re-directed its focus towards the Arctic, as seen in its 2009 *Danish Defence Agreement* which highlights the rising geostrategic importance of the region.<sup>141</sup> In 2009, a plan was approved for a new Arctic command and task force, which will join the two current commands of Greenland and the Faroe Islands into one, and a new Arctic response force is to be trained and established in Greenland by 2014.<sup>142</sup> Denmark's naval capabilities are also on the rise, with the

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<sup>140</sup> Alexander Boot, "A new Cold War? Why we should take Russia's nuclear arsenal seriously," *Mail Online*, last updated 6 May 2012, <http://www.dailymail.co.uk/debate/article-2140444/A-new-Cold-War-Why-Russias-nuclear-arsenal-seriously.html>.

<sup>141</sup> Danish Ministry of Defence, *Danish Defence Agreement 2010 - 2014*, (Copenhagen: MOD, 2009).

<sup>142</sup> "Denmark Plans Forces for Arctic," *BBC News*, last updated 16 July 2009, <http://news.bbc.co.uk/2/hi/8154181.stm>.

expansion of its frigate fleet, and a recent purchase of heavily armed, ice-strengthened offshore patrol vessels.<sup>143</sup>

An important sidebar is the potential independence of Greenland. In 2008, a referendum resulted in 75% of the population voting to secede from Denmark, and it appears that economic independence will be the final hurdle.<sup>144</sup> Greenland has much to offer in terms of resources, such as potential petroleum reserves, mineral deposits including rare earth metals, and roughly 10% of the world's fresh water reserves.<sup>145</sup> It is also home to Thule, a strategic air base used by the United States for space surveillance and missile defence. As Greenland's independence becomes more likely, major powers like the European Commission and the United States have begun conducting regular visits there, eager to garner influence.<sup>146</sup> It is possible that tensions could rise as interests clash during this process.

## Norway

Norway's defence policy, currently found in the 2007 *Soria Moria Declaration on International Policy*, focuses defence priority on the northern part of the country.<sup>147</sup>

As it has historically, this policy focuses largely on Russia, but the emphasis has now

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<sup>143</sup> S. Saunders (ed.), *Janes Fighting Ships . . .*, 193.

<sup>144</sup> "Greenland said yes to independence", *The Berents Observer*, last updated 26 November 2008, <http://barentsobserver.com/en/node/20737>.

<sup>145</sup> Euractiv, "Arctic expert: Greenland could re-join the EU in a generation", last updated 25 July 2012, <http://www.euractiv.com/specialreport-rawmaterials/arctic-expert-greenland-rejoin-e-interview-514010>.

<sup>146</sup> *Ibid.*

<sup>147</sup> Norwegian Office of the Prime Minister, *Soria Moria Declaration on International Policy*, 4 February 2007, last accessed 2 March 2013, <http://www.regjeringen.no/en/dep/smk/documents/Reports-and-action-plans/rapporter/2005/The-Soria-Moria-Declaration-on-Internati.html?id=438515>.

shifted from a general Russian threat, to that of conflicting Arctic interests.<sup>148</sup> In line with this assessment, the Norwegian military headquarters was moved in 2009 from the south of the country to Reitan, located north of the Arctic circle. Norway has focused the bulk of its military modernization on the Navy, recently replacing its frigate fleet with larger, more capable ships, and revealing plans to purchase the country's first support ship by 2015.<sup>149</sup> Though Norway and Russia are generally seen to have good relations, as evidenced by their recent agreement over maritime boundaries in the Berents Sea and the Arctic Ocean, a series of incidents in 2012, where Russian fisherman were forced out of the area by Norway, indicate that the treaty has not been as effective as hoped.<sup>150</sup> Norway has also been emphasizing its cooperation with NATO forces, hosting regular NATO Arctic training exercises since 2006. The most recent "Exercise Cold Response" was held in Northern Norway with over 16,000 troops from 15 countries, and focused on Arctic training for "high intensity crisis response operations."<sup>151</sup>

## **The United States**

Of all the Arctic nations, the United States represents an anomaly, in that it has not seen a robust shift in policy or military capability towards the Arctic region. Prior to leaving office in 2009, American President George W. Bush enacted the *Arctic Region*

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<sup>148</sup> *Ibid.*, note 40.

<sup>149</sup> S. Saunders (ed.), *Janes Fighting Ships . . .*, 577.

<sup>150</sup> Alexai Fenenko, "Moscow and Washington in the Arctic," Russian International Affairs Council, last updated 12 July 2013, [http://russiancouncil.ru/en/inner/?id\\_4=601](http://russiancouncil.ru/en/inner/?id_4=601).

