

Archived Content

Information identified as archived on the Web is for reference, research or record-keeping purposes. It has not been altered or updated after the date of archiving. Web pages that are archived on the Web are not subject to the Government of Canada Web Standards.

As per the [Communications Policy of the Government of Canada](#), you can request alternate formats on the "[Contact Us](#)" page.

Information archivée dans le Web

Information archivée dans le Web à des fins de consultation, de recherche ou de tenue de documents. Cette dernière n'a aucunement été modifiée ni mise à jour depuis sa date de mise en archive. Les pages archivées dans le Web ne sont pas assujetties aux normes qui s'appliquent aux sites Web du gouvernement du Canada.

Conformément à la [Politique de communication du gouvernement du Canada](#), vous pouvez demander de recevoir cette information dans tout autre format de rechange à la page « [Contactez-nous](#) ».

CANADIAN FORCES COLLEGE / COLLÈGE DES FORCES CANADIENNES
CSC 33 / CCEM 33

EXERCISE/EXERCICE NEW HORIZONS

**DEFENDING CANADIAN ARCTIC SOVEREIGNTY:
AN EXAMINATION OF PRIME MINISTER HARPER'S ARCTIC INITIATIVES**

By /par

LCol S.W. Moore

This paper was written by a student attending the Canadian Forces College in fulfilment of one of the requirements of the Course of Studies. The paper is a scholastic document, and thus contains facts and opinions, which the author alone considered appropriate and correct for the subject. It does not necessarily reflect the policy or the opinion of any agency, including the Government of Canada and the Canadian Department of National Defence. This paper may not be released, quoted or copied, except with the express permission of the Canadian Department of National Defence.

La présente étude a été rédigée par un stagiaire du Collège des Forces canadiennes pour satisfaire à l'une des exigences du cours. L'étude est un document qui se rapporte au cours et contient donc des faits et des opinions que seul l'auteur considère appropriés et convenables au sujet. Elle ne reflète pas nécessairement la politique ou l'opinion d'un organisme quelconque, y compris le gouvernement du Canada et le ministère de la Défense nationale du Canada. Il est défendu de diffuser, de citer ou de reproduire cette étude sans la permission expresse du ministère de la Défense nationale.

Prime Minister Harper intends to enhance the Canadian Forces (CF) ability to protect northern Canada and respond to threats against Canadian Arctic sovereignty and security.¹ His vision of improving Canada's north

expenditures, the icebreakers. These platforms are a key component of the government's "Canada First" defence approach which entails a promised increase of 5.3 billion dollars towards improving the defence of the Arctic. The paper will include a discussion on the potential suitability of OGD, including the Canadian Coast Guard to address the problem of sovereignty protection. To begin, the historical background of the Canadian approach to defending the Arctic will first be discussed.

CANADIAN ARCTIC SOVERIGNTY- BACKGROUND

Canada's view of Arctic sovereignty and defence has often seen oscillating public and political interest, precipitated in response to a particular event or circumstance. Incidents such as the transit through the North-West Passage by the American tanker Manhattan in 1969 and 1970, and the US Coast Guard Polar Sea Icebreaker in 1985³ brought extensive governmental debates, legislative and legal changes.⁴

The accompanying procurement initiatives consisting of icebreakers⁵ and nuclear submarines⁶ however, eventually waned from governmental interests or funding

³ Government of Canada, "Voyage of the Polar Sea," *Government news release*, 31 July 1985: 85/114.

⁴ Led to Canadian *Territorial Sea Geographical Co-ordinates of 1986* and *Canada's Arctic Waters Pollution Prevention Act*, which was translated into Article 234 of the *United Nations' Convention on the Law of the Sea (UNCLOS)* in 1982. Andrea Charron, "The Northwest Passage in Context," *Canadian Military Journal* 6, no. 4 (Winter 2005-2006): 41-44.

⁵ Initiatives by the Government including the intent to purchase an arctic icebreaker in 1970, again in 1985 with the \$450 million Polar 8 icebreaker both fell victim due to a reassessment of priorities and lack of funding. The Polar class 8 was designed to work year long in the Northwest Passage. John Honderich, *Arctic Imperative: Is Canada Losing the North?* (Toronto: University of Toronto Press, 1987), 78.

priorities over time. In reality, successive governments have historically preferred to minimize presence, and instead commit minimal funding toward the preservation of Arctic sovereignty.⁷ Prior to the end of the Cold War, Canada within the context of its continental defence partnership with the United States, was content to allow American funding to pay for large cost items such as the construction of the Distant Early Warning (DEW) radar line or a northern airport at Iqaluit.⁸

Against this trend the Harper government has again placed a renewed interest in spending to address issue of Arctic sovereignty.⁹ Leading up to the January 2006 election, Mr Harper stressed the belief that “the federal government’s single most important duty is to protect and defend our national sovereignty.”¹⁰ This stated vision

⁶ Similarly the 1987 Defence White Paper stated intent of obtaining a fleet of nuclear submarines, to patrol under the Arctic ice, met a similar cancellation fate. Department of National Defence, *Challenge and Commitment 1987 Defence White Paper* (Ottawa: Minister of Supply and Services, 1987), 53.

⁷ Rob Huebert, “Renaissance in Canadian Arctic Security,” *Canadian Military Journal* 6, no.4 (Winter 2005-2006): 19.

⁸ Canada has instead elected to provide a level of presence and response through lower cost initiatives and less culturally intrusive means such as the Canadian Rangers. These mainly Inuit community patrol groups have provided the main Canadian Forces Arctic presence and situational awareness, although they are mainly restricted to sovereignty patrols within close distances to their communities. Department of National Defence, “JFNA Fact Sheet,” http://www.cfna.forces.gc.ca/aboutus/fact_sheet_e.asp; Internet; accessed 12 January 2007.

⁹ Why then has the Harper government now placed a renewed interest in spending address Arctic sovereignty? According to Robert Huebert, a Canadian sovereignty specialist at the University of Calgary, four factors have contributed to the renewed governmental interest in Canadian Arctic sovereignty and security. These factors include: the attacks of September 11 2001 which drew attention to the terrorism threat within North America; the impact of global warming, increasing the accessibility of the Canadian North to foreigners; the increasing demands for natural resources, producing increased exploration, exploitation and environmental concerns in the North; and finally, a series of widely publicized international incidents that have spurred interest from the political and public arena to push to defend Canadian sovereignty and security. Huebert, “Renaissance in Canadian Arctic Security...”, 27.

¹⁰ Stephen Harper, “Harper Stands up for Arctic Sovereignty,” *Conservative Party Press Release*, 22 December 2005.

however, is not as a clear cut as it may seem. The understanding of the meaning of sovereignty has various nuances.

Traditionally the definition reflected the state's right to exercise jurisdictional control, territorial integrity, and non-interference from outside states. In this light

considering the relationship with the United States. Canada must adopt a convincing protective posture to satisfy the US that its northern flank remains secure.¹⁴

A significant current issue of sovereignty disagreement with the United States surrounds the designation of the North-West Passage. Canada has adopted the legal position¹⁵ that the passage rests in internal historic waters.¹⁶ Canada has stated that a boundary around the entire Arctic Archipelago exists consisting of Straight/Geographic Baselines¹⁷ as shown in figure 1.

Most countries, however, including the United States view the passage as an international strait vice internal historical waters.¹⁸ As recently as November 2006, the US Ambassador David Wilkins reiterated his government's position that "... the North-West Passage is a strait for international navigation, that's been our position and continues to our position."¹⁹

¹⁴ Failing this the United States would quickly exert its own protective measures including increased border security, which would impact gravely on the Canadian economy.

¹⁵ This initiative occurred post the 1985 North-West Passage voyage by the US Coast Guard icebreaker Polar Sea. A straight baseline approach drawing a line around the boundary of the entire Arctic Archipelago was adopted, thereby claiming all land and water territory within to be Canadian. Kyle Christensen, *Arctic Maritime Security and Defence: Canadian Northern Security Opportunities and Challenges*. Technical Report TR 2005/01 (Ottawa: Defence R & D Canada, 2005): 28-40.

¹⁶ Concerning the legality of the situation, arctic researcher Andrea Charron submits that the Northwest Passage is in fact legally considered as Canadian territory and is not the disputed issue. The real legal debate surrounds whether Canada has the right to control which vessels enter the passage. Andrea Charron, "The Northwest passage in Context...", 42.

¹⁷ "...The usage of the arctic land and water by native peoples as one." The External Affairs Minister Mr Clark in describing Canada's position on Canadian Internal waters and territorial Sea announced that "an order in Council establishing straight baselines around the outer perimeter of the Canadian Arctic Archipelago has been signed today and will come into effect on January 1, 1986 Government of Canada, Common Debates, *Routine Proceeding Canadian Sovereignty Government Position*, 10 September 1985, 6463.

¹⁸ Government of Canada, Common Debates. *Routine Proceeding Canadian Sovereignty...*, 6463.

¹⁹ David Jones, "Why the United States will never accept Canadian Arctic Sovereignty," *The Hill Times*, 13 November 2006, 15.

