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CANADIAN FORCES COLLEGE/ COLLÈGE DES FORCES CANADIENNES
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EXERCISE NEW HORIZONS/EXERCISE NOUVEAUX HORIZONS

**AN ENHANCED MILITARY PRESENCE IN THE NORTHWEST PASSAGE: STILL
OUT OF SIGHT BUT NO LONGER OUT OF MIND**

By/par LCdr WD Rockwell

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The Arctic has been described as the forgotten coast. Known for its harsh and inhospitable environment, ice has always restricted shipping in Canada's Arctic archipelago. Evidence now suggests that the polar ice cap is melting, and that increased accessibility will facilitate regional exploitation. The Northwest Passage, a shipping route through this treacherous region, has long been the subject of a sovereignty dispute between Canada and the United States. In the absence of demonstrated sovereign control, Canada's claim over the passage, as being internal waters, becomes less secure with increased use by foreign vessels. An enhanced Canadian military presence in the region is now required to solidify Canada's claim. Additionally, in response to the increased use of Arctic waters, an enhanced military presence will also provide a means for Canada to fulfill the responsibilities of a littoral state. Canada must now remember that three oceans surround it.

An Enhanced Canadian Military Presence in the Northwest Passage: Still out of Sight but no Longer out of Mind

LCdr W.D. Rockwell

Two forces have traditionally protected Canadian resources and sovereignty in the Arctic. The Canadian government has historically been allied with a much stronger partner - the Arctic ice. Now that the Arctic ice is melting, the government must assume a more prominent role. Quite the opposite is happening however. The military's presence in the Arctic, for example, has been shrinking in recent years. Martin Shadwick, in a recent article, points out that Prime Minister Chretien has let the military's northern profile erode.¹ "Budgetary restrictions, a plethora of resource-devouring overseas commitments, as well as other factors, have essentially eliminated naval deployments in the north, reduced the Army to two tiny sovereignty operations per year, and slashed the Air Force's Northern surveillance patrols to two per year."²

Canada claims sovereignty over a vast northern region that has traditionally been ice-covered year round. The Canadian Arctic archipelago³ is an immense remote area that is virtually uninhabited. The hostile environment of the region has traditionally limited accessibility. If the Arctic ice pack continues to melt, the resultant accessibility will facilitate increased shipping and resource exploitation. Canada must be prepared to address the governmental responsibilities resulting from these probable changes.

¹ Martin Shadwick, "Northern Exposure", *Canadian Military Journal*, VIII No.2 (Summer 2002), p 2.

² *Ibid*, p 3.

³ "Archipelago" means a group of islands, including parts of islands, interconnecting waters and other natural features which are so closely interrelated that such islands, waters and other natural features form an intrinsic geographical, economic and political entity, or which historically have been regarded as such. See: 1982 United Nations Convention on the Law of the Sea – definition of terms.

The military has, as a mandate, the task of protecting Canadian sovereignty⁴. Additionally, the military provides assistance to other government agencies for a variety of roles including fisheries and environmental protection. The aim of this essay, therefore, is to demonstrate that the Canadian government must enhance its military presence in the Northwest Passage.

Before arguing this thesis, a general background of the Canadian Arctic archipelagic region, including the Northwest Passage, will be provided. Canada's sovereignty claim, and the natural resource potential of the region will be introduced briefly before reviewing the existing military presence. Three arguments will be made in support of the thesis. The first argument is that the current conditions in the Arctic region are such that a significant military presence is required to maintain Canadian sovereignty.

The Canadian Arctic is a vast, sparsely populated region. It has a population of only 4,200. North of the Arctic Circle, the population is isolated in small regional communities. For example, the population within a one hundred-kilometre region of Nanisivik⁷ is only 723. Coppermine, as one of the few villages along the Northwest Passage

⁴ 1994 *Defence White Paper* (Ottawa: Department of National Defence, 1994), Ch 4, p.1.

⁵ The Arctic is an area, which spans more than 3 million square kilometers. The population, 199

After
the
1994

route has a population of 1,059.⁸ Further north, Ellesmere Island's⁹ only occupants are the approximately fifty military personnel at Canadian Forces Station Alert.¹⁰

Canadian Arctic marine waters include the Beaufort Sea eastward from the Yukon/Alaska border, all of the Arctic Archipelago, and Foxe Basin, Hudson Bay, Hudson Strait, and James Bay. This area includes approximately 173,000 km of coastline and over 1 million square-kilometers of continental-shelf waters.¹¹ As seen in Figure 1, the Northwest Passage is a navigational route that lies in the middle of the Canadian Arctic. This route provides a potential economic shipping shortcut between Europe and Asia that is 9,000 km shorter than the Panama Canal route and 17,000 km shorter than the route around Cape Horn.¹²

Sovereignty of the Arctic region has been an issue since Britain ceded the unexplored territory to Canada in 1880.¹³ While Canadian sovereignty of the archipelago islands is now accepted as well founded¹⁴, sovereignty over the water between these islands remains disputed. The argument is centred on the assessment of these straits either as being classified as Canadian internal waters, or, as the Americans claim, international waters.¹⁵

⁸ *Canadian Arctic Profiles Indigenous Culture*, [<http://collections.ic.gc.ca/arctic/inuit/copper.htm>], 20 February 2003, p.1.

⁹ Ellesmere Island is six and a half times the size of the province of Prince Edward Island.

¹⁰ CFS Alert is the most northern permanently inhabited settlement in the world. It is situated on the northeastern tip of Ellesmere Island in the Canadian Arctic Archipelago. Its mission is threefold: a. Operate and maintain signals intelligence collection and geolocation facilities in support of Canadian Military Operations, b. Operate and maintain radio HFDF facilities in support of SAR and other ops; and c. Provide support services to DOE weather services and Arctic Researchers, both civilian and military.

¹¹ Harold E. Welch, "Marine Conservation in the Canadian Arctic: A Regional Overview", *Northern Perspectives*, VXXIII (Spring 1995), p. 1

¹² John Falkingham, Dr. Humfrey Melling, and Katherine J. Wilson, "Shipping in the Canadian Arctic: possible climate change scenarios", *Weathering Change: newsletter of the northern climate exchange*, (fall 2002), p 4.

¹³ Elizabeth B. Elliot-Meisel, *Arctic Diplomacy: Canada and the United States in the Northwest Passage* (New York: Peter Lang Publishing, Inc, 1998), pp. 16-17.