<sup>151</sup> Norwegian Joint HQ Public Affairs Office, "Exercise Cold Response 2012 Press Release," last accessed 28 February 2013, <http://www.norge.fi/PageFiles/591341/IEPR%20-%20Exercise%20Cold%20Response%202012.pdf>.

*Policy*, which identifies security as the first of six policy priorities, and is still in effect today.<sup>152</sup> The document highlights, in a very broad sense the impact of climate change on various American interests in the region, and identifies the government departments responsible for each. On the topic of security, it stipulates that the U.S. must be "prepared to operate either independently or in conjunction with other states to safeguard these interests," however no sources of funding are identified; only that "the heads of executive departments and agencies . . . shall work to identify future [resource] requirements to implement the elements of this directive."<sup>153</sup> Surprisingly, the Arctic does not factor prominently into other strategic defence policy documents. The 2010 *National Security Strategy* and the 2011 *National Military Strategy* only mention the arctic briefly, and the 2012 DOD policy which outlines American security priorities for the next century, makes no reference to the Arctic at all.<sup>154</sup>

In 2010, the Commandant of the US Coast Guard voiced concern over the need to prepare for increasing commercial traffic, but admitted that American security interests in the Arctic were not yet sizeable enough to warrant anything more than "outreach, planning, and small-scale summer deployments."<sup>155</sup> Notwithstanding this apparent lack of

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<sup>152</sup> The White House, *National Security Presidential Directive 66*, (Washington, DC: Government Printing Office, 2009).

<sup>153</sup> *Ibid.*

<sup>154</sup> The White House, *National Security Strategy*, (Washington, DC: Government Printing Office, 2010); and Department of Defense, *The National Military Strategy of the United States of America 2011: Redefining America's Military Leadership*, (Washington, DC: Government Printing Office, 2011); and Department of Defense, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, (Washington, DC: Government Printing Office, 2012).

<sup>155</sup> R.J. Papp, "Charting the Coast Guard's course", *Proceedings of the United States Naval Institute*, 137, no.3 (Mar. 2011), 21.

interest, the United States still maintains a northern capability that dwarfs that of Canada. Since the end of the Cold War, the U.S. has continued Arctic military operations, though at a reduced rate. They continue to conduct regular Arctic submarine operations with the British, and deployed at least three submarines into Arctic waters in 2009. Alaska is also home to one of two ballistic missile defence sites, and three wings of fighter aircraft used for air defence.<sup>156</sup> Being able to conduct air operations out of four air bases, including Thule, the USAF is able to project substantial air intercept and patrol assets into the North on short notice. Control of these aircraft, and all of Canada's interceptor aircraft for that matter, is the responsibility of NORAD, which also employs the North Warning System, a series of air surveillance radars in Canada, Greenland, and Alaska. America's Arctic-capable land forces consist of those under control of US Army Alaska (USARAK), though Arctic training is limited and the primary response force would be the 1,850 members of the Alaskan National Guard.<sup>157</sup> Other US land forces, like the Marines, conduct some Arctic training and could be called upon for contingency operations. While the US Navy has no ice-capable ships, most of its 53 nuclear attack submarines can operate under the polar ice cap, and are capable of breaking through the ice from beneath.<sup>158</sup> American icebreaker capability is extremely limited, however, with the Coast Guard operating only one unarmed ship, mostly for research.

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<sup>156</sup> Siemon T. Wezeman, "Military Capabilities in the Arctic," SIPRI Background Paper, (Stockholm: 2012): 11.

<sup>157</sup> *Ibid.*, 12.

<sup>158</sup> S. Saunders (ed.), *Jane's Fighting Ships . . .*, 947.



Though American policy does not place much emphasis on the Arctic, its response capability is still formidable, and there are signs that it is addressing shortcomings with Northern ISR as well. An example of this is the Assured Arctic Awareness (AAA) program which has been established by DARPA.<sup>159</sup> The program's goal is to develop remote sensing technologies able to monitor both above and below the ice, and capable of operating in the austere Arctic environment. Very much like Canada's Northern Watch program, AAA's end state is to provide "year-round situational awareness without the need for forward-basing or human presence."<sup>160</sup>

## **Conclusion**

The preceding comparison of Arctic nations' defence policies and military investments clearly shows an unprecedented level of attention and build-up of military power in the Arctic. The conclusions which can be drawn from this, however, are not nearly as clear. A recent study by the Stockholm International Peace Research Institute concluded that the build up of military power and increased capabilities are merely aimed at addressing "challenges associated with the environmental, economic and political changes anticipated in the region, rather than as a response to major threat perceptions."<sup>161</sup> Indeed, it is difficult to argue against the claim that each nation is merely adapting their defence posture in order to secure their own national interests in a region with many close neighbours, a fragile ecosystem, and vast resource potential. Given that we have also seen so much cooperation in recent years at the Arctic Council, and with