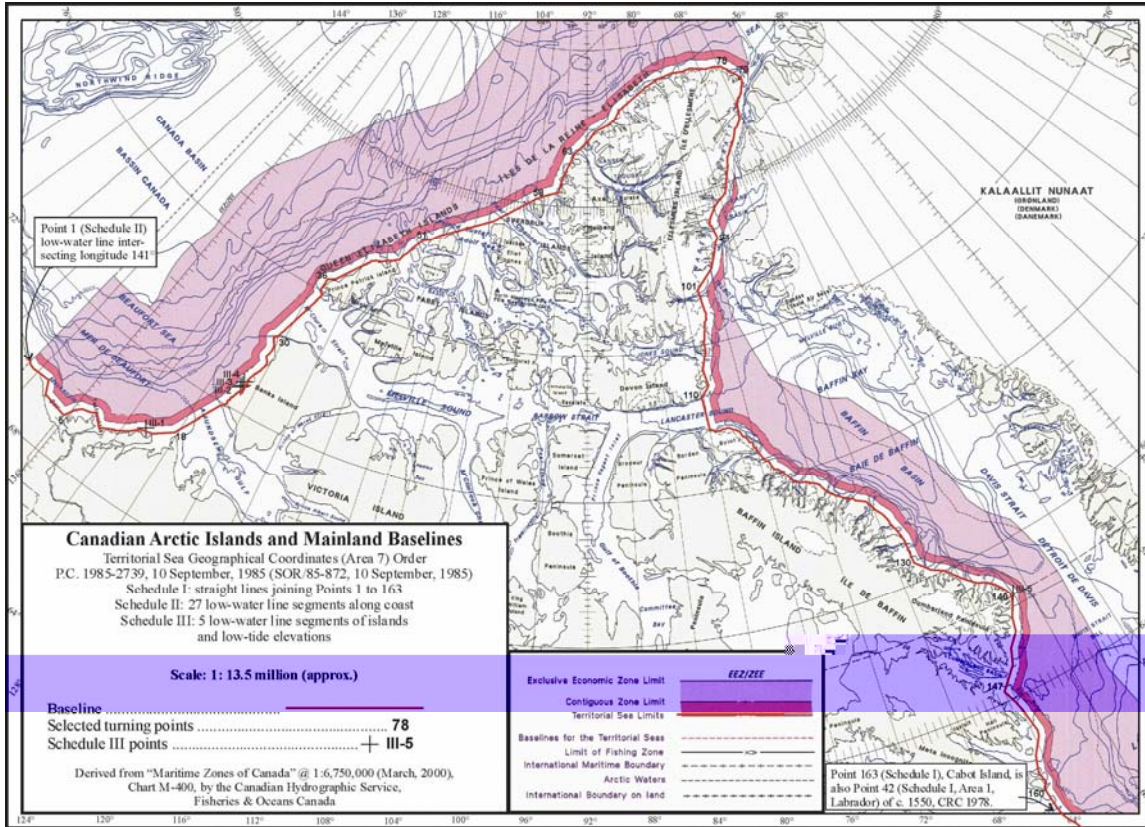


Figure 1. Straight Territorial Baseline - Canadian Arctic Islands

Source: Association of Canada Land Surveyors, "Canadian Arctic Islands and Mainland Baselines," <http://www.acls-aatc.ca/ENGLISH/members-info/offshore%20pics.htm>; Internet; accessed 11 April 2007.

Given this opposition, to strengthen Canada's position in a legal sense, Canada must present more than legal debate as it is recognized that "...the intention to exercise jurisdiction is simply not the same as exercising jurisdiction."²⁰ Canada must have a real

²⁰ Lieutenant-Commander Guy Killaby "Great Game in a Cold Climate, Canada's Arctic Sovereignty in Question," *Canadian Military Journal* 6, no. 4 (Winter 2005-2006): 36.

capability to act and respond to back its legal claims particularly in disputed waters.²¹ In doing so, Canada's legal claims can be strengthened.²²

University of Ottawa law professor Donald McRae, a sovereignty expert, supports the view that Canada has to act domestically with respect to the Arctic to be taken seriously internationally. To him "this means being aware of what is happening within the North-West Passage, for both surface and submerged traffic. Canada must ensure that all passage is conducted with consent and that Canada must be able to take measures of enforcement when vessels do not comply with Canadian law."²³

This view of presence and response capability has clearly been embraced by Prime Minister Harper. In briefing military personnel during a visit to Alert on Ellesmere Island in the summer of 2006, he stated that "sovereignty is not a theoretical concept; you either use it or lose it, ...let me be absolutely clear that your new national government is committed to using."²⁴

With this vision of the need to physically exercise sovereignty protection, the question as to against which threats will next be considered.

²¹Dalhousie University naval affairs expert Peter Haydon has identified three criteria that must be met in order to exercise effective control. These include the requirement to know precisely who is using the waters and why, the requirement to maintain indisputable government authority over those waters, and the requirement to respond rapidly and effectively to violations of the law or threats to security. Donald McRae, "Arctic Sovereignty: Loss by Dereliction?" *Northern Perspectives* 22, no. 4 (Winter 1994-95), <http://www.carc.org/pubs/v22no4/loss.htm>; Internet: accessed 16 November 2006.

²² Based on the willingness to exercise this sovereignty in contentious areas such as the North-West Passage, Canada can better support its legal arguments. John Honderich, *Arctic Imperative...*, 49.

²³ Within this article an interesting parallel is presented comparing the control of passage within southern Canada. If Canada is willing and able to enforce Canadian law in what is viewed as internal passage between Vancouver and Rupert Sound, then the same standard must be applied in laws concerning the environmentally fragile North West passage in the Arctic. Donald McRae, "Arctic Sovereignty? What is at Stake?" *Behind the Headlines* 64, no. 1 (Canadian Institute of International Affairs: The Centre for International Governance Innovation 2007): 20.

²⁴ Paul Chaisson, "PM takes Arctic Sovereignty message to Ellesmere...."

CURRENT AND FUTURE THREATS TO ARCTIC

As assessed in the 2005 Defence Policy Statement, a myriad of threats to Canadian interests and values exist, explaining that “Canadians are now, in some ways more individually threatened than at any time during the Cold War.”²⁵ The policy further describes that the Canadian Arctic faces numerous threats including: environmental/global warming, natural resource exploitation, sovereignty claim challenges, and use as a potential avenue of approach for terrorism and conventional invasion threats.

These threats however, have varying degrees of probability. For instance the risk of conventional invasion is remote. This is due to factors such as the expansive distance via Arctic approaches, the harsh environment and the collective defence posture partnered with the United States (whose national interest includes a secure Canada).

The terrorist threat to North America however is a different issue.²⁶ The events of 11 September 2001 clearly highlighted that Canada is not isolated from terrorism.²⁷ The CF does have a role in fighting against global terrorism in partnership with other military and Canadian security and constabulary agencies.

²⁵ Canada’s International Policy Statement, *A Role of Pride and Influence in the World: Defence* (Ottawa: Department of National Defence, 2005), 1.

²⁶ If Canada’s North is viewed as unprotected to intruders it may provide an avenue of entry for terrorists. “Canada’s unguarded back door, the Arctic, offers easy access for unwanted guests, terrorists and criminals.” Kate Jamet, “Arctic vulnerable to Crime: Expert: Police, Army Have Little Presence,” *Calgary Herald*, 26 January 2002, A13.

²⁷ As resource development and increased accessibility sweeps across Canada’s north, new fears are emerging that terrorists could see the Arctic as the soft underbelly of the continent, and use this as an entry. Comments from Rob Huebert, associate director of the Centre for Military and Strategic Studies. Comments from Rob Huebert, associate director of the Centre for Military and Strategic Studies. Nathan Vanderklippe, “Arctic could be target for terrorism,” *Times (Victoria)*, 19 September 2004, A3.

Environmental and resource exploitation risks are the most directly significant threats to the Arctic itself. The Arctic Climate Impact Assessment (ACIA) has made it clear that the Arctic will continue to warm at an alarming rate.²⁸ The warming of the earth's climate system has been recognized as unequivocal, as is now evident from observations of increases in global air and ocean temperatures, producing widespread melting of snow and ice, and rising mean sea levels.²⁹ Compounding this issue is the fragility of the Arctic ecosystem. The impact of an event such as a major oil spill in a high-latitude cold ocean environment would be even more catastrophic as compared to the south.³⁰

This global warming trend creates the potential for increasing navigability of the North-West Passage. There are however, opposing views related to the timeframe and likelihood of this occurrence. Franklyn Griffiths, professor of political science at the University of Toronto, believes the unpredictability of multi-year ice will create conditions that will leave the North-West Passage route too risky for at least the next 50 years. The multi-year flow of ice in the Arctic Sea circulates in such a way that it pushes the multi-year thick ice into the Canadian Arctic Archipelago. He believes that many other routes including the North-East Passage on the Russian side of the Arctic will be

²⁸ Over the past thirty years, the annual average sea ice has decreased by 8% with this melting trend accelerating. The summer ice has melted more dramatically at 10 -15 %. An additional decline of up to 50% loss of annual ice generation is projected by 2100. Arctic Climate Impact Assessment *Impacts of a Warming Arctic*, ed. Syran Hassol, (Cambridge: Cambridge University Press, 2005), 3, [Http://www.acai.uaf.edu](http://www.acai.uaf.edu); Internet; accessed 15 January 2007.

²⁹ Climate Change 2007. *The Physical Science Basis: Summary for Policy Makers* UNEP Intergovernmental Panel on Climate Change. 10th session of Working Group I of the IPCC, (Paris, IPCC, 2007), 4, [Http://www.ipcc.ch](http://www.ipcc.ch); Internet; accessed 2 March 2007.

³⁰ It is extremely difficult to clean up oil spills that have been incorporated into sea ice. The fragility of the ecosystems and harsh conditions also increase the challenge and difficulty of oil spill clean up in the Arctic. Arctic Climate Impact Assessment, *Impacts of a Warming Arctic...*, 12.

commercially viable well before the North-West Passage is viewed as fit for commercial traffic.³¹ As such, shipping companies with non-hardened ships would not risk potential losses with transiting the chaotic North-West Passage, despite an estimated length reduction of 35% on a voyage between Europe and the Orient.³²

Conversely, Rob Huebert, associate director of the center for military and strategic studies at the University of Calgary, believes that extended summer seasons with ice free navigation will allow heavier shipping usage within as little as the next 25 years.³³

In either scenario, environmental impacts or resource protection within the entire Arctic region will be the main direct threats to the Arctic itself. The suitability of the CF for tasks such as passage and environmental regulation tied to constabulary law enforcement must be questioned. This aspect will be explored further in the last section of the paper.