¹⁴ In 1971 the then Director-General of the Legal Bureau of the Department of Legal Affairs, emphasised that "Canada is aware of no challenges to its sovereignty over the mainland and islands of the Canadian Arctic".

¹⁵ Superintendent D.R. Barker RCMP, *A Strategy for establishing Canadian Sovereignty and Control over the Arctic Archipelagic Waters*, (National Defence College of Canada: file 355.005 N3, 1983), pp. 7-11.

Despite its austere reputation, the Canadian Arctic is rich in natural resources. The Sverdrup Arctic Basin is a prime example. “One hundred nineteen wells drilled in the Mesozoic structural play of [the] western Sverdrup Basin resulted in one of the technically most successful Canadian petroleum exploration efforts discovering 19 major petroleum fields.”¹⁶ Additionally, there are diamonds, gold and other minerals, and the ice pack contains one of the world’s largest sources of fresh water.

Currently the primary visible military presence in the region is provided by the Canadian Rangers who conduct surveillance patrols in some areas along the Northwest Passage. These patrols, however, consist of snowmobile excursions and are generally limited to the immediate area of the Ranger’s home communities.¹⁷

This background has set the scene for arguing the thesis. The next requirement is to establish that the ice will continue to melt.

¹⁶ Zhoheng Chen, *et al*, “Petroleum potential in western Sverdrup Basin, Canadian Arctic Archipelago”, *Bulletin of Canadian Petroleum Geology*, Vol. 48, No 4 (December 2000), p 323.

¹⁷ Canada, Department of National Defence, “Arctic Capabilities Study”, Director General Strategic Planning, June 2000, pp 8-9.

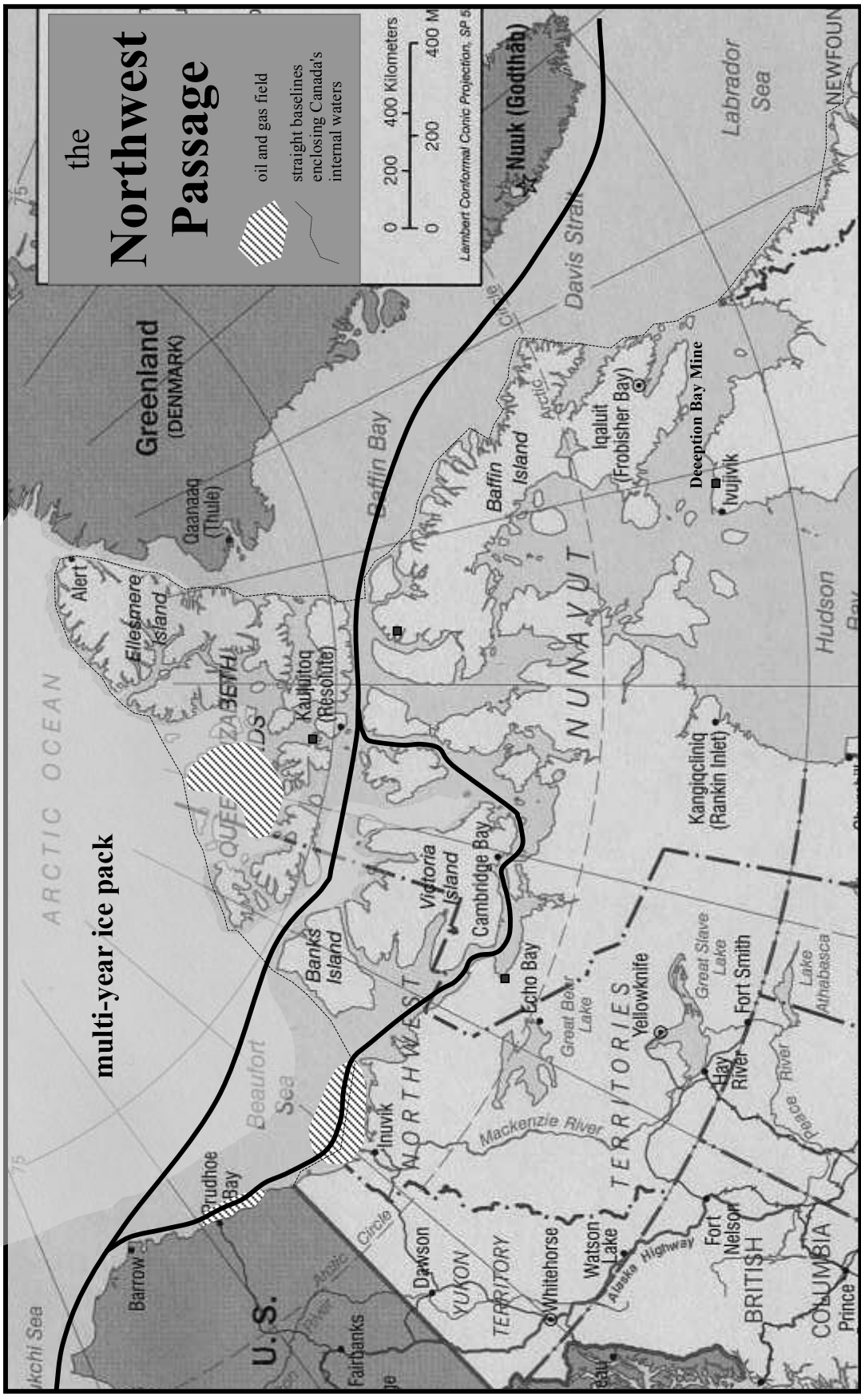


Figure 1 - Northwest Passage Routes and Key Features of the North
 Obtained from: LCDr Newton's CSC 27 Paper: The Navy and the Arctic – The Thaw After the Freeze

There remains little doubt that the ice covering the Canadian Arctic archipelagic region has been melting in recent years. The 100-year historical record from ships and settlements going back to 1900 shows a decline in ice extent starting about 1950 and falling below pre-1950 minima after about 1975. Additionally, the record of submarine ice draft data shows that the ice draft at the end of summer has declined about 40% over a time interval of about thirty-five years.¹⁸ The trend continued in the summer of 2002 when the melting of Arctic Ocean sea ice reached levels not seen in decades. Dr James Morrison explained, “The shrinking fits in with the trend since the late 1970’s and general predictions of global warming.”¹⁹

Other experts do not support the theory of melting ice. Dr Greg Holloway suggests that the ice has moved rather than melted and that this possibility was not adequately considered when sketchy data accumulated from submarines was evaluated. His hypothesis is dismissed, however, by Dr Peter Wadhams²⁰ who points out that data from radar altimetry indicates that the ice has thinned over the whole Arctic.²¹

An area of considerable debate is not so much that the ice is melting, but rather the rate at which the ice will recede in future years. Associated with this discussion is, of course, the question of when and if the Northwest Passage will be open to commercial shipping. According to Dr Igor Poykov, long-term trends of melting ice are small and generally statistically insignificant. He points out that the current warming trend in the Arctic is similar to a warming

¹⁸ United States Arctic Research Commission, “The Arctic Ocean and Climate Change: A Scenario for the US Navy,” [<http://12.1.239.251/arctic/NavyArcticPanel.htm>], pp 7-8.