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<sup>159</sup> DARPA Strategic Technology Office, "Assured Arctic Awareness," last accessed 3 March 2013, [http://www.darpa.mil/Our\\_Work/STO/Programs/Assured\\_Arctic\\_Awareness\\_\(AAA\).aspx](http://www.darpa.mil/Our_Work/STO/Programs/Assured_Arctic_Awareness_(AAA).aspx)

<sup>160</sup> *Ibid.*

<sup>161</sup> Siemon T. Wezeman . . . , 13.

key maritime boundary disputes being settled, it is easy to conclude that there is nothing to worry about. But no matter how benign the intentions are behind each nation's build-up of forces, the fact remains that, by and large, each country has policy which identifies the Arctic as a potential security risk, and believes it must be protected. Russia stands out from the rest of the polar nations in that its economic future is most dependent on the North, and thus its power projection is equally substantial. Unfortunately, tensions between Russia and the west continue to be problematic, especially on the topic of ballistic missile defence, and this has led some to call what is happening in the Arctic an "arms race".<sup>162</sup> Either way, as Rob Huebert has concluded, Canada has no choice but to try to play catch-up in this new security environment, since no matter what, military power will be necessary to back up negotiations, ensure security, and enforce our laws.<sup>163</sup> The next chapter will therefore look at Canada's policies and military capabilities in this increasingly competitive region.

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<sup>162</sup> Daniel Proussalidis, "Canada lags in Arctic Arms Race," *CNews Online*, last updated 4 July 2011, <http://cnews.canoe.ca/CNEWS/Politics/2011/07/04/18373021.html>.

<sup>163</sup> Rob Huebert, "Arctic Diplomacy is not Enough" . . .

## CHAPTER 6 - CANADIAN MILITARY POLICIES AND CAPABILITIES

Ever since 2007, the Conservative government of Stephen Harper has made the protection of Canadian Arctic sovereignty a priority. The 2008 release of the *Canada First Defence Strategy*, and the 2009 *Northern Strategy*, effectively put the government's money where its mouth was, and identified a number of planned capability investments out to 2028, many of which were aimed at Arctic capability.<sup>164</sup> Included in these plans was the intention to establish a reserve Army unit in Yellowknife and increase the Canadian Rangers, a reserve element of the Canadian Forces composed of aboriginal peoples, from 4,100 to 5,000 members. Both of these have already been accomplished. The policy also identified a number of capital acquisitions / replacements which included: the replacement of Canada's 18 CP140 Aurora patrol aircraft with 10-12 new airplanes starting in 2020; the acquisition of 65 F-35 fighter aircraft to replace the aging fleet of CF-18's; the acquisition of 6-8 Arctic/Offshore Patrol Ships, capable of operating in first year ice; the establishment of a deep water docking and refueling facility in Nanisivik; the acquisition of 17 new fixed wing search and rescue aircraft; and the establishment of an Arctic training center in Resolute Bay, located near the mid-point of the Northwest Passage, as a staging base and training facility for northern operations.<sup>165</sup>

Other projects specifically intended to address the Arctic ISR gap include: the Joint Uninhabited Surveillance and Target Acquisition System (JUSTAS), which aims to

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<sup>164</sup> Department of National Defence, *Canada First Defence Strategy*. . . ; and Department of Indian Affairs and Northern Development, *Canada's Northern Strategy: Our North, Our Heritage, Our Future*, (Ottawa: Canada Communication Group, 2009).

<sup>165</sup> Department of National Defence, *Canada First Defence Strategy* . . . , 4.

acquire 6 UAV's for maritime and Arctic patrol; Polar Epsilon, a space-based ISR project; and Northern Watch, a technology demonstration project aimed at developing a remotely operated northern surveillance system capable of monitoring air, maritime surface, and sub-surface traffic year round, primarily in the vicinity of Barrow Strait, a choke-point in the Northwest Passage. The status and viability of these investments will be addressed later, but first it is important to understand Canada's current Arctic policy stance and military capabilities.

Canadian Arctic policy has always emphasized the importance of diplomacy in arenas like the Arctic Council, the United Nations, and other partnerships. Policy statements like *Canada's Northern Strategy*, *The Northern Dimension of Canadian Foreign Policy*, and the *Statement on Canada's Arctic Foreign Policy*, all give emphasis to international cooperation on issues like environmental monitoring, local governance, and scientific research.<sup>166</sup> Militarily, however, there is a distinct focus on power projection and maintenance of sovereignty; thus the CF will have many different roles to play in Canada's Arctic future. The *Canada First Defence Strategy* addresses this assumption by stating that:

[The] Canadian Forces must have the capacity to exercise control over and defend Canada's sovereignty in the Arctic . . . As activity in northern lands and waters accelerates, the military will play an increasingly vital role in demonstrating a visible Canadian presence in this potentially resource rich region, and in helping other government agencies such as the Coast Guard respond to any threats that may arise.<sup>167</sup>

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<sup>166</sup> Rob Huebert, et al., *Climate Change & International Security* . . ., 27.