Threats to Canadian sovereignty also exist as a number of outstanding legal disputes including Hans Island and the Kennedy Channel (figure 2),³⁴ the high Arctic Continental shelf boundary (figures 3, 4),³⁵ the Alaskan/Yukon border extended into the

³¹Franklyn Griffiths, *New illusion of a Northwest Passage*, Paper presented at the Conference on International Energy Policy, the Arctic and the Law of the Sea, 23-26 June, (St Petersburg, 2004)

³² Franklyn Griffiths, "Pathetic fallacy: That Canada's Arctic is on thinning ice," *Canadian Foreign Policy* 11, no. 3 (Spring 2004): 2.

³³ Rob Huebert, "The Shipping News Part II: How Canada's Arctic Sovereignty is on Thinning Ice," *International Journal* 58, no. 3 (Summer 2003): 295.

³⁴ Dispute exists on the maritime boundary between Canada and Denmark, including the ownership of Hans Island in the Kennedy Channel between Greenland and Ellesmere Island. Shown in Figure 2.

³⁵ Resolution of this claim impacts on the allowance of certain rights over the seabed and subsoil, and economic potential therein out to limit of 350NM, shown in Figures 3 and 4.

Beaufort Sea (figure 5),³⁶ and the North-West Passage (figure 6)³⁷ status. Certainly Canadian governmental presence, be it military or other agency, would certainly assist in strengthening these claims.



Figure 2. Location of Hans Island between Greenland and Ellesmere Island.

Source: CBC News, “Denmark, Canada to negotiate over disputed Arctic Island” *CBC News World*, 8 August 2005; <http://www.cbc.ca/world/story/2005/08/08/hans-island-050808.html>; Internet; accessed 11 April 2007.

³⁶ Dispute over the Alaska and Yukon maritime boundary, with the debate impacting on (straight line from border as opposed to 90 degrees from coast line) the ownership of an area within the Beaufort Sea, containing rich oil and gas reserves. Disputed area is shown Figure 5.

³⁷ Dispute over the status of the North-West Passage, as either internal waters or an international straight. Passage shown in Figure 6.

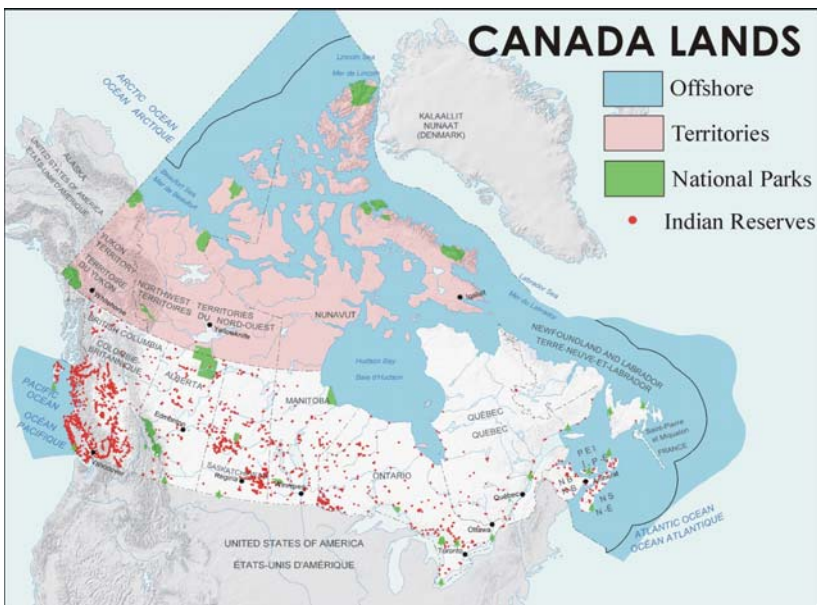


Figure 3. Canada’s Claim of Continental Shelf Territory, for Seabed Exploration.

Source: Inter Governmental Oceanographic Commission, “UNCLOS – A manual on Technical aspects of the United Nations Convention on the Law of the Sea -1982,” ioc3.unesco.org/abelos/index.php?option=com_docman&task=doc_download&gid=127; Internet; accessed 11 April 2007.

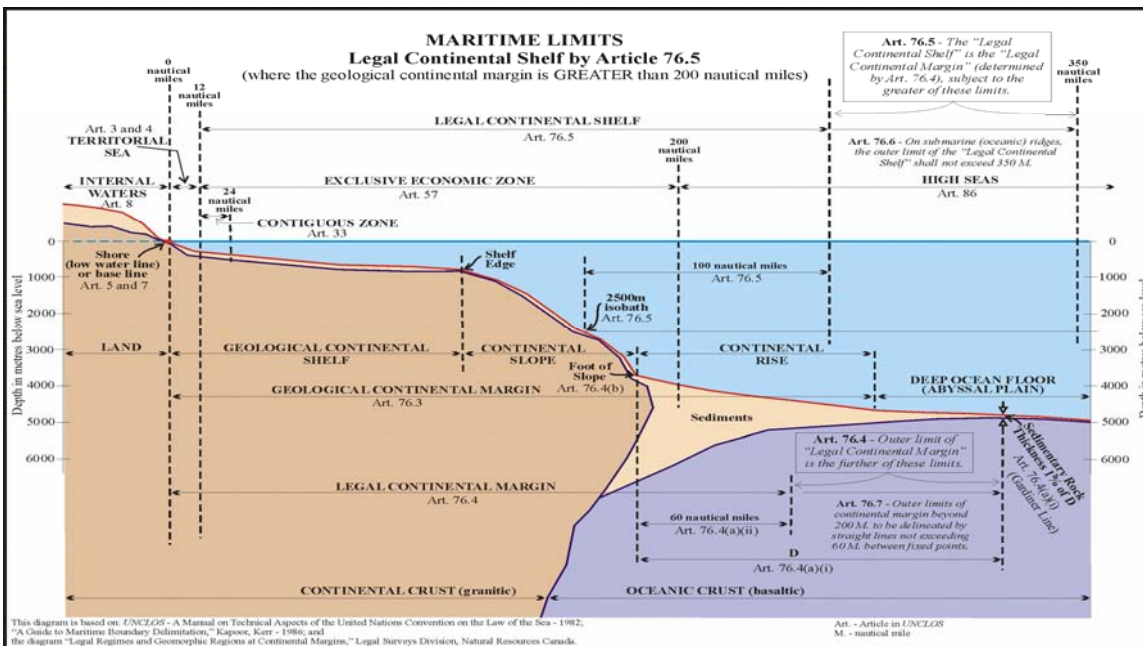


Figure 4. UNCLOS Continental Shelf to 350 NMs.

Source: Association of Canada Land Surveyors, “Canadian Arctic Islands and Mainland Baselines...”, Internet; accessed 11 April 2007.

Beaufort Sea

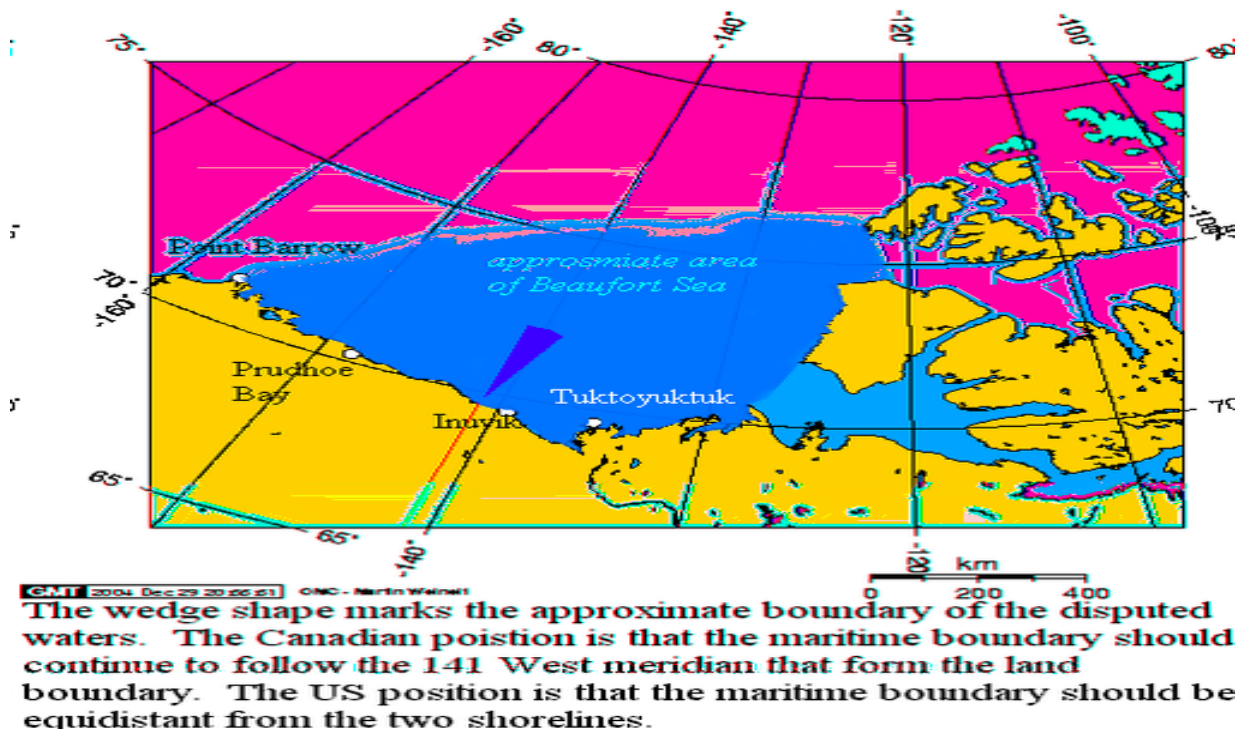


Figure 5. US/Canada Beaufort Sea Dispute.