¹⁹ Kenneth Chang, “Arctic Ice is Melting at Record Level, Scientists Say,” *The New York Times*, [<http://www.commondreams.org/headlines02/1208-03.htm>], Dec 8, 2002.

²⁰ Dr Peter Wadhams works at the Scott Polar Research Institute in Cambridge, UK. He is recognized as one of the world’s leading experts on Arctic ice.

²¹ Jonathan Amos, “Arctic’s big melt challenged,” *BBC News*, [<http://news.bbc.co.uk/1/hi/sci/tech/1311007.stm>], 4 May 2000.

period that occurred between 1920 and 1945.²² Another phenomena adding to the uncertainty of future trends is the, “Great Ocean Conveyor”.²³ Two prominent scientists, Terrence Joyce and Lloyd Keigan support the phenomena and argue that proponents of global warming are ignoring the fact that the Earth’s climate has changed rapidly in the past. They hypothesize that global warming could actually instigate a new ‘Little Ice Age’ in the northern hemisphere.²⁴ Huge rivers of fresh water have appeared in the last thirty years in the North Atlantic, likely a result of melting ice. The freshwater floats on the denser salt water and therefore threatens the conveyor effect. Should the conveyor slow or stop completely, the warming effect of the Gulf Stream will lessen and the North Atlantic region will actually cool.²⁵

Despite these viewpoints, the majority of scientific models indicate that melting ice trends will continue in the Arctic. Both the Geophysical Fluid Dynamics Laboratory and the Hadley Centre have climate models which predict, “...continued decreases in sea-ice thickness and extent (Vinnikov *et al.*, 1999), so that by 2050, sea-ice extent is reduced to about 80% of area it covered at the mid-20th century.”²⁶ Another supportive example is the 2002 study done by NASA indicating, “...perennial sea ice – the floating ice that remains year round near the Arctic Circle – is melting faster than previously thought and could disappear entirely within this century.”²⁷ Professor Peter Wadhams of the Scott Polar Research Institute in Cambridge, UK,

²² The Greening Earth Society, “How Popular Coverage of Melting Arctic Sea Ice Overlooks Relevant Long-term Research,” *Objective Science*, [<http://www.objectivescience.com/articles.ge.ice.sea.htm>], 9 Dec 2002.

²³ The Great Ocean Conveyor is a three dimensional current flow. Thermohaline circulation in the North Atlantic is the main engine powering the Great Ocean Conveyor. The circulation is initiated by the sinking of cold, salty (and therefore denser) waters in the North Atlantic Ocean. This creates a void that pulls warm, salty Gulf Stream waters northward. The Gulf Stream gives up its heat to the atmosphere above the North Atlantic Ocean, and prevailing winds carry the heat eastward to warm Europe.

²⁴ Terrence Joyce, and Lloyd Keigwin, “Are We on the Brink of a New Little Ice Age,” *Ocean and Climate Change Institute*, [http://www.whoi.edu/institutes/occi/abruptclimate_joyce_keigwin.html].

²⁵ Brad Lemley, “The Next Ice Age,” *Discover Magazine*, September 2002, pp 38-39.

²⁶ Intergovernmental Panel on Climate Change, “Climate Change 2001: Working Group II: Impacts, Adaptation and Vulnerability,” [http://www.grida.no/climate/ipcc_tar/wg2/605.htm].

²⁷ U.S. Department of State International Information Programs, “NASA Study Says Arctic Ice May Disappear by the End of Century,” [<http://usinfo.state.gov/topical/global/enviro/latest/02120301.htm>].

conservatively assesses that the Arctic could be virtually ice-free during the summer by about 2080.²⁸

What conclusions can be drawn from the melting ice with respect to a projected availability of the Northwest Passage for commercial shipping? The United States Arctic Research Commission compiled the views of a panel of experts on the subject of expected changes in the Arctic in the 21st Century.²⁹ Although the experts are quick to point out that nothing is guaranteed, one of their expectations is that “ [by 2050] the Northwest Passage through the Canadian Archipelago and along the coast of Alaska will be ice free and navigable every summer by non-icebreaking ships.”³⁰

Although a believer that the ice coverage is shrinking, Mr. Falkingham, the Chief of Operations of the Canadian Ice Service, is cautious of the future viability of commercial shipping through the Northwest Passage. He points out that year-round shipping through the passage will not be possible as the lack of winter sunlight will ensure that there will always be winter ice coverage. He also advises that summer shipping in the passage will likely be dangerous due to the possibilities of drifting pack ice that breaks off from the perennial ice cap.³¹

Despite these restrictions, transits of the Northwest Passage have been increasing exponentially. (See Figure 2) Mr. Falkingham recognizes that usage will continue to go up with the increased accessibility resulting from the melting ice pack. He notes that resource extraction

²⁸ Alex Kirby, “Arctic ice ‘melting from below,” *BBC News*, [<http://news.bbc.co.uk/1/hi/sci/tech/1894740.stm>], Mar 27, p 2.

²⁹ United States Arctic Research Commission, “The Arctic Ocean and Climate Change: A Scenario for the US Navy,” pp 7-8.

³⁰ *Ibid*, p 8.