<sup>167</sup> Department of National Defence, *Canada First Defence Strategy*. . ., 8.

Given that Canada has the second largest sector of the Arctic, the Canadian Forces' current ability to operate in the North is quite limited. The Royal Canadian Air Force operates CP140 Aurora patrol aircraft from southern bases in Comox and Greenwood which are also capable of anti-submarine operations. The fleet size has decreased from 18 to 10 in recent years, however, and as a result, Arctic patrols have become less frequent. Air defence in the North is more than sufficient, as it is accomplished bi-laterally through NORAD and its North Warning System of radars. Canada contributes to NORAD with personnel, Command and Control nodes, and with its fleet of CF-18 fighter aircraft which can be operated out of Inuvik, Yellowknife, Rankin Inlet, and Iqaluit. Canada's Navy currently has no ice-capable vessels, but has begun training most of its fleet in Northern waters during summer months, when ice is not a factor. Its four Victoria class diesel submarines are incapable of operating under ice, and have been plagued by maintenance issues since their acquisition. The Navy estimates that the subs will finally reach full operational capability in 2013, with three out of the four subs available for operations.<sup>168</sup>

The Canadian Coast Guard (CCG), unlike many other nations, is a civilian organization with no military or law enforcement responsibilities. They may, however, operate their vessels in support of military operations, and like the Navy, can only support domestic law enforcement by acting as a platform for agencies like the RCMP or CBSA. The Navy, however, is provided law enforcement status under the Fisheries Act

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<sup>168</sup> Department of National Defence Fact Sheet, "Royal Canadian Navy Submarines: Fleet Status," last updated 18 February 2013, <http://www.forces.gc.ca/site/news-nouvelles/news-nouvelles-eng.asp?id=3979>.

and can respond to illegal fishing; the CCG cannot. The CCG's primary roles include maintenance of navigational aids, icebreaking, environmental response, and search and rescue. Of the CCG's 19 icebreakers currently in service, six can handle ice thicker than one metre, and two are considered "heavy icebreakers". Unfortunately, those two are old and scheduled for decommissioning in 2017 and 2020. A project is underway to replace one of them in 2017, but there are currently no plans to replace the second.<sup>169</sup>

In terms of land forces, all members of the Canadian Army receive basic cold weather training, and most Army equipment is rated to operate in cold environments. In the past decade, though, the Army has not had sufficient opportunity to train in the North. In fact, Canada's Assistant Chief of the Land Staff stated in 2011 that the Army had lost the "ability to operate up north in the Arctic because of the focus on operations in Afghanistan."<sup>170</sup> To remedy this deficiency, Canada has begun conducting annual northern training exercises, and regularly takes part in the combined NATO exercise "Cold Response" in Norway.

To further address these deficiencies, the government has made considerable efforts to emphasize the need for more robust Arctic capabilities and training, both with policy statements and by initiating spending in this regard. A closer look at the specific capabilities planned for the Arctic, however, shows a disturbing trend towards an

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<sup>169</sup> Canadian Coast Guard, "Polar Icebreaker", last accessed 14 March 2013, <http://www.ccg-gcc.gc.ca/vessel-procurement/polar-icebreaker>.

<sup>170</sup> Sergei Desilva-Ranasinghe, "Interview: Major General Alan Howard", *Janes Defence Weekly*, 12 January 2011, 34.

inability to deliver, thanks to excessive delays in project deliveries and increasing financial pressures.

The planned acquisition of the F-35 Joint Strike Fighter, originally intended to begin replacing the CF-18 in 2016, has seen a great deal of controversy. Excessive programme delays, increased costs, and a tremendous amount of political pressure has put the acquisition in jeopardy, resulting in a considerable step back to determine whether the F-35 is even the right choice. Given the estimated life expectancy of the CF-18, a replacement must begin arriving by 2017, which means the order for its replacement must be made by 2014.<sup>171</sup> The government is not likely to meet this deadline, which will either result in excessive interim costs to extend the current fleet, or decreased annual flying rates which would directly impact Canada's ability to protect the Arctic; neither of which will be welcomed by the Canadian public.