Source: Wikipedia, "Beaufort Sea," <http://en.wikipedia.org/wiki/Beaufort-Sea>; Internet; accessed 11 April 2007.



Figure 6. North-West Passage Route.

Source: Wikipedia, "Northwest Passage," http://en.wikipedia.org/wiki/Image:Northwest_passage.jpg; Internet; accessed 11 April 2007.

In terms of sub-surface usage of Arctic regions, American and Soviet nuclear powered submarines entered Canadian Arctic waters for operations during the Cold War.³⁸ This intent to use Arctic waters remains of interest to the United States Navy (USN).³⁹ In 2001, during an USN symposium studying the impact of global warming, the USN declared that its operations would increase in the Arctic as the ice recedes.⁴⁰

The challenge of the status of the North-West Passage is not only of interest to the US. The US and China as great and emerging powers are unified in their view regarding the freedom of navigation. As reported in a *Foreign Affairs* article, “Washington and Beijing share a common interest in securing open sea-lanes to ensure the unhindered passage of cargo ships. That both governments want stability in the Malacca and Taiwan straits does not pit them against each other—just the opposite.”⁴¹

Although significant threats challenge Canadian sovereignty these environmental, resource claim, legal claim, and thwarting threats like terrorism do not necessarily dictate a military response. As stated by Senator Meighen, Deputy Chair of the Standing Committee of National Security and Defence, “the threat to our sovereignty comes more from lawyers than from armies... an increased presence is therefore of critical

³⁸ Ron Purver, “The Arctic in Canadian Security Policy, 1945 to the Present” in *Canada’s International Security Policy*, ed. David Hewitt and David Leyton-Brown (Scarborough: Prentice Hall Canada Inc., 1995), 94.

³⁹ In December 2005, there were reports in the Canadian Media that an American submarine may have passed through Canadian Arctic waters during its transit of the Arctic Ocean, possibly without permission from the Canadian Government. Chris Wattie, “U.S. Sub May Have Toured Canadian Arctic Zone,” *National Post*, 19 December 2005, A1.

⁴⁰ Rob Huebert, “Canadian Arctic Security Issues: Transformation in the Post-Cold War Era,” *International Journal* 54, no.2 (Spring 1999): 203.

⁴¹ David Zweig and Bi Jianhai, “China’s Global Hunt for Energy,” *Foreign Affairs* 84, no. 5 (September/October 2005): 37.

importance.”⁴² This presence does not necessarily need to be displayed by military forces, yet in terms of announced Arctic initiatives; improving the military response capability seems to be focus of Prime Minister Harper plans. These plans will next be discussed.

PRIME MINISTER HARPER’S ARCTIC INITIATIVES

As part of the Harper government’s “Canada First” defence commitment, 5.3 billion dollars was pledged over a five year span. The intent was to ensure that the defence of Canada actually becomes, more than words, a CF priority. To support this intent the following measures were promised: the purchase of three heavy naval icebreakers, capable of carrying troops; the creation of a combined military, civilian deep water docking facility in the Iqaluit region (with at least 500 sailors committed to operating these icebreakers and docking facility); the creation of an Arctic sensor system to monitor our northern waters for submarines and other vessels; the replacement of existing fixed wing search and rescue aircraft in Yellowknife; the deployment of new unmanned aerial (UAV) squadrons in CFB Comox and CFB Goose Bay; the upgrade of Aurora aircraft for continuous surveillance of all three coasts; the establishment of a new Arctic army training centre manned with 100 Regular Force personnel in Cambridge Bay; the establishment of a new 650-strong airborne battalion, capable of providing

⁴² Senator Michael Meighen is the Vice-Chair of the Standing committee on National Security and Defence (SCONSAD). Michael Meighen, “Policy Briefing - Canada’s North Canada’s Coast Guard should be guardians of Canada’s Arctic Sovereignty,” *The Hill Times*, 16 October 2006, 18.

emergency response anywhere in the Arctic; and finally the expansion and revitalization of the Canadian Rangers.⁴³

As recently as February 2007, Prime Minister Harper continued to profess his intent to improve the CF Arctic response capability. He expressed that "the first priority of national defence is to assert your sovereign presence on your territory, to be prepared to defend Canadians from threats of all kinds, whether they are major threats of invasion, or simply minor threats of unauthorized surveillance or potential unauthorized economic activity."⁴⁴ Despite high capital costs, the Harper government believes "that Canadians are excited about the government asserting Canada's control and sovereignty in the Arctic. We believe that's one of the big reasons why Canadians are excited and support our plan to rebuild the Canadian Forces."⁴⁵

In looking to succeed where others have failed, Prime Minister Harper expressed that "I'm hoping that years from now, Canada's Arctic sovereignty, military and otherwise, will be, frankly, a major legacy of this government."⁴⁶

A February Leger Marketing poll supported his view that Canadian's value the Arctic and found that 52% believe Canada should assert Arctic sovereignty through international legal channels; 70 % believe that Canada should station troops at strategic

⁴³ Michel Comte, "Conservative Leader Harper Assets Canada's Arctic Claims...",

⁴⁴ Kathleen Harris, "Our True North Strong and Free?" *Toronto Sun*, 23 February 2007. <http://www.torontosun.com/News/Canada/2007/02/23/3657827-sun.html>; Internet; accessed 23 February 2007.

⁴⁵ Kathleen Harris, "Our True North Strong and Free...", accessed 23 February 2007.

⁴⁶ *Ibid.*, accessed 23 February 2007.

northern points; while only 12% say we should simply continue with existing practices.

⁴⁷

Despite this public support, the actual implementation of a committed expenditure plan⁴⁸ has not unfolded in federal budgeting to date.⁴⁹ Prior to discussing the utility of the Harper government's desired capabilities, the current government capabilities will next be reviewed.

CURRENT CANADIAN FORCES STRUCTURE AND LEGAL FRAMEWORK

The current disposition of the CF presence in the North, consists of: the CF Joint Headquarters North, headquartered in Yellowknife comprising of 82 Regular Force, Reserve and Civilian personnel; 440 Transportation Squadron of 46 personnel;⁵⁰ and the 1st Canadian Ranger patrol group consisting of 2860 personnel. The military activities supported on a yearly basis include two "Sovereignty Operations (Army)," two "Northern Patrols (flights of Aurora patrol aircraft)," 10 to 30 "Sovereignty Patrols" close to local communities and one enhanced "Sovereignty Patrol" to a remote areas.⁵¹ For a level of

⁴⁷ The Sun Media-Leger Marketing online poll surveyed a representative national sample of 3,092 adult Canadians from Dec. 27, 2006 to Jan. 5, 2007. The results are considered accurate within 1.8 percentage points, 19 times out of 20. *Ibid.*, accessed 23 February 2007.

⁴⁸ The way ahead, reported by Defence Minister O'Connor, is to develop a Defence Capabilities Plan which was initially to be presented to cabinet in the fall of 2006. Unfortunately, this plan has yet to be approved. Bea Vongdouangchanh, "Policy Briefing -Canada's North, Cabinet Waiting for Defence Department's 10-year Arctic military plan: O'Connor" *The Hill Times*, 16 October 2006, 18.

⁴⁹ Michael Byers, a University of British Columbia Professor and expert in international Law, is disappointed in the government as they have yet to deliver on key promises, and has failed to place funding in their federal budget. Michael Byers, "Policy Briefing-Canada's North. Canadian Government cannot afford to dither on Arctic Sovereignty," *The Hill Times*, 16 October 2006, 22.

⁵⁰ 440 Squadron provides support to the North with 1800 fixed wing flight hours annually.

⁵¹ Canada, Department of National Defence, "JFNA Fact Sheet...", accessed 12 January 2007.

response greater than the available northern assets, the CF would need to utilize assets from southern Canada. Due to location and day to day operational tasking outside the North, these elements would be less prepared to operate in harsh arctic climates.

With a key task of the CF in the North being surveillance, the Department of National Defence is participating in the Polar Epsilon project.⁵² The project “will provide an all-weather, day/night surface observation capability for Canada’s Arctic region,” by using information from Canada’s RADARSAT II satellite.⁵³ By May 2009, RADARSAT II will provide Canada a capability to enable the tracking of surface vessels in Canadian northern waters.⁵⁴

OGDs also provide service to the North. The Canadian Coast Guard provides: icebreaking fleet services in the Arctic, Gulf of St-Lawrence and the Atlantic.⁵⁵ Icebreaking is not a year around service in the Arctic and operates from May to mid October. The Coast Guard aging ice-breaking fleet⁵⁶ contains only one heavy Ice-breaker

⁵² Project Polar Epsilon will provide the capability to receive and process RADARSAT II information, and will distribute the information to the new MSOCs where it will be fused with surveillance data from other sources. Major P.J. Butler, “Project Polar Epsilon: Joint Space-based Wide Area Surveillance and Support Capability.” 31st *International Symposium on Remote Sensing of Environment*, 20 - 24 June, (Saint Petersburg: Russia, 2005), 2.

⁵³ Department of National Defence, News Release, “Project Polar Epsilon will enhance Canada’s Surveillance and Security Capability,” 2 Jun 2005. http://www.forces.gc.ca/site/newsroom/view_news_e.asp?id=1674; Internet; accessed 27 February 2007.