³¹ John Falkingham, Dr. Humfrey Melling, and Katherine J. Wilson, “Shipping in the Canadian Arctic...,” p 4.

will become less prohibitive financially which, in turn, will increase the demand for cargo into the Arctic.³²

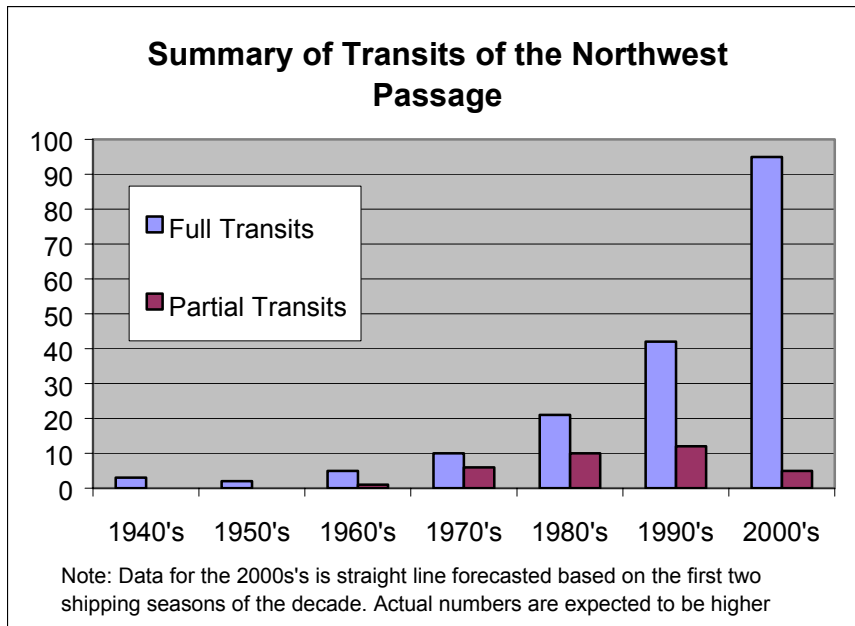


Figure 2: Transits of the Northwest Passage – Courtesy of Brian J. McDonald Operations Officer Canadian Coast Guard, Updated 2003-04-09

The ice that once limited human presence in Canadian Arctic waters is melting. Government has long been able to ignore the Arctic – because relatively few had access. This is no longer the case. Melting ice in the Arctic can no longer be conveniently dismissed because scientists do not agree on the rate of the melt. The fact that must be considered is that virtually all of the scientific community agrees that the melt is happening. Pressure is increasing on the Canadian government to incorporate this reality into government expenditure, as increased regional exploitation will require that government services be expanded. Sovereignty of the Northwest Passage is a prime example of an unresolved issue directly affected by increased use.

³² John Falkingham, “Sea Ice in the Canadian Arctic in the 21st Century,” *NCE Knowledge Site*,

The melting Arctic ice pack and resultant shipping increase has re-kindled the sovereignty debate over Canadian Arctic archipelagic waters. As previously stated, sovereignty³³ of these waters has never been fully resolved. Before illustrating the affect of the changing Arctic on sovereignty, some background is required.³⁴ Simply put, the debate is whether the archipelagic waters are legally recognized either as internal waters or as international waters.³⁵ Canada claims that the waters are internal waters whereas the United States refuses to recognize this claim and characterizes the Northwest Passage as an international strait.

Canada attempted to exert control over these waters by passing the Arctic Waters Pollution Prevention Act in June of 1970. This law was enacted in an effort to establish legal jurisdiction over vessels operating in the Arctic archipelago, but again this was openly disputed by the United States and some Western European countries.³⁶ It was at this time that a military role was planned. The 1971 Defence White Paper assigned the armed forces to defend the “sovereignty and independence” of Canada from “external challenges.”³⁷ Ever since, a strong argument for a military presence in the North has been the requirement to establish Canadian sovereignty. Perhaps the most infamous example was the plan, in the 1987 White Paper, to

[<http://Yukon.taiga.net/knowledge/resources/seice.html>], September 2000, p 1.

³³ As used here, sovereignty is a state’s lawful control over its territory generally to the exclusion of other states, authority to govern in that territory, and authority to apply law there. [<http://www.hawaii-nation.org/sovereignty.html>]

³⁴ Donat Pharand’s book, *Canada’s Arctic waters in international Law*, is suggested as a reference that provides a comprehensive historical background on the legal issues.

³⁵ Internal waters are defined as those found in fresh water lakes, rivers, harbours, waters surrounding coastal islands, and those waters lying inside boundary lines. In such waters, the coastal state has complete sovereignty and control. It can pass whatever laws it wishes to control traffic and, just as importantly, foreign ships do not have the automatic ‘right of innocent passage.’ International waters, often called high seas, include regularly used straits between larger seas or oceans. These waters are open to all traffic, and a coastal state has virtually no power to exercise any kind of national control over them. See: *Arctic Imperative: Is Canada losing the North?*, p 46.

³⁶ Nathaniel French Caldwell, Jr., *Arctic Leverage, Canadian Sovereignty and Security* (New York: Praeger Publishers, 1990), pp 49-50.

³⁷ Nathaniel French Caldwell, Jr., *Arctic Leverage ...*, p 50.

acquire 10 to 12 nuclear attack submarines. Support for this program was primarily in reaction to the American transit of the passage by the *Polar Sea*.³⁸

Legally, Canada continued to push its objective. Canada successfully lobbied for article 234 to be included in the 1982 Law of the Sea Accord.³⁹ This article, known as the ‘Arctic clause’, “...gives to Arctic coastal states the right to ‘adopt and enforce’ laws for the prevention, reduction and control of marine pollution from vessels in ice-covered areas.”⁴⁰ Unfortunately, the United States is not a signatory to the Accord and maintains that the Northwest Passage is an international strait.

On 1 January 1986, the Canadian government announced that it would implement ‘straight baselines’.⁴¹ The implementation of ‘straight baselines’⁴² encloses the Canadian Arctic archipelago and attempts to establish the water landward from the baselines as historical internal waters.⁴³ The United States views this declaration as an illegal claim. Additionally, Canada’s declaration of straight baselines does not follow the etiquette established in the 1982 United Nations Convention on the Law of the Sea.⁴⁴

³⁸ In an overt display of the U.S. policy of freedom of navigation, the USCG Icebreaker *Polar Sea* transited the Northwest Passage in 1985. The US did not formally ask Canada’s permission.