Another project worthy of discussion is that of the Arctic/Offshore Patrol Ship (AOPS). The announcement of this project in 2007, along with the promise to build a single icebreaker for the Coast Guard, replaced an earlier pledge by the government to procure three armed, heavy icebreakers for the Navy. AOPS, a smaller ship, will also be armed and capable of housing a helicopter (for navigation purposes), but only be strong enough to operate in first year ice up to one metre thick, which means summer operations only; the increased number of ships (6-8) and its versatility will benefit the Navy by

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<sup>171</sup> "Canada Preparing to Replace its CF-18 Hornets," *Defence Industry Daily*, last updated 4 March 2013, <http://www.defenseindustrydaily.com/canada-preparing-to-replace-its-cf-18-hornets-05739>.

allowing it to patrol Canada's other coasts throughout the remainder of the year. Critics have identified a number of issues with the ship's design, including a complete lack of acoustic sensors (including no plan to house an organic maritime helicopter), slow speed, and small crew.<sup>172</sup> These limitations would result in a limited ability to react to emergencies in the Arctic, and absolutely no ability to sense or track submarines, though this limitation could be mitigated by deploying AOPS in tandem with one of Canada's Victoria Class subs. Notwithstanding these limitations, a construction contract has yet to be signed, and already the initial delivery date has been pushed back three years, to 2018. As the Navy's sole Arctic-capable asset, these delays and capability shortcomings will most certainly impact Canada's ability to control its northern waters.

A key requirement for the operation of AOPS in the North is the proposed refuelling facility at Nanisivik, on the north end of Baffin Island. Originally planned as a year round deep water sea port, the project has been cut back substantially in recent years due to the high costs associated with building in the North. The facility will now operate during the summer months only, and plans to update the local airstrip have also been scrapped. Instead, the military will have to use a civil airport 13 miles away, and crews will be housed in temporary trailers.<sup>173</sup> Additionally, planned fuel storage has been cut back by 50%, and no telecommunications infrastructure will be installed, resulting in users having to rely on satellite phones or hand held radios. Even with these cuts, the

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<sup>172</sup> David Pugliese, "Arctic Patrol Ship Limited in What it Can Do in the North Say Critics," *Ottawa Citizen*, 25 June 2009, last accessed 12 March 2013, <http://blogs.ottawacitizen.com/2009/06/25/arctic-patrol-ship-limited-in-what-it-can-do-in-the-north-say-critics>.

<sup>173</sup> Jim Bell, "Nanisivik: Nunavut's incredible shrinking naval facility," *Nunatsiug Online*, last updated 22 March 2012, [http://www.nunatsiaqonline.ca/stories/article/65674nanisivik\\_nunavuts\\_incredible\\_shrinking\\_naval\\_facility](http://www.nunatsiaqonline.ca/stories/article/65674nanisivik_nunavuts_incredible_shrinking_naval_facility).



project is currently delayed three years, and is not expected to be operational until 2016 at the earliest.<sup>174</sup>

There are also a number of other projects identified in the 2008 CFDS which have yet to reach the implementation phase. These include the Canadian Multi-mission Aircraft (CMA) which are to replace the CP-140 Aurora, the Fixed Wing Search and Rescue (FWSAR) aircraft acquisition, and the JUSTAS project which aims to acquire a UAV capability for surveillance in the Arctic. Each of these projects has seen substantial delays, and as a result are facing increasing financial pressures. As a result, there is no guarantee if, or when, these projects will deliver as promised.

On a positive note, one project which is showing great promise is Polar Epsilon. This project currently uses data from the commercial Radarsat-2 satellite to monitor Canada's Arctic region, including its ocean approaches. Radar imagery can be used to detect and track foreign vessels, and even detect oil spills. The project's Initial Operational Capability was first reached in 2010, and represented a quantum leap in Canadian ISR of the North. Limitations of the current technology include not being able to track small vessels, and since the satellite is not in a geo-synchronous orbit, it cannot provide continuous coverage. Long revisit times can equate to difficulty in tracking targets, and its orbit takes 24 days to perfectly return to the same location.<sup>175</sup>

Additionally, the satellite is privately owned by MacDonald, Dettwiler, and Associates,

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<sup>174</sup> *Ibid.*

<sup>175</sup> MacDonald, Dettwiler, and Associates, "about Radarsat-2," last accessed 12 March 2013, <http://gs.mdacorporation.com/SatelliteData/Radarsat2/About.aspx>.

who sells its data to users world-wide. This means that the Canadian government may not always get priority for coverage and imagery. With that being said, the next phase of Polar Epsilon will involve the use of the "Radarsat Constellation", a group of three new satellites designed to provide daily revisits of Canada's maritime approaches, and more frequent coverage of the Arctic. Enhanced radar will allow for tracking of smaller vessels, and an integrated Automatic Identification System (AIS) receiver will help identify individual ships. The Canadian Space Agency (CSA) signed the \$706 Million contract for the construction of these new satellites in January 2013, and the satellites are scheduled to launch in 2018. The CSA will own the satellites, and its data will be used by a number of government agencies.<sup>176</sup>