Louis St. Laurent (commissioned in 1969), and four medium vessels *Pierre Radisson* (1978), *Des Groseilliers* (1982), *Henry Larsen* (1987) and *Terry Fox* (1983).⁵⁷

Constabulary services are provided by the RCMP with 57 detachments and 380 personnel. Additionally seven officers of Environment Canada focus on enforcement, environmental emergencies and administration of the Canadian Ice Service using RADARSAT I (moving to RADARSAT II in 2009). OGDs involved to a lesser extent with Arctic sovereignty protection issues include: Citizen and Immigration, CSIS, Transport Canada, Canadian Customs and Revenue Services and Indian and Northern Affairs.⁵⁸

To assist OGDs the CF is bound to a legal framework. The legal authority for the aid to civil power operations comes from the Canadian *Constitution Act*⁵⁹ section 274 to 285 of the *National Defence Act* further amplified in Chapter 23 of the *Queen's Regulations and Orders for the CF*, and Bill C-7 of the *Public Safety Act*.⁶⁰

⁵⁶ Several important factors influence an icebreakers performance. Propulsion Power, Momentum based on speed and displacement (weight and hull shape. To be considered an icebreaker by the US propulsion power must be greater than 10,000 horsepower with a minimum displacement of 6000 Tons. Committee on the Assessment of U.S. Coast Guard Polar Icebreaker Roles and Future Needs, National Research Council, *Polar Icebreaker Roles and US Future Needs: A Preliminary Assessment* (Washington: The National Academies Press), 16. http://books.nap.edu/openbook.php?record_id+11525&page=16; Internet; accessed 29 January 2007.

⁵⁷ Department of Fisheries and Oceans, "Canadian Coast Guard...", accessed 29 January 2007

⁵⁸ Department of National Defence, *Arctic Capabilities Study* (Director General Strategic Planning: file 1948-3-CC4C (DGSP)), 15 June 2000, 5-7.

⁵⁹ Historically, the Legal authority for the CF to take action in the defence of Canada is clearly defined in section 91(7) of the Canadian Constitution. Department of Justice, *Constitution Act, 1867* (Ottawa: Minister of Supply and Services) online at <http://laws.justice.gc.ca/en/const/index.html>; Internet; accessed 29 January 2007.

⁶⁰ Department of National Defence, *National Defence Act*, R.S.C 1985 online at <http://laws.justice.gc.ca/en/N-5/text.html>; Internet; accessed 29 January 2007. Department of National Defence, *Queen's Regulations and Orders for the CF*, online at http://www.admfincs.forces.gc.ca/gr_o/vol1/intro_e.asp; Internet; accessed 29 January 2007. Government of Canada, *The Public Safety Act*, May 2004, online at

As outlined in *Securing an Open Society: Canada's National Security Policy*, the CF is not normally the lead agency in many domestic incidents.⁶¹ Other departments at the Municipal, Provincial and Federal level are the first-responders to most situations.⁶² The CF does not have a standing mandate to enforce the laws of Canada. Although the CF is a responsive partner to assisting other government agencies within Canada, it is not a standing task for the military to be the first responders for items such as terrorist incidents,⁶³ nuclear powered boat escort⁶⁴, and fisheries patrol and boarding.⁶⁵ This is a desirable situation within a liberal democracy such as Canada, which has placed legitimate limits on the ability of the military to take action within the country.⁶⁶

http://www.parl.gc.ca/common/bills_ls.asp?Parl=37&Ses=3&ls=c7; Internet; accessed 29 January 2007.

⁶¹ Privy Council Office, *Securing an Open Society: Canada's National Security Policy*, (Ottawa: Privy Council Office, 2004), 47.

⁶² Assistance to federal and provincial law enforcements agencies is requested by aid to civil power.

⁶³ The response to terrorism is controlled via a chain of events in PSEPC determining if the threat is beyond the RCMP, who then activates a request via the MND for provision of armed assistance by the CF. The authority was transferred from the Federal Solicitor General to PSEPC in 2005. Government of Canada, *The National Counter-Terrorism Plan*, (Ottawa: Solicitor General, 2001).

⁶⁴ For the entry of nuclear power vessels into Canadian Waters the RCMP is ultimately responsible. Coordination and regulations the CF can provide transportation for the escorting RCMP staff. Department of National Defence, *Nuclear Safety Orders and Directives*, (Ottawa: DND: 2006) 63. [Http://www.forces.gc.ca/admie/dgns/NSOD_e.doc](http://www.forces.gc.ca/admie/dgns/NSOD_e.doc); Internet; accessed 29 January 2007.

⁶⁵ For Fisheries patrols, they are normally conducted with Department of Fisheries and Oceans Inspectors embarked. The CF normally provides the transport and infrastructure to support the DFO inspectors. As with any aid to civil power or government use of force can be escalated, but the normal is in law enforcement support to the DFO. Department of National Defence, *CFCD108 Naval Boarding and Force Protection Operations Manual*, (Ottawa: DND: 2004), 1-10. [Http://navy.dwan.dnd.ca/english/dgmpor/dmpor/pubs/CFCD%20108_Operations%20Manual.pdf](http://navy.dwan.dnd.ca/english/dgmpor/dmpor/pubs/CFCD%20108_Operations%20Manual.pdf); Internet; accessed 29 January 2007

⁶⁶ Brad Gladman, "Enabling Appropriate Freedom of Action at the Operational Level: The Legal Authorities for the Conduct of Domestic Operations," Defence R & D Canada Centre for Operational Research & Analysis (Ottawa: file no. DRDC CORA TM 2006-17), 17 May 2006, 12

This legal posture, although preferable, does impact negatively on the potential CF responsiveness within Canada in the new post 9/11 security environment.⁶⁷ Information sharing between departments in matters of security can be difficult. To work within this new security environment⁶⁸ the CF must achieve an appropriate balance and not go too far interfering in other governmental mandates.⁶⁹ Accordingly, CF operations in defence of Canada need to remain focused on task of surveillance and assisting in the control of Canadian territory.⁷⁰

ANALYSIS OF PRIME MINISTER HARPER'S INITIATIVES

The CF has a key role to play in Arctic sovereignty. Given the difference between CF current assets and the government's intent, however, a very significant capability gap exists in the ability to conduct operations in the North. In 1979, Franklyn Griffiths wrote that "... the perennial absence of a workable interdepartmental mechanism for northern

⁶⁷ Brad Gladman, "Enabling Appropriate Freedom of Action at the Operational Level...", 8.

⁶⁸ The CF needs to develop a solid working and response relationship with other government departments. A whole of Government approach to handle domestic threats be they environmental disasters, sovereignty, terrorism, marine surveillance and pandemic disease must be utilized. Post 9/11, the Government of Canada introduced the Marine Transportation Security (Act) to provide security of marine transportation. The MTSA demands vessels over 100GT to report 96 Hours prior to entering Canadian Waters. This allows time to perform a security risk evaluation and screening, to determine if Canada must redirect the vessel. The NORDREG Canada's vessel reporting system for the North has near 100% compliance rate as vessels value the sea ice information provided, will this honour system work as the sea ice continues to melt?

⁶⁹ Brad Gladman, "Enabling Appropriate Freedom of Action at the Operational Level...", iv.

⁷⁰ As suggested by Colonel Guerin a whole of Government/Team Canada approach coupled with a coherent national strategy is needed to deal with the upcoming challenges and opportunities in the Arctic. Colonel D. Guerin, "True North Strong and Free – The Need for a National Strategy and Whole-of Government Approach to Protect Canada's Arctic Interests," (Toronto: Canadian Forces College National Security Studies Course Paper, 2006), 4.

policy-making in Ottawa has served to constrain official interest in an integrated approach to Canada's activity in the circumpolar region."⁷¹ Although improving, this problem still exists today. The CF needs to improve its ability to respond, generate and sustain an Arctic capable force. Situational awareness and effective communications⁷² are vital to trigger this effective response.

The CF and OGDs will need to share intelligence effectively through a shared Common Operating Picture (COP) in order to improve governmental situational awareness, coordination and integration during the planning and execution of Arctic surveillance and control operations. A number of ongoing initiatives such as Polar Epsilon and the Marine Security Operations Centers (MSOC) project will improve this ability to detect, access and response to maritime threats.⁷³ The CF's Maritime Information Management and Data Exchange (MIMDEX) system will also enhance interagency coordination by linking marine data into a shared picture.⁷⁴

⁷¹ Franklyn Griffiths, "A Northern Foreign Policy", *Canadian Institute of International Affairs, Wellesley Papers 7/79* (Toronto: 15 King's College Circle, 1979), 9.

⁷² The high latitude of the Canadian Arctic creates unique problems for communication and space based surveillance systems. High frequency communication and space surveillance systems are adversely affected by solar flares. Geosynchronous satellites (normally used in south do not reach above 73-75 degrees north latitude.

⁷³ MSOC which will build facilities on the Atlantic and Pacific coasts to detect, assess, prevent and respond to marine security threats and manage and integrate the collection of marine information and intelligence, surveillance and reconnaissance data is breaking new ground in interdepartmental and interagency collaboration and should be used as a model for similar activity areas in the North.

⁷⁴ Department of National Defence. "Enhancing the Security of Canada's Marine Transportation Station" *Canada's Navy: News and Information – Issues and Challenges*. 12 January 2004, 8. http://www.navy.forces.gc.ca/mspa_news/news_issues_e.asp; Internet; accessed; 15 February 2007.

Although the Harper government has placed its emphasis on providing Arctic sovereignty protection through military means,⁷⁵ the military is not the only suitable government agency for this task.⁷⁶ A Whole of Government approach based on coherent national strategy must be adopted to deal with the emerging challenges and opportunities in the Arctic. The CF cannot be alone in attempting to safeguard sovereignty and security, particularly as the CF legally is a second responder to many issues.