³⁹ Article 234 states: Coastal States have the right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels in ice-covered areas within the limits of the exclusive economic zone, where particularly severe climatic conditions and the presence of ice covering such areas for most of the year create obstructions or exceptional hazards to navigation, and pollution of the marine environment could cause major harm to or irreversible disturbance of the ecological balance. Such laws and regulations shall have due regard to navigation and the protection and preservation of the marine environment based on the best available scientific evidence.

⁴⁰ John Honderich, *Arctic Imperative: Is Canada Losing the North?*, (Toronto: University of Toronto Press, 1987), p. 53.

⁴¹ Elizabeth B. Elliot-Meisel, *Arctic Diplomacy...*, p 149.

⁴² In localities where the coastline is deeply indented and cut into, or if there is a fringe of islands along the coast in its immediate vicinity, the method of straight baselines joining appropriate points may be employed in drawing the baseline from which the breadth of the territorial sea is measured. See: UNCLOS III Article 7.

⁴³ Elizabeth B. Elliot-Meisel, *Arctic Diplomacy...*, p 149.

⁴⁴ 1982 United Nations Convention on the Law of the Sea, Article 7, [<http://xs2.greenpeace.org/~intlwl/lscnts.html>].

Having briefly reviewed the historical issue, the legal crux of the debate will be examined. A literature review reveals that resolution of the dispute essentially boils down to usage. “The ‘functional criterion’, as applied by the International Court in the ‘Corfu Channel Case’ requires that a strait has been a useful route for international maritime traffic, as evidenced mainly by the number of ships using the strait and the number of flags represented, before it can be classified as an international strait.”⁴⁵

Superintendent Barker, of the Royal Canadian Mounted Police, assessed that the status of the Northwest Passage could change as a result of use. Speculating on future status, he stated, “...in the absence of action to subject shipping to clear Canadian control, commercial use of the Northwest Passage by foreign ships will eventually turn it into an international strait.”⁴⁶ Since Barker wrote in 1983, there has been no action to subject shipping to Canadian control⁴⁷. While traffic continues to increase, it is unlikely that it has reached sufficient volume to establish the passage as an international strait. In 1988, Dr. Pharand, a leading authority on international law, assessed that the Northwest Passage failed to meet the functional criterion based on the number of transits to date.⁴⁸ Dr Donald McRae, a professor specializing in international law, concurred with this assessment in 1994, however, he acknowledged that sub-surface transit may impact this assessment if tested in international litigation. He concluded that, “Failure by Canada to exercise its sovereign authority over the waters will diminish the credibility of its claim of sovereignty,

⁴⁵ Donat Pharand, *Canada's Arctic waters in international law*, (Cambridge: Cambridge Universit

and continued and frequent transit of the Northwest Passage, whether by surface or subsurface vessels, could lead to the Passage becoming an [international strait].”⁴⁹

One might think that the Department of National Defence would be capable of monitoring and influencing sub-surface transits of our National waters, but “at present the Navy has no capability to operate with a surface ship or a submarine in the Arctic.”⁵⁰ The mission of the six Canadian Coast Guard vessels operating in the Arctic does not include the projection of Canadian sovereignty nor are they capable of monitoring sub-surface transit. Clearly, this lack of capability hinders Canada’s desire to demonstrate sovereign control.

Two counter arguments can be made to the necessity of demonstrating sovereign control. The first would be the argument that the passage is already legally classified as an internal waterway by virtue of historic title. Mark Gaillard, representing the Department of Foreign Affairs and International Trade, writes that, “The waters of the Arctic Archipelago have been Canada’s internal waters by virtue of historic title.”⁵¹ He bases his position on the fact that the waters have been used by Inuit, now of Canada, since time immemorial.⁵² Dr Peter Haydon of the Centre for Foreign Policy Studies does not share this view. He asserts that “if a state does not maintain the capability to control all activities in the waters under its jurisdiction, it can be seen as tacit acceptance that others can use those waters as they please and without respect for [Canadian] law.”⁵³ Many argue that Canada has been woefully deficient at establishing historical

⁴⁹ Donald McRae, “Arctic Sovereignty: Loss by Dereliction,” *Canadian Arctic Counsel – Northern Perspectives*, Winter 1994-95, [<http://www.carc.org/pubs/v22no4/loss.htm>], p 11.

⁵⁰ Pierre Leblanc, “Canada and the North – Insufficient Security Resources,” *CCS Research Papers*, [http://www.ccs21.org/ccspapers/papers/Leblanc-canada_north.htm], p 2.

⁵¹ Mark Gaillard, “Canada’s Sovereignty in Changing Arctic Waters”, DFAIT: Oceans Environmental and Economic Law Division, Legal Affairs Division, [http://www.taiga.net/nce/circumpolar/Northern_Review_proceedings.pdf], p.188.

⁵² *Ibid*, p 188.

⁵³ 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), p. 74.

precedence. Summing up Canada's historical efforts, Elliot-Meisel writes: "The Canadian government's claims to the water have been nebulous and hesitant at best, timid and irresponsible at worst, and nearly always reactive instead of proactive."⁵⁴ A recent Navy League report agrees - describing the Canadian Arctic as the forgotten coast.⁵⁵ Canada must address these concerns.

A second counter argument to the requirement for an enhanced military is the possibility that increased usage will dictate that the passage be recognized as an international strait, regardless of demonstrated Canadian sovereign control. Control of the passage does not guarantee Canada's position. Effective control is required to solidify a claim, but does not legally establish it in itself. Only time will tell if future usage of the passage establishes recognition of the Northwest Passage as an international strait. As sovereign control is only one of many factors, it is difficult to gauge to what extent it will influence the outcome. It is important to note, however, that demonstrated sovereign control is one of the few factors over which the government has positive control. Enhancing the military presence will support Canada's position.

When Arctic sea ice limited use of the Northwest Passage, time was on Canada's side in the sovereignty dispute. "The feeling was that such passage of time combined with the absence of any real challenge to Canadian authority served only to solidify Canada's perspective [based on historical precedence]."⁵⁶ With traffic increasing in the Northwest Passage, time is no longer on Canada's side. Our ally, the Arctic ice, is losing its strength, and it is now required that the military be used to establish sovereign control.

⁵⁴ Elizabeth B. Elliot-Meisel, *Arctic Diplomacy...*, p 9.

⁵⁵ The Navy League of Canada, "Canada, An Incomplete Maritime Nation," [www.navyleague.ca], 2003, p 9.

⁵⁶ John Honderich, *Arctic Imperative: Is Canada Losing the North...*, p.54.