The conclusions that can be drawn by this look at Canada's proposed capabilities are twofold. First is that, militarily, Canada is very much playing a losing game of catch-up with its Arctic Neighbours. Its current capability is woefully behind, especially when the size of Canada's Arctic region is considered, and even the proposed capabilities could not compete militarily with a superpower like Russia or the United States. Second is that almost every procurement project is seriously delayed and under increasing financial pressure. As a result, the final capabilities will most likely not meet the initial intent, if delivered at all. This would not be a new concept for Canada, as Nancy Teeple highlights below:

History demonstrates that, however proactive they may seem at time of

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<sup>176</sup> Canadian Space Agency, "Radarsat Constellation," last accessed 12 March 2013, <http://www.asc-csa.gc.ca/eng/satellites/radarsat>.

announcement, government proposals to improve Canadian Arctic capabilities have seen little action in reality, as observed in the abandonment of the 1965 initiative to acquire some U.S. Skipjack-class submarines, the 1990 cancellation of the 1985 proposal to construct a Polar 8 class icebreaker and the 1987 intention to build 12 nuclear submarines that was abandoned at the end of the Cold War.<sup>177</sup>

It would be premature to state that history is repeating itself today, but the status of most procurements does not inspire confidence. To make matters worse, recent cuts to Canada's defence budget, which have resulted in a 22% reduction in funding for the Army, have led to a considerable decrease in planned Arctic training.<sup>178</sup> Indeed, increasingly aggressive budget cuts, along with exceptionally high costs of doing business in the North, could ultimately spell disaster for Canada's hopes of Arctic control. A 2013 internal DND planning document by Lieutenant-General Peter Devlin, Canada's senior operational commander, stated that "recent Northern exercises and operations highlight the fact that conduct of these activities can cost from five to seven times more than if they were conducted in southern Canada," and that "the Army will have to limit/reduce the scope of its activities in the North, thus directly impacting on Canada's ability to exercise Arctic Sovereignty."<sup>179</sup>

### **Recommendations**

The preceding look at Canada's Arctic policy and its current and proposed military capabilities has identified a number of concerns as the increasingly accessible Arctic moves closer. By and large, Canada has been proactive in establishing sound

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<sup>177</sup> Nancy Teeple, "A Brief History . . .", 61.

<sup>178</sup> David Pugliese, "Army to scale back Arctic operations because of budget cuts," *The Ottawa Citizen*, last updated 3 March 2013, <http://www.ottawacitizen.com/news/Army+scale+back+Arctic+operations+because+budget+cuts /8042743/story.html>

<sup>179</sup> *Ibid.*

policies which emphasize international cooperation as well as protection of national interests- much like most other Arctic nations. It has also initiated the processes to procure equipment and train its forces to be able to conduct the missions which will be required in the future. These include the fundamental missions of ISR, support to law enforcement, conducting sovereignty and fisheries patrols, and, ultimately being able to defend Canadian territory in the North. Unfortunately, budget cuts and issues with procurement have slowed Canada's response dramatically, and it appears that financial constraints may end up being the single largest threat to Canada's control of the North. In addition to ensuring all current projects receive the financial support required to deliver their capabilities as promised, the following policy recommendations are also provided.

#### Defence Relationships

It is evident that Canada's current and proposed military capability will have serious difficulties in meeting the needs of both Arctic control and support to other departments for law enforcement. The one area in which Canada does have adequate capability is that of air defence, which is directly attributable to Canada's commitment to NORAD and the support of the United States. Given the issues Canada is facing, it would be wise to pursue a more robust allegiance with the U.S. in the form of a broadened NORAD mandate, or even bi-lateral agreements with USNORTHCOM. In almost all cases Canada and the U.S. share their interests, whether it be in relation to economic development, environmental protection, or continental security. As an added benefit, both nations would gain from sharing the financial burden, especially when both are having to

deal with massive budgetary deficits. The results of this cooperation would lead to a joint responsibility for control of North America's Arctic skies and waters.

An expanded NORAD mandate would represent the most simple way to effect this sort of agreement, since the command and control structures are already in place for its core missions of air defence and, since 2006, maritime warning including the maritime approaches and internal waters of both countries.<sup>180</sup> The adoption of the maritime control mandate would necessitate integration of both countries' naval command structures, but the air side could easily be used as a template. Canada would not be coming to the table empty-handed, either. The Radarsat Constellation, AOPS, and the Coast Guard's heavy icebreakers, all represent capabilities the Americans currently lack. Combined with U.S. submarines, UAV's (which could use Radarsat for communications), and the USCG's constabulary capability, a formidable defensive barrier could be enacted. This would also free up Canadian Forces assets to ensure provision of support to other government departments in combating the expanding internal security threats highlighted in chapter 4.