Recognizing this issue and the new emphasis placed on the Arctic by the Harper government, the CF hosted a Conference on Defence Capabilities for Canadian Arctic Sovereignty, 25 -29 September 2006. The CF Force Development staff gathered all government departments who have issues, presence, and mandates in the North. The intent was to determine what response and tasks would be required of the CF to assist in the Arctic to include surveillance, presence, emergency assistance and support to other OGDs.⁷⁷

⁷⁵ PM Harper is concerned that the lax enforcement by previous governments allowed foreign vessels to enter those waters without permission or even awareness of Canadian Officials. Dene Moore, "Canadian Military will defend claim over Arctic waters: Prime Minister," *Canadian Press*, 13 Aug 2006.

⁷⁶ Arctic solutions will require that all government agencies must work together as no single department has a monopoly on sovereignty and control operation, or has a complete picture of activities, vulnerabilities and threats in the North. Captain (N) P. Avis, "Surveillance and Canadian Maritime Domestic Security". *Canada's Navy: News and Information – Issues and Challenges*. (Canada: Department National Defence, 2004), 12 January 2004; http://www.navy.forces.gc.ca/mspa_news/news_issues_e.asp?category=4&title=14; Internet; accessed 15 February 2004.

⁷⁷ Although still under development as part of the Defence Capabilities Plan, key CF tasks confirmed at the conference include: providing presence in the three territories; building lasting relationship with other OGDs, which play a role in protecting Canada's sovereignty and provide safety and security for Canadians; providing focused presence in areas where Canada's sovereignty is challenged and where security and safety responses will, likely occur; performing surveillance and control of land, air and maritime areas of interest; improve emergency preparedness with OGDs (and in some scenarios with the US and other circumpolar countries) in case of environmental disasters, such as oil spills, maritime or aviation catastrophes or security threats; providing timely response to crisis (environmental, humanitarian assistance, security threats terrorist attacks etc); supporting other OGD in monitoring environmental laws; aiding the civil power; assistance to law enforcement; providing search and rescue by appropriate land, sea, air mechanisms; escorting Fisheries and sovereignty patrols; and providing defence of Northern territories

In considering these tasks compared to Prime Minister Harper's vision, many of his proposed additions would prove valuable. The initiatives of updating search and rescue and patrol aircraft, providing UAVs, creating an arctic training centre, airborne battalion, and expanding the Canadian Rangers⁷⁸ fit within the a reasonable framework of improving the CF defensive and response capabilities within the Arctic.

Additionally, underwater surveillance is an important component of the government's intent. For sovereignty protection Canada should be in a position to monitor activities above, on and beneath the waters of the Arctic Archipelago. It must be questioned, however, what Canada would do with this surveillance data? Unfortunately Canada lacks an Arctic underwater response asset such as a nuclear submarine. The declared intent to purchase nuclear submarines as announced in the Defence White Paper of 1987, failed due to heavy resistance focused on costs and public concern with nuclear power. As such it is unlikely such a program would be resurrected within the conceivable future.

It will also be a challenge to employ listening devices in the North. According to Oran Young the director of the Center for Northern Studies in Wolcott Vermont, Arctic based submarines are peculiarly difficult to detect due to the ambient noise found in the

from conventional attack. Department of National Defence, *Defence Capabilities for Canadian Arctic Sovereignty Conference 25-29 September 2006*. (Ottawa: Canada Command file no. 3000 -1 (J5- Plans 1)), September 2006, 5-10.

⁷⁸ The Rangers allow the military and societal security needs to be addressed in a flexible, inexpensive and culturally inclusive manner. They have the benefit of providing presence and a highly visible expression of Canadian sovereignty in the Arctic, fulfilling a key operational task of the military and the Government. Whitney Lackenbauer, "The Canadian Rangers: A 'Post-modern' Militia that Works," *Canadian Military Journal* 6, no. 4 (Winter 2005/2006): 58.

Arctic which reduces dramatically the effectiveness of acoustics monitoring methods including sonar, while the opaqueness of the ice prevents most visual monitoring.⁷⁹

Despite the lack of under ice capable submarines and technical challenges associated listening devices; the surveillance assets do provide a minimum stance as a worthwhile first step in this underwater environment. Upon discovery of unauthorized intrusion for instance (beneficially, the sub-surface threat is restricted to a known set of countries that own nuclear submarines, as compared to resolving the vastly greater number of future commercial surface traffic), at minimum a diplomatic protest and investigation could be raised as an initial step in expressing Canadian sovereignty.

Similarly, the construction and Operations and Maintenance (O & M) cost of a deep water port in Iqaluit, raises certain concerns. The CF is already burdened with a considerable, dispersed, non-cost effective infrastructure throughout Canada. Adding a northern port to the CF would incur more infrastructure burden with little operational benefit. The Coast Guard has successfully conducted operations in the Arctic for years, without a northern deep water port.

Other aspects must also be considered including the potential negative environmental impact and dredging of a port and the significant negative social impacts of stationing of 500 soldiers plus families in a small northern community of 6,000. Senator Kenny Chair Senate Standing Committee on National Security and Defence does

⁷⁹ Oran Young, "The Age of the Arctic," *Foreign Policy* (Winter 85/86): 162.

not the support the need for military development of a deep water port as it provides little value to remove 100 million from the defence budget to provide this requirement.⁸⁰

The key requirement of the Harper plan involves the procurement of icebreakers.⁸¹ The ability to project and provide year round surface presence is critical as commercial traffic increases. This function however should not be provided by the CF. Icebreaker operations require different navigation and operator expertise as compared to open water. If the Navy is assigned this additional task while maintaining the requirement for sailors to be flexible to serve in and out of Arctic water deployments (to support expeditionary operations and patrol of Canada's Atlantic and Pacific coasts) skill fade will occur, requiring continual retraining. Additionally, the negative impact of increased O&M costs for the CF in maintaining an additional variety of vessel must also be considered when looking at icebreaker ownership. The CF currently does not operate or maintain these platforms, whereas the Coast Guard has the expertise and a fleet of ships which need to be re-vitalized.

⁸⁰ Liberal Senator Colin Kenny is Chair of the Senate Standing Committee on National Security and Defence. Colin Kenny, "Policy Briefing – Canada's North, Defending the Far North: Romance vs Realism," *The Hill Times*, 16 October 2006, 23.

⁸¹ In 1988, Professor Pharand wrote, "I do believe that a Class 8 icebreaker, which would permit us to exercise surveillance over those waters year-round, except for the McClure Strait where you would need a class 10, is the minimum we need" to exercise effective control. Since then, the effects of climate change and increased Arctic marine and air traffic, suggests that a single polar Class 8 icebreaker is probably insufficient, however, this would depend on the actual state of the ice pack. Donat Pharand, *Canada's Arctic Waters in International Law*, (Cambridge: Cambridge University Press, 1988), 178. Ships of Arctic Standard are divided into categories. The categories are based upon the purpose for which the vessel is designed. They are related to the manner in which a ship is designed to break ice, as well as the type or thickness of ice. The basic philosophy is that ships may be operated to their fullest capability within their structural capacity. For a Class 10 or Category 1 a ship which is designed and constructed for the purposes of unrestricted navigation in Canadian Arctic waters; and the management of large ice features. For Class 8 or Category 2 there is a requirement that the ship is fitted with a structural monitoring system that will enable the person in charge of navigation to determine the severity of ice loads during various operations, and if necessary, warn them to reduce the loads during ramming. Transport Canada, "Equivalent Standards for the Construction of Arctic Class Ships." <http://www.tc.gc.ca/MarineSafety/TP/TP12260/menu.htm>; Internet; accessed 11 April 2007.

Senators Kenny and Meighen, Chairs of the Standing Committee of National Security and Defence believe that the Coast Guard should remain the agency responsible for icebreaking with an increased constabulary role as required.⁸² They believe that the military is best suited for other purposes and that the CF and particularly the Navy cannot take of this task without impacting heavily on our ability to respond to other military threats.⁸³

In the 2005 DND Strategic Assessment considering the global threat picture, analyst Mathieu Bussieres discussed the common role of other nations Coast Guards in countering the threats in littoral waters. Many nations employ coast guards for maritime surveillance duties as “these highly flexible forces are well suited for specific tasks like maritime enforcement and sovereignty duties, but can also play other roles that navies are not well suited for, such as search and rescue, protection of the marine environment, and inland navigational surveillance.”⁸⁴

The Canadian Coast Guard could adapt to function as in other countries. James Boutlier, Special Advisor (Policy), Maritime Forces, Pacific Headquarters, Department of National Defence an expert on security approaches by other countries, believes Canada would be best served by expanding the Coast Guards capacity to a more constabulary

⁸² The Standing Committee on National Security and Defence is supportive of most arctic campaign promises raised by PM Harper, less the concept of the provision of Icebreakers to the Canadian Navy, if the threat level becomes one where weapons are needed to enforce Canadian laws, then the Guard should become constabulary and armed.

⁸³ Senator Michael Meighen, “Policy Briefing - Canada’s North Canada’s Coast Guard...”, 18.