Having established that an enhanced military is required to support Canada's sovereignty claim over the Northwest Passage, the next area to examine is how the increasing use of the passage, in itself, demands an enhanced military presence. Ironically, an increased presence is required regardless of the outcome of the sovereignty dispute. Use of the Arctic will demand an increased military presence just as usage will influence legal recognition of the waters as being an international strait. The risks of pollution, over-fishing, and terrorism all increase with additional usage. John Falkingham observes, "It is not inconceivable that foreign companies could attempt to illegally exploit Canadian Arctic resources that are no longer protected behind a semi-permanent ice cover."⁵⁷ While the Department of National Defence is not the lead agency, the Canadian military has historically provided support in combating all of these threats. There is nothing to suggest that this would not continue in the Arctic. Where once the requirement for a military was primarily based on protecting sovereignty claims over the Northwest Passage - the requirement is now also strengthened by usage, the very thing that might place Canada's sovereignty claim in jeopardy.

This is not to say that previous justification for a military presence in the Arctic does not apply. Indeed, the justification is more relevant than ever. The difference this time is that the increased potential exploitation of the Arctic requires action be taken in response to issued policy. Instead of debating who should set the rules in the Northwest Passage, focus should be placed on establishing how Canada would be able to enforce them. The requirement for an increased visible military presence in Canada's North has been stated as policy for some time. The greater risk of violation of Canadian Law, posed by increased accessibility to the Arctic, now emphasizes the requirement.

⁵⁷ John Falkingham, "Sea Ice in the Canadian Arctic in the 21st Century," ..., p 2.

Historically, stated policy has not resulted in significant change to the military presence. In the 1971 Defence White Paper, the Government of Canada stated that its first national concern was, "...[the] re-examination [of defence responsibilities] as a result of government decisions to regulate the development of the North in a manner compatible with environmental preservation."⁵⁸ This policy was never implemented. "Despite the precedence of Arctic sovereignty protection stressed in the 1971 White Paper, the Trudeau government supported no new maritime initiatives and seemed satisfied with the statement that the present naval ships cannot operate safely in ice-covered waters, or about 65 degrees north latitude at any time of the year."⁵⁹

The 1987 Defence White paper also provided guidance with respect to Arctic sovereignty. The centerpiece of the White Paper's acquisition proposals was the creation of a 'three ocean navy' to protect sovereignty and security. In the Arctic, the government insisted that the Navy had to be capable of not only monitoring the ships beneath the Arctic waters but also deterring hostile or potentially hostile intrusions. Again, the policy was not fiscally supported and the military presence in the Arctic was not enhanced.

The 1994 White Paper was specific in stating that the Canadian military must be capable of mounting effective responses to emerging situations in our maritime areas of jurisdiction.⁶⁰ Amongst others, these objectives include; fisheries protection, drug interdiction, environmental protection, and the maintenance of a search and rescue capability.

It is worthwhile digressing, for a moment, to discuss the role of other government departments. One could argue that the Solicitor General, the Department of Immigration, and the Department of Fisheries and Oceans should be enhanced vice the military in order to satisfy the

⁵⁸ Department of National Defence, *Defence in the 70s* (Ottawa: Information Canada, 1971), p.1.

⁵⁹ Nathaniel French Caldwell, Jr., *Arctic Leverage ...*, p 51.

increasing government responsibilities in the area. The requirement to enhance these other Departments cannot be disputed. “The numbers of personnel in the Arctic speak for themselves. According to Colonel Leblanc, there are fewer than ten immigration officers in the Arctic and no presence by the Canadian Security Intelligence Service. RCMP resources are stretched thin with less than 20 officers focused on drugs, diamonds and federal issues.”⁶¹ The Canadian Coast Guard is currently in a state of disarray. This is highlighted in the 2003 Navy League Report: “In particular, we are deeply concerned that the Canadian Coast Guard has virtually lost its operational capability.”⁶²

Clearly, the departments that the military support also require enhancement. Providing effective maritime security requires the cooperation and synergy of all the involved departments.⁶³ The focus of this essay, however, concerns the requirement for an enhanced military. Use of the military provides a unique flexibility. In some instances, National Security demands an armed military force. “On its own, a non-military coast guard...would not be able to manage violence should the need arise.”⁶⁴ Capabilities that are required for defence purposes are and will continue to be leveraged to aid other government departments. While the aim of this essay is limited to establishing that an enhanced military presence is required, an examination of some of the options available to the military is available in a June of 2000 Arctic Capabilities

⁶⁰ 1994 Defence White Paper (Ottawa: Department of National Defence, 1994), Chapter 4.

⁶¹ Pierre Leblanc, “Canada and the North – Insufficient Security Resources,” *CCS Research Papers*, [http://www.ccs21.org/ccspapers/papers/Leblanc-canada_north.htm].

⁶² The Navy League of Canada, “Canada, An Incomplete Maritime Nation,”...p 13.

⁶³ Conducting surveillance, maintaining a national presence, law enforcement, and response to incidents at sea are all highly specialized operations in which military forces can play a major but not the only role. Other government department and organizations are involved at just about every level of national security and in the preservation of sovereignty. All these “arms” of government must work with each other in providing a seamless security regime. See: Canada, An Incomplete Maritime Nation, p 11.

⁶⁴ Peter T. Haydon, “Sea Power and Maritime Strategy in the 21st Century: A “Medium” Power Perspective,”...p 74.

Study.⁶⁵ Having discussed the interrelationship with other departments, possible actions available to the government in the face of the increasing requirement will now be examined.