Of course there would be some significant barriers to establishing a joint relationship such as this. First, the maritime boundary dispute over the Beaufort Sea would need to be resolved, which would likely require the United States to finally ratify UNCLOS, as it provides the most recognized arbitration process. If that weren't enough, the disputed status of the Northwest Passage would likely be another serious barrier. Because this represents Canada's primary sovereignty concern, and neither country would

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<sup>180</sup> "About NORAD", NORAD, last accessed 13 March 2013, <http://www.norad.mil/about/index.html>.

be willing to concede, the only foreseeable way forward would be a continuation of the current "agree to disagree" policy. Arguably, a broadened NORAD mandate could in fact strengthen the current policy through more comprehensive MOU's, and help avoid a legal decision entirely, which is in the interest of both countries. Canadian public support would also be a sizeable hurdle, since many Canadians are suspicious of American military power being exercised on or near Canadian soil. The current government's stance against participating in the American missile defense program is ample proof of this. Nevertheless, trust built through NORAD over more than 50 years of military cooperation should help to temper any concerns. In the end, a joint security agreement for the North appears to be the only viable solution to Canada ensuring protection of its vast Arctic region.

#### Canadian Coast Guard

The Canadian Coast Guard's current limitations on use of force and law enforcement are simply unacceptable, given the growing requirements for law enforcement in the North. Since CCG vessels will continue to operate in the Arctic for many months after the Navy will have had to leave due to thickening ice, the Coast Guard must be capable of augmenting Canada's enforcement capabilities, and ultimately be more capable of "guarding" Canada's coasts. Therefore, the recent recommendations of The Canadian International Council are echoed here:

We recommend that the Canadian Coast Guard, currently an arm of the Department of Fisheries, be moved to Public Safety Canada, alongside the

Canadian Border Services, and that it be appropriately armed. The Canadian Coast Guard must be given the capability to literally guard our coasts . . . This is especially true in the Arctic.<sup>181</sup>

Additionally, the future of the Coast Guard's icebreaker fleet should be reviewed with an eye towards replacing or extending its heavy icebreaker capability by 2020. If Canada is serious about developing the potential of the Northwest Passage, icebreaker support will be crucial. Having only one heavy icebreaker provides a single point of failure, which could shorten the open season of the Northwest Passage for shipping, or increase risk to future oil exploitation. Russia is well aware of the importance of icebreakers for its Northern Sea Route and petroleum industry, and is therefore investing heavily in icebreaker capability. Ensuring it maintains at least six heavy icebreakers, Russia is also building the world's largest nuclear icebreaker, scheduled to be completed in 2017.<sup>182</sup> Canada cannot afford to fall behind in this critical capability.

#### Arctic Council

As Canada takes the helm of the Arctic Council this spring, its goals have been laid out. "The overarching theme for Canada's chairmanship will be Development for the People of the North, with sub-themes of Responsible Arctic Resource Development, Safe Arctic Shipping and Sustainable Circumpolar Communities."<sup>183</sup> While some have taken

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<sup>181</sup> "Open Canada: A Global Positioning Strategy for a Networked Age," Canadian International Council (2010), last accessed 20 February 2013, <http://www.onlinecic.org/research/gps>.

<sup>182</sup> Katia Moskvitch, "Russia to build biggest nuclear-powered icebreaker," *BBC News*, last updated 12 September 2012, <http://www.bbc.co.uk/news/technology-19576266>.

<sup>183</sup> Department of Foreign Affairs and International Trade, Press Release: "Minister Aglukkaq Concludes

exception to the fact that environmental concerns did not make the list, these priorities do in fact make strategic sense for Canada. Development of Northern communities will be crucial for Canada's long term exercising of national sovereignty, while the focus on resource development and safe shipping will hopefully lead to multilateral agreements and international standards that can help de-fuse tensions and provide for increased Canadian control over the Northwest Passage if the bid for internal waters status is lost.

Another issue which has been recommended that Canada pursue as chair, is the Arctic Council's ban on military security discussions. As Michael Byers describes in his paper on the topic of Canada's chairmanship,

To date, the Arctic Council has shied away from security issues because of a footnote in the 1996 Ottawa Declaration that reads: "The Arctic Council should not deal with matters related to military security." The footnote was included at the insistence of the United States, which was at that time concerned about the new intergovernmental forum's potential effect on the delicate U.S.-Russian nuclear balance in the region. Today, in quite different circumstances that include a marked decline in military tension as well as a successful track record on the part of the Arctic Council, the member states would be well advised to revisit that decision.<sup>184</sup>

In light of this ban, the Chiefs of Defence of the eight Arctic nations have instead begun annual meetings to share lessons learned, and discuss interoperability in the case of emergency response. Should military tensions rise in the future, however, the Arctic Council would be a more appropriate forum to settle differences, since the Chiefs of

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Successful Visit to Arctic Council States," 25 January 2013, last accessed 17 March 2013, <http://www.international.gc.ca/media/arctic-arctique/news-communiqués/2013/01/25a.aspx?view=d>.