⁸⁴ Mathieu Bussieres, *Upcoming Maritime Security Challenges*, Department of National Defence Canada, Directorate of Strategic Analysis Policy Planning Division Policy Group, Strategic Assessment 2005 (Ottawa: Directorate of Strategic Analysis), 82.

role.⁸⁵ Supporting this concept, the former Commissioner of the Canadian Coast Guard John Thomas has expressed that the Coast Guard would be eager to transition to a constabulary role if the proper level of funding and resources were made available for the transition.⁸⁶

The expanding of the Coast Guard role would also bring cost advantages. James Kelly, Fellow, Centre for Foreign Policy Studies, Dalhousie University wrote that “the majority of Coast Guards throughout the world have a policing role...it could spell some economic advantages in the deployment of smaller, more cost effective platforms.” This is echoed by Commodore (retired) Hendel who asserts that “an armed coast guard is a much more cost-efficient means of interdicting vessels of interest close to our shores than the more costly destroyer or frigate”⁸⁷

To estimate cost, the new open ocean US Polar class USCGC Healy costing of 400 million US dollars (460 million dollars Canadian), provides a good benchmark. For ice-breaking in the inland waters of Canadian Arctic Archipelago, the cost would increase,⁸⁸ due to the thicker ice, stronger ship hull requirement.⁸⁹ The Harper

⁸⁵ Senator Colin Kenny Excerpts from 17th report, Senate Committee on National Security and Defence. Canadian American Strategic Review, “Who’s Guarding our Coasts? Here’s a hint: It isn’t the Navy, but we could develop an effective Canadian Coast Guard,” *Canadian Foreign & Defence Policy – Maritime Security* (July 2004). <http://www.sfu.ca/casr/ft-senate2.htm>; Internet; accessed 29 January 2007.

⁸⁶ Canadian American Strategic Review, “Who’s Guarding our Coasts ...”, accessed 29 January 2007.

⁸⁷ *Ibid.*, accessed 29 January 2007.

⁸⁸ Stephen Priestley, “Canada’s Arctic Sovereignty – Iqaluit Deep water Port” *Canadian American Strategic Review* (April 2006). <http://www.sfu.ca/casr/id-igaluitport3.htm>; Internet; accessed 29 January 2007.

⁸⁹ Propulsion power, momentum as a factor the ship’s displacement and hull shape will dictate an icebreakers effectiveness. Peter T. Haydon, “Sea Power and Maritime Strategy in the 21st Century: A Medium Power Perspective”, *Maritime Security Occasional Paper*, no. 10 (Halifax: Dalhousie University Centre for Foreign Policy Studies), 50.

government estimates the cost for three icebreakers and the deep water port would be approximately 2 billion dollars. This sum is likely underestimated by tens of millions.⁹⁰ High cost platforms such as these have evaded previous governments' good intentions. If the cost again becomes prohibitive, a lesser set of only one or two icebreakers should be considered as an initial capability, rather than completely canceling the initiative.

Finally, in proceeding with the year round use of icebreakers, prudent operation of these resources must be observed. To maintain proper Arctic sovereignty stewardship, an Arctic icebreaker impact assessment must be done to explore the actual and potential environmental impacts on marine mammal populations and historic migration routes.⁹¹ Canada has an obligation to protect the traditional culture and livelihood of the Inuit. The harvesting of marine-related resources is of critical importance for the survival of the Inuit, and their traditional way of life is dependent upon these resources. Indeed, Professor Donat Pharand, a leading authority on international law and the Arctic, asserts that Canada has both a moral and legal responsibility to protect the Inuit, as Canada is a signatory to the *International Covenant on Civil and Political Rights*, which obligates Canada to protect ethnic minorities and their culture.⁹²

⁹⁰ Canadian Press, "Tories' ambitious defence plan needs more money," *Canadian Press*, 18 February 2006, http://www.ctv.ca/serclet/ArcicleNews/story/CTVNews/200060218/tory_defence_plan-060218?s_name+&no_ads=; Internet; accessed 15 January 2007.

⁹¹ Such as polar bear and other mammal routes, and on fragile Arctic ecosystems.

⁹² Donat Pharand, *Canada's Arctic Waters in International Law*, (Cambridge: Cambridge University Press, 1988), 177.

CONCLUSION

The intent of this paper was to examine if the approach proposed by Prime Minister Harper's government to defend the Arctic, by adding assets to the CF, is a solution well suited to the task of protecting Canadian sovereignty against current and potential future threats. Most of the intended measures are valid. The concepts of the icebreakers, the deep water port in Iqaluit and the underwater surveillance require further exploration.

To begin, the paper explored the national sovereignty responsibility to protect, exercise and enforce its jurisdiction. The exercising of sovereignty requires responsive capabilities to enforce laws and provide protection against threats. These threats to Canada include environmental/global warming, natural resource exploitation, sovereignty claim challenges, and use as a potential avenue of approach for terrorism and conventional invasion threats. These threats have varying degrees of probability. Constabulary enforcement issues including environmental impacts and nature resource exploitation provide the most significant future threat to the Arctic.

To address these threats and exercise Canadian sovereignty the Harper government intends to: procure icebreakers; establish a deep water port; install underwater surveillance; replace or upgrade aircraft and UAVs; construct an arctic training center; establish an airborne battalion; and finally increase the Canadian Rangers. These measures would greatly increase capability of the government to support response, surveillance and presence in the North.

All initiatives however, are not well matched to the CF role, capability, and legal response capability as a non-constabulary, second responder to most domestic incidents.

The icebreaker capability is vital to express sovereignty but should remain a Coast Guard not CF asset. Considering a Whole of Government approach and threats, the allocation of icebreakers is better situated with the Canadian Coast Guard, to provide an effective governmental sovereignty response. Should budgetary pressures be exerted on icebreaker concept, a reduced number should be procured to at least provide some measure of year round Canadian Arctic surface capability.

The requirement for a deep water port is questioned, faced with other budgetary pressures, it is not a cost effective infrastructure resource for the CF. The underwater surveillance capability, although a good initial step (which should be pursued), is lacking in the supporting enforcement reaction capability such as a nuclear submarine. Underwater surveillance however, even as a minimal capability is preferable to no capability and will allow the government to at least respond diplomatically.

Given the cost estimate exceeding five billion for all government Arctic initiatives it will be interesting to see if the Harper government is successful in executing its plans were other previous governments have failed. Remaining committed to procuring these assets, namely the icebreakers, will be important to future of Canadian sovereignty and economic development as the Arctic as changes due to Global warming continue at a rapid pace.

Bibliography

- Arctic Climate Impact Assessment. *Impacts of a Warming Arctic*. Edited by Sysan Hassol. Cambridge: Cambridge University Press, 2005. <http://www.acai.uaf.edu>: Internet; accessed 15 January 2007.
- Association of Canada Land Surveyors. "Canadian Arctic Islands and Mainland Baselines." <http://www.acls-aatc.ca/ENGLISH/members-info/offshore%20pics.htm>; Internet; accessed 11 April 2007.
- Avis, Captain (N) Peter. "Surveillance and Canadian Maritime Domestic Security." *Canada's Navy: News and Information – Issues and Challenges*. Canada: Department National Defence, 2004, 12 January 2004; http://www.navy.forces.gc.ca/mspa_news/news_issues_e.asp?category=4&title=14; Internet: accessed 15 February 2007.
- Bussieres, Mathieu. *Upcoming Maritime Security Challenges*. Department of National Defence Canada, Directorate of Strategic Analysis Policy Planning Division Policy Group, Strategic Assessment 2005. Ottawa: Directorate of Strategic Analysis.
- Butler, Major P.J. "Project Polar Epsilon: Joint Space-based Wide Area Surveillance and Support Capability." *31st International Symposium on Remote Sensing of Environment*, 20 - 24 June. Saint Petersburg: Russia, 2005.
- Byers, Michael. "Policy Briefing-Canada's North. Canadian Government cannot afford to dither on Arctic Sovereignty." *The Hill Times*, 16 October 2006.
- Canada. Canada's International Policy Statement. *A Role of Pride and Influence in the World: Defence*. Ottawa: Department of National Defence, 2005.
- Canada. Department of Fisheries and Oceans. "Canadian Coast Guard." http://www.ccg-gcc.gc.ca/ice-gla/fleet_e.htm: Internet; accessed 29 January 2007.
- Canada. Department of Justice. *Constitution Act, 1867*. Ottawa: Minister of Supply and Services. <http://laws.justice.gc.ca/en/const/index.html>; Internet; accessed 29 January 2007.
- Canada. Department of National Defence. *Arctic Capabilities Study*. Director General Strategic Planning: file 1948-3-CC4C (DGSP). 15 June 2000.
- Canada. Department of National Defence. *Challenge and Commitment 1987 Defence White Paper*. Ottawa: Minister of Supply and Services, 1987.

- Canada. Department of National Defence. *Defence Capabilities for Canadian Arctic Sovereignty Conference 25-29 September 2006, Ottawa*. Ottawa: Canada Command file no. 3000 -1 (J5- Plans 1). 26 September 2006.
- Canada. Department of National Defence. “Enhancing the Security of Canada’s Marine Transportation Station” *Canada’s Navy: News and Information – Issues and Challenges*. 12 January 2004.
http://www.navy.forces.gc.ca/mspa_news/news_issues_e.asp; Internet: accessed 15 February 2007.
- Canada. Department of National Defence. “JFNA Fact Sheet.”
http://www.cfna.forces.gc.ca/aboutus/fact_sheet_e.asp; Internet; accessed 12 January 2007.
- Canada. Department of National Defence. *National Defence Act, R.S.C 1985*.
<http://laws.justice.gc.ca/en/N-5/text.html>; Internet; accessed 29 January 2007.
- Canada. Department of National Defence. News Release “Project Polar Epsilon will enhance Canada’s Surveillance and Security Capability.” 2 June 2005.
http://www.forces.gc.ca/site/newsroom/view_news_e.asp?id=1674; Internet; accessed 27 February 2007.
- Canada. Department of National Defence. *CFCD108 Naval Boarding and Force Protection Operations Manual*. Ottawa: DND: 2004.
[Http://navy.dwan.dnd.ca/english/dgmp/dmpor/pubs/CFCD%20108_Operations%20Manual.pdf](http://navy.dwan.dnd.ca/english/dgmp/dmpor/pubs/CFCD%20108_Operations%20Manual.pdf); Internet; accessed 29 January 2007.
- Canada. Department of National Defence. *Nuclear Safety Orders and Directives*. Ottawa: DND: 2006. [Http://www.forces.gc.ca/admie/dgns/NSOD_e.doc](http://www.forces.gc.ca/admie/dgns/NSOD_e.doc); Internet; accessed 29 January 2007.
- Canada. Department of National Defence. *Queen’s Regulations and Orders for the CF*.
http://www.admfincs.forces.gc.ca/qr_o/vol1/intro_e.asp; Internet; accessed 29 January 2007.
- Canada. Government of Canada. Common Debates. *Routine Proceeding Canadian Sovereignty Government Position*. 10 September 1985, 6463.
- Canada. Government of Canada. *The Public Safety Act*. May 2004.
http://www.parl.gc.ca/common/bills_ls.asp?Parl.gc.ca/common/bills_ls.asp?Parl=37&Ses=3&ls=c7; Internet; accessed 29 January 2007.
- Canada. Government of Canada. *The National Counter-Terrorism Plan*. Ottawa: Solicitor General, 2001.