Sovereignty of the Arctic encompasses much more than the historical claim to the Northwest Passage. Judge Alvarez pointed out in the *Corfu Case* that, "...sovereignty confers rights upon States and imposes obligations on them."⁶⁶ Realistically, Canada has consistently failed in meeting its sovereignty obligations in the archipelago, including the waters where sovereignty is not disputed. "To be sovereign at sea a state must be able to control whatever takes place in the waters under its jurisdiction. This applies to the territorial waters within 12 nautical miles (nm) of the shore, to the waters of the 200 nm exclusive economic zone, and to the adjoining areas of the continental shelf."⁶⁷ Even if the Northwest Passage becomes an international strait, Canada still has the obligation to adopt and enforce laws and regulations concerning; safety, pollution, fishing, and customs.⁶⁸

Faced with this increasing requirement, Canada has few options. Maintaining the status quo would be the easiest for the fiscally challenged government. The Department of National Defence opted for this route in the June of 2000 Arctic Capabilities Study: "In acknowledging these trends, one must recognize that these Northern issues must be weighed against other emerging security challenges faced by Canada, and that, while important to monitor, they present no immediate concern to the Canadian Forces."⁶⁹

⁶⁵ Options for an increased Canadian Forces Presence in the Arctic include; inter-government cooperation, situational awareness CFNA HQ, increased CFNA HQ capability, increased ranger activity, increased ranger capability, rapid reaction force-land, rapid reaction force-air, increased aurora patrols, increased CF-18 deployments, ice-capable maritime ships, high altitude long endurance unmanned aerial vehicle, high frequency surface wave radar, rapidly deployable underwater acoustic surveillance system, and space based sensors. See: 2000 Arctic Capabilities Study conducted by the Canadian Directorate of Defence.

⁶⁶ Elizabeth B. Elliot-Meisel, *Arctic Diplomacy*..., p.151.

⁶⁷ Peter T. Haydon, "Sea power and Maritime Strategy in the 21st Century: A "Medium" Power Perspective,"...p 50.

⁶⁸ 1982 United Nations Convention on the Law of the Sea, Article 43.

⁶⁹ Canada, Department of National Defence, "Arctic Capabilities Study,"..., p 11.

All government departments must balance requirements against what is fiscally achievable. Typically, this results in prioritizing requirements and reacting to the most immediate concern. In this case, it does not eliminate the requirement, but only delays it until the risks of not addressing the issue become unacceptable. In the same Arctic Capabilities Study the requirement is summarized, “Canadian Forces activities in the North have decreased over the years and our ability to monitor activity and to respond in an appropriate manner remains limited. This shortcoming is likely to become more significant as activity in the Arctic increases.”⁷⁰

A second option for the Canadian government would be to let the United States monitor and control use of the Northwest Passage. There are emerging trends to suggest that this option is not unimaginable. In response to the September 11th terrorist attack, the Americans established a new command structure. Northern Command, the command responsible for the defense of the American homeland, has an area of responsibility that includes Canada.⁷¹ President Bush has also suggested the harmonization of American, Canadian, and Mexican customs and immigration policies to create a North American security perimeter.⁷² At risk of oversimplification, these developments suggest that United States’ resources are available for Canadian Arctic surveillance.

The United States does not hesitate to use its military to patrol international straits for security reasons,⁷³ and it is evident that America is preparing for future military operations in the Arctic. The United States Arctic Research Commission has identified requirements for the

⁷⁰ Canada, Department of National Defence, “Arctic Capabilities Study,” . . . , p 8.

⁷¹ Jim Garamone, “Northern Command to Assume Defense Duties Oct 1,” *American Forces Information Services News Articles*, [http://www.defenselink.mil/news/Sep2002/n09252002_200209254.html], Sept 25 2002.

⁷² “Fortress North America,” [http://www.mapleleafweb.com/education/spotlight/issue_3/printable.html].

⁷³ “India begins patrolling Malacca Straits,” *The Hindu*, Apr 20, 2002, [<http://www.hinduonnet.com/thehindu/2002/04/20/stories/2002042002901100.htm>].

United States Navy to operate in the Arctic and a recent symposium identified the increased need for a naval presence.⁷⁴ Using Northern Command, in the future, as a means of accessing American capabilities would reduce the requirement for Canada to develop its own capabilities.

It is almost certain that the suggestion of the U.S. Navy patrolling the Northwest Passage would be met with violent objection in most of Canada. As Canadians, we must decide if we are willing to pay the price for sovereign control of our country. The fact of the matter is that a coastal state of a navigable strait has responsibilities under international law.⁷⁵ If Canada is not willing or able to financially assume these responsibilities on its own, then other alternatives will have to be found. The fervour surrounding the transit of the Northwest Passage by the *Polar Sea* would suggest that Canadian's would not prefer this option.

If the Arctic was not changing, the preferred option might well be the status quo. Current and past policy has clearly articulated the requirement to increase the military presence, but the risk of not doing so was acceptable when measured against the cost of providing it. Now that the polar cap is melting an increased Canadian military presence is required if the government desires Canadian sovereign control⁷⁶ over the Northwest Passage – regardless of its status as an international strait. “Neglect of the control of Canadian maritime frontiers will erode the most fundamental national interest of all - territorial integrity and political independence.”⁷⁷

Three arguments have been made in supporting the thesis that Canada must enhance its military presence in the Arctic archipelagic region. The first argument, as a pre-condition, established that the Arctic ice that has historically prevented shipping through the Northwest

⁷⁴ “The Arctic Ocean and Climate Change: A Scenario for the US Navy, United States Arctic Research Commission,” [http:12.1.239.251/arctic/NavyArcticPanel.htm]

⁷⁵ Satya N Nandan, “Funding and managing International Partnerships for the Malacca and Singapore Straits,” [http://www.sils.org/seminar/1999-straits-18.pdf].

⁷⁶ Sovereign control in this instance refers to the ability of Canada to enforce National and/or International Law independent of the use of another country's military assets.

⁷⁷ David VanderZwaag, *Canadian Ocean Law and Policy*, (Canada: Butterworths Canada Ltd, 1992), p 535.

Passage, is melting. Scientists continue to debate the rate that this is occurring, but most predict the Northwest Passage will be ice free, during the summer months, by 2050. One thing is clear, increased accessibility to the Northwest Passage has resulted in more shipping.

Canada has often stated, as policy, that it requires a military presence in the Arctic in order to solidify its sovereignty claim over the Northwest Passage. The second argument within this essay illustrated that increased usage of the passage by other countries will put Canada's legal claim in jeopardy. The posit

Northwest Passage, the risk of not having this capability is also increasing and the requirement for an enhanced Canadian military is greater than ever.

The ice has long kept human intrusions into the passage to a minimum. Now the ice is melting, and use of the Arctic is increasing. Despite Canada's internal waters claim, other countries continue to use the strait and it is possible that international law will legitimize transits under the right of innocent passage. As the sole littoral state of the passage, Canada is faced with the obligation of protecting it. Canada must enhance its military presence in the Northwest Passage.