<sup>184</sup> Michael Byers, *Circumpolar Challenges: An Ambitious Agenda for the Arctic Council*, (Ottawa: Rideau Institute, 27 September 2012), 16.



Defence are by no means professional diplomats. The Arctic Council has already set a precedent by enacting the first legally binding treaty on search and rescue, proving that the council works and is taken seriously by its member nations. It is the ideal place to discuss grievances regarding military security, and thus help avoid escalation should disagreements get heated. Maintaining a ban on these discussions is simply counterintuitive.

Though the Canadian Forces will primarily be a supporting agency to other government departments operating in the North, it will be the most active and most crucial. This is because it will provide the intelligence and surveillance capability, the manpower, and the equipment required to accomplish many of the government's tasks. It is also responsible for kinetically defending Canada's territory and its interests, if diplomacy were to fail. It is therefore critical that the CF be given the resources to adequately conduct these missions.

## CHAPTER 7 - CONCLUSION

Only a fool would try to predict where Canada will stand in the Arctic in 2028. Twenty years from now, Canada could have an expanded military presence in the North, major research facilities in the High Arctic, a renewed national commitment to things northern, the icebreaker capacity to patrol the now-open Northwest Passage, vigorous territorial governments in Yukon, the Northwest Territories, and Nunavut that have expanded their activities in and along the Arctic Ocean. Canada could finally emerge as a truly northern nation, committed to the region and determined to assert and preserve Arctic sovereignty in the area . . . Or not.

Coates, et al., *Arctic Front*.<sup>185</sup>

The advent of global warming, combined with technological advancements, are rapidly allowing for exploitation of the vast resources in the North, and as a result, most Arctic nations are scrambling to establish a foothold. The unfortunate second order effect of this increase in activity is that Canada is now facing a number of emerging threats. Though the government would have Canadians believe otherwise, threats to sovereignty are relatively few - namely the disputed ownership of the Beaufort Sea, and the unresolved status of the Northwest Passage. The low number, however, does not diminish their importance. Failure to win these disputes would have substantial economic repercussions, so it is vital that Canada act aggressively to mitigate these risks. In the realm of security, the Northwest Passage dispute represents a substantial threat as well, since Canada could lose its ability to fully control these waters. On top of this, the region is increasingly becoming prey to illegal fishing and the multitude of security threats which the south must deal with, but without an adequate level of surveillance or enforcement capability with which to respond.

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<sup>185</sup> Coates, Lackenbauer, et al, *Arctic Front*, (Toronto: Thomas Allen Publishers, 2008), 189.

As the Arctic states position themselves to take advantage of the bounty which the North is expected to provide, military forces are also moving in to the region in an effort to provide support for development, security for its citizens, and to protect each country's interests from potential aggressors. Though no nation will openly admit to the existence of a military threat, and diplomatic relations in the region have been exemplary, evidence suggests that the Arctic nations are still hedging their bets with military might, just in case diplomacy fails. The result is a massive build-up of military capability in the relatively close-quarters of the Arctic, and Canada is behind the curve.

This paper has provided a series of recommendations - mostly in the areas of policy and diplomacy - which can help mitigate the perceived threats in the North. Stepping away from the government's fear-based rhetoric to focus on international cooperation is the first step to securing control over Canada's Northern waters, and establishing treaties and standards can help protect the environment and limit confusion between states.

As with most things, however, Canada's success in the Arctic will ultimately boil down to money. Canada's fiscal constraints due to its small tax-base have not changed, so the government must revisit its priorities in these economically challenged times. Operating in the Arctic can cost up to seven times what it does in the south, so if Northern development remains one of Canada's top priorities, it had better be willing to write some cheques.

The Canadian Forces have begun a number of projects which will address most capability gaps and allow for proper support of the multitude of government agencies involved in Northern development. Financial support for these projects must continue so they are seen through to delivery and, ideally, the authorities of the Canadian Coast Guard should be enhanced to allow for enforcement operations. Even with these new capabilities, however, the CF will be stretched thin, and could never compete against an aggressor like Russia, should a military threat materialize. It is for this reason that an expanded NORAD mandate is recommended, to include maritime defence, as a way to secure North America's surface and sub-surface environment, like it currently does in the air.

The quote provided above describes a prosperous Northern environment that Canada could realistically achieve in 20 years' time. Unlike previous, failed attempts to invest in the North, now is the time for the government to follow through with its promises and build the foundation for a flourishing, secure region. Enacting the recommendations provided herein can help Canada position itself to secure its interests, develop its vast resources, retain control over its Northern territories, and set the conditions for success.

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