- Canada. Government of Canada. "Voyage of the Polar Sea," *Government news release*. 31 July 1985: 85/114
- Canada. Privy Council Office. *Securing an Open Society: Canada's National Security Policy*. Ottawa: Privy Council Office, 2004.
- Canada. Transport Canada, "Equivalent Standards for the Construction of Arctic Class Ships." <http://www.tc.gc.ca/MarineSafety/TP/Tp12260/menu.htm>; Internet; accessed 11 April 2007.
- Canadian American Strategic Review. "Who's Guarding our Coasts? Here's a hint: It isn't the Navy, but we could develop an effective Canadian Coast Guard." *Canadian Foreign & Defence Policy – Maritime Security*. July 2004. <http://www.sfu.ca/casr/ft-senate2.htm>; Internet; accessed 29 January 2007.
- CBC News. "Denmark, Canada to negotiate over disputed Arctic Island." *CBC News World*, 8 August 2005. <http://www.cbc.ca/world/story/2005/08/08/hans-island-050808.html>; Internet; accessed 11 April 2007.
- Canadian Press. "Tories ambitious defence plan needs more money." *Canadian Press*, 18 February 2006. http://www.ctv.ca/serclet/ArcicleNews/story/CTVNews/200060218/tory_defence_plan-060218?s_name+&no_ads; Internet; accessed 15 January 2007.
- Chaisson, Paul. "PM takes Arctic Sovereignty message to Ellesmere." *The Canadian Press*, 13 August 2006.
- Charron, Andrea. "The Northwest Passage in Context." *Canadian Military Journal* 6, no. 4 (Winter 2005-2006): 41- 48.
- Christensen, Kyle. *Arctic Maritime Security and Defence: Canadian Northern Security Opportunities and Challenges*. Technical Report TR 2005/01. Ottawa: Defence R & D Canada, 2005.
- Climate Change 2007. *The Physical Science Basis: Summary for Policy Makers UNEP Intergovernmental Panel on Climate Change. 10th session of Working Group I of the IPCC*. Paris, IPCC, 2007. [Http://www.ipcc.ch](http://www.ipcc.ch); Internet; accessed 2 March 2007.
- Committee on the Assessment of U.S. Coast Guard Polar Icebreaker Roles and Future Needs, National Research Council. *Polar Icebreaker Roles and US Future Needs: A Preliminary Assessment*. Washington: The National Academies Press. http://books.nap.edu/openbook.php?record_id+11525&page=16; Internet; accessed 29 January 2007.

- Comte, Michel. "Conservative Leader Harper Assets Canada's Arctic Claims." *Defense News*, 13 March 2006.
<http://www.defensenews.com/story.php?F=1429085&C=america>: Internet; accessed 16 November 2006.
- Gladman, Brad. "Enabling Appropriate Freedom of Action at the Operational Level: The Legal Authorities for the Conduct of Domestic Operations." *Defence R & D Canada Centre for Operational Research & Analysis*. Ottawa: file no. DRDC CORA TM 2006-17. 17 May 2006.
- Griffiths, Franklyn. "A Northern Foreign Policy." *Canadian Institute of International Affairs*. Wellesley Papers 7/79. Toronto: 15 King's College Circle, 1979.
- Griffiths, Franklyn. *New illusion of a Northwest Passage*. Paper presented at the Conference on International Energy Policy, the Arctic and the Law of the Sea, 23-26 June. St Petersburg, Russia, 2004.
- Griffiths, Franklyn. "Pathetic fallacy: That Canada's Arctic is on thinning ice." *Canadian Foreign Policy* 11, no. 3 (Spring 2004): 1-16.
- Guerin, Colonel Denys. "True North Strong and Free – The Need for a National Strategy and Whole-of Government Approach to Protect Canada's Arctic Interests." Toronto: Canadian Forces College National Security Studies Course Paper, 2006.
- Harper, Stephen. "Harper Stands up for Arctic Sovereignty." *Conservative Party Press Release*, 22 December 2005.
- Harris, Kathleen. "Our True North Strong and Free?" *Toronto Sun*, 23 February 2007.
<http://www.torontosun.com/News/Canada/2007/02/23/3657827-sun.html>;
 Internet; accessed 23 February 2007.
- Haydon, Peter. "Sea Power and Maritime Strategy in the 21st Century: A Medium Power Perspective." *Maritime Security Occasional Paper*, no. 10. Halifax: Dalhousie University Centre for Foreign Policy Studies.
- Honderich, John. *Arctic Imperative: Is Canada Losing the North?* Toronto: University of Toronto Press, 1987.
- Huebert, Rob. "Canadian Arctic Security Issues: Transformation in the Post-Cold War Era." *International Journal* 54, no.2 (Spring 1999): 203
- Huebert, Rob. "Renaissance in Canadian Arctic Security." *Canadian Military Journal* 6, no.4 (Winter 2005-2006): 17-29.
- Huebert, Rob. "The Shipping News Part II: How Canada's Arctic Sovereignty is on Thinning Ice." *International Journal* 58, no. 3 (Summer 2003): 295 -308.

- Inter Governmental Oceanographic Commission. "UNCLOS – A manual on Technical aspects of the United Nations Convention on the Law of the Sea -1982." ioc3.unesco.org/abelos/index.php?option=com_docman&task=doc_download&gid=127; Internet; accessed 11 April 2007.
- Jamet, Kate. "Arctic vulnerable to Crime: Expert: Police, Army Have Little Presence." *Calgary Herald*, 26 January 2002.
- Jones, David. "Why the United States will never accept Canadian Arctic Sovereignty." *The Hill Times*, 13 November 2006.
- Kenny, Colin. "Policy Briefing – Canada's North, Defending the Far North: Romance vs Realism." *The Hill Times*, 16 October 2006.
- Killaby, Lieutenant-Commander Guy. "Great Game in a Cold Climate, Canada's Arctic Sovereignty in Question." *Canadian Military Journal* 6, no. 4 (Winter 2005-2006): 31-40.
- Kusugak, Jose. "Stewarts of the Northwest Passage." *National Post*, 3 February 2006.
- Lackenbauer, Whitney. "The Canadian Rangers: A 'Postmodern' Militia that Works." *Canadian Military Journal* 6, no. 4 (Winter 2005/2006): 49-60.
- McRae, Donald. "Arctic Sovereignty: Loss by Dereliction?" *Northern Perspectives* 22, no. 4 (Winter 1994-95). <http://www.carc.org/pubs/v22no4/loss.htm>; Internet; accessed 16 November 2006.
- McRae, Donald. "Arctic Sovereignty? What is at Stake?" *Behind the Headlines* 64, no. 1 Canadian Institute of International Affairs: The Centre for International Governance Innovation 2007.
- Meighen, Michael. "Policy Briefing - Canada's North Canada's Coast Guard should be guardians of Canada's Arctic Sovereignty." *The Hill Times*, 16 October 2006.
- Moore, Dene. "Canadian Military will defend claim over Arctic waters: Prime Minister." *Canadian Press*, 13 August 2006.
- Pharand, Donat. *Canada's Arctic Waters in International Law*. Cambridge: Cambridge University Press, 1988.
- Philpot, Daniel. "Sovereignty: an Introduction and Brief History." *Journal of International Affairs* 48, no. 2 (Winter 1995): 357.
- Priestley, Stephen. "Canada's Arctic Sovereignty – Iqaluit Deep water Port." *Canadian American Strategic Review*, April 2006. <http://www.sfu.ca/casr/id-iqaluitport3.htm>; Internet; accessed 29 January 2007.

- Purver, Ron. "The Arctic in Canadian Security Policy, 1945 to the Present." *Canada's International Security Policy*, edited by David Hewitt and David Leyton-Brown. Scarborough: Prentice Hall Canada Inc., 1995.
- Vanderklippe, Nathan. "Arctic could be target for terrorism." *Times (Victoria)*, 19 September 2004.
- Vongdouangchanh, Bea. "Policy Briefing -Canada's North, Cabinet Waiting for Defence Department's 10 -year Arctic military plan: O'Connor." *The Hill Times*, 16 October 2006.
- Wattie, Chris. "U.S. Sub May Have Toured Canadian Arctic Zone." *National Post*, 19 December 2005.
- Wikipedia. "Beaufort Sea." <http://en.wikipedia.org/wiki/Beaufort-Sea>; Internet; accessed 11 April 2007.
- Wikipedia. "Northwest Passage." http://en.wikipedia.org/wiki/Image:Northwest_passage.jpg; Internet; accessed 11 April 2007.
- Young, Oran. "The Age of the Arctic." *Foreign Policy* (Winter 85/86): 160 -179.
- Zweig, David and Bi Jianhai. "China's Global Hunt for Energy." *Foreign Affairs* 84. no. 5 (September/October 2005).