BIBLIOGRAPHY

BOOKS

- Caldwell, Nathaniel French, Jr., *Arctic Leverage, Canadian Sovereignty and Security*. New York: Praeger Publishers, 1990.
- Elliot-Meisel, Elizabeth B., *Arctic Diplomacy: Canada and the United States in the Northwest Passage*. New York: Peter Lang Publishing, Inc, 1998.
- Griffiths, Franklyn, ed. *Politics of the Northwest Passage*. Canada: McGill-Queen's University Press, 1987.
- Honderich, John. *Arctic Imperative: Is Canada Losing the North?*. Toronto: University of Toronto Press, 1987.
- Pharand, Donat. *Canada's Arctic waters in international law*. Cambridge: Cambridge University Press, 1988.
- VanderZwaag, David. *Canadian Ocean Law and Policy*. Canada: Butterworths Canada Ltd, 1992.
- VanderZwaag, David L., ed, and Lamson, Cynthia, ed. *The Challenge of Arctic Shipping: Science, Environmental Assessment, and Human Values*. Canada: McGill-Queen's University Press, 1990.
- Westermeyer, William E., ed, and Shusterich, Kurt M., ed. *United States Arctic Interests: The 1980s and 1990s*. New York: Springer-Verlag, 1984.

PERIODICALS

- Chen, Zhoheng; Osadetz, Kirk G.; Embray, Ashton F.; Gao, Haiyu; and Hannigan, Peter K. "Petroleum potential in western Sverdrup Basin, Canadian Arctic Archipelago." *Bulletin of Canadian Petroleum Geology*. Vol. 48, No. 4 (December 2000), pp 323-326.
- Falkingham, John; Melling, Humfrey; and Wilson, Katherine J., "Shipping in the Canadian Arctic: possible climate change scenarios." *Weathering Change: newsletter of the northern climate exchange*. (fall 2002), pp 4-5.
- Lemley, Brad. "The Next Ice Age." *Discover Magazine*, September, 2002, pp 34-40.

Shadwick, Martin. "Northern Exposure." *Canadian Military Journal*, VIII No.2 (Summer 2002).

Welch, Harold E., "Marine Conservation in the Canadian Arctic: A Regional Overview." *Northern Perspectives*, VXXIII (Spring 1995), p. 1

OTHER SOURCES

Barker, Superintendent D.R., *A Strategy for establishing Canadian Sovereignty and Control over the Arctic Archipelagic Waters*. National Defence College of Canada: file 355.005 N3, 1983.

Canada, Department of National Defence, "Arctic Capabilities Study." Director General Strategic Planning, June 2000

Canada, Department of National Defence. *Defence in the 70s*. Ottawa: Information Canada, 1971.

Canada, Department of National Defence. *1994 Defence White Paper*. Ottawa: Information Canada, 1994.

Haydon, Peter T., "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.

WEB ARTICLES

Amos, Jonathan. "Arctic's big melt challenged." *BBC News*, [http://news.bbc.co.uk/1/hi/sci/tech/1311007.stm]. May 4 2000.

Canadian Arctic Profiles Indigenous Culture. [http://collections.ic.gc.ca/arctic/inuit/copper.htm].

Chang, Kenneth. "Arctic Ice is Melting at Record Level, Scientists Say." *The New York Times*, [http://www.commondreams.org/headlines02/1208-03.htm]. Dec 8 2002.

Falkingham, John. "Sea Ice in the Canadian Arctic in the 21st Century." *NCE Knowledge Site*. [http://Yukon.taiga.net/knowledge/resources/seice.html]. September 2000.

"Fortress North America." [http://www.mapleleafweb.com/education/spotlight/issue_3/printable.html].

- Gaillard, Mark. "Canada's Sovereignty in Changing Arctic Waters." DFAIT: Oceans Environmental and Economic Law Division, Legal Affairs Division. [http://www.taiga.net/nce/circumpolar/Northern_Review_proceedings.pdf].
- Garamone, Jim, "Northern Command to Assume Defense Duties Oct 1." *American Forces Information Services News Articles*. [http://www.defenselink.mil/news/Sep2002/n09252002_200209254.html]. Sept 25 2002.
- "India begins patrolling Malacca Straits." *The Hindu*. [<http://www.hinduonnet.com/thehindu/2002/04/20/stories/2002042002901100.htm>]. Apr 20, 2002,
- Intergovernmental Panel on Climate Change. "Climate Change 2001: Working Group II: Impacts, Adaptation and Vulnerability." [<http://www.grida.no/climate/ipcc/tar/wg2/605.htm>].
- Joyce, Terrence; and Keigwin, Lloyd. "Are We on the Brink of a New Little Ice Age." *Ocean and Climate Change Institute*, [http://www.whoi.edu/institutes/occi/abruptclimate_joyce_keigwin.html].
- Kirby, Alex. "Arctic ice 'melting from below.'" *BBC News*, [<http://news.bbc.co.uk/1/hi/sci/tech/1894740.stm>]. Mar 27.
- Leblanc, Pierre. "Canada and the North – Insufficient Security Resources." *CCS Research Papers*. [http://www.ccs21.org/ccspapers/papers/Leblanc-canada_north.htm].
- McRae, Donald. "Arctic Sovereignty: Loss by Dereliction." *Canadian Arctic Counsel – Northern Perspectives*. [<http://www.carc.org/pubs/v22no4/loss.htm>]. Winter 1994-95.
- Nandan, Satya N., "Funding and managing International Partnerships for the Malacca and Singapore Straits." [<http://www.sils.org/seminar/1999-straits-18.pdf>].
- The Greening Earth Society. "How Popular Coverage of Melting Arctic Sea Ice Overlooks Relevant Long-term Research." *Objective Science*, [http://www.objectivescience.com/articles.ge_ice_sea.htm]. Dec 9 2002.
- The Navy League of Canada. "Canada, An Incomplete Maritime Nation." [www.navyleague.ca]. 2003.
- United States Arctic Research Commission, "The Arctic Ocean and Climate Change: A Scenario for the US Navy." [<http://12.1.239.251/arctic/NavyArcticPanel.htm>].

U.S. Department of State International Information Programs. "NASA Study Says Arctic Ice May Disappear by the End of Century."
[<http://usinfo.state.gov/topical/global/environ/latest/02120301.htm>].

1982 United Nations Convention on the Law of the Sea, Article 7,
[<http://xs2.greenpeace.org/~intlaw/lscnts.html>].