

Increased Traffic through Canadian Arctic Waters: Canada's State of Readiness

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Résumé

Depuis des décennies, le Canada défend, avec plus ou moins de clarté, son droit souverain de contrôler les activités dans les eaux de l'Arctique au large de sa côte du grand Nord. Depuis 1986, il revendique ces dernières à titre d'eaux intérieures. L'objet de cet article n'est pas d'analyser à fonds la légitimité des revendications du Canada à l'égard des eaux de l'Arctique. Car peu importe l'issue du débat concernant le statut des eaux de l'Arctique dans l'archipel canadien, le Canada, en tant qu'État côtier, se voit de toutes façons attribuer d'importants pouvoirs et prérogatives. Cet article cherche donc à évaluer la volonté et la capacité du Canada de mettre en œuvre et de faire respecter ces droits et devoirs que lui reconnaît le droit international.

Abstract

For decades, Canada has asserted, with varying degrees of clarity, its sovereign right to control activities in the Arctic waters lying off its Northern coast, which since 1986, it claims as internal waters. The purpose of this article is not to analyze in-depth the legitimacy of Canada's claim to the Arctic waters. For irrespective of the outcome of the legal debate regarding the specific status of the Arctic waters in the Canadian archipelago, Canada, as the coastal State, is attributed important powers and prerogatives. This paper therefore investigates Canada's will and ability to enforce those rights and duties conferred upon it by international law.

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It is probably not an exaggeration to say that Canada has always been somewhat lacadaisical in enforcing its rights over the waters of the Canadian Arctic archipelago¹. No doubt this attitude has arisen from the perception that, with the obvious exception of scientific research, the Arctic waters are of little real interest or indeed use to the world, except perhaps for their military importance to the U.S.². And Canadian governments have been prepared, in this regard, to bank on the close and amicable relationship which binds us to our powerful neighbour to the south. However, the Canadian public must soon wake up to the realization that the

¹ *Apart from Greenland, which is almost entirely ice covered (and geologically an extension of the archipelago), the Canadian Arctic Archipelago forms the world's largest high-arctic land area ... Lying [north] of mainland Canada, these islands, the largest group in the world, cover 1.3 million km² with their intervening waters. They contain 6 of the world's 30 largest islands, including BAFFIN i, the fifth largest. They are separated by "channels", some of which would qualify as seas elsewhere in the world. PARRY CHANNEL, which runs from LANCASTER SOUND to M'Clure [Strait] and divides the northern QUEEN ELIZABETH ISLANDS from the rest, is an important part of the NORTHWEST PASSAGE*

The Canadian Encyclopedia, vol. 1, 2nd ed., Edmonton, Hurtig Publishers, 1988, at 109. As Rothwell explains, the Northwest Passage is in reality a series of connected straits passages. "Given the large number of islands that make up the Arctic Archipelago, there exist many potential shipping routes from east to west and west to east. The practical reality, however, is that because of the heavy ice found in these polar waters, and the shallow draught that exists in some of the straits, there are only a handful of viable combinations of straits and channels which can be used to make the complete crossing": Donald R. ROTHWELL, "The Canadian-U.S. Northwest Passage Dispute: A Reassessment", (1993) 26 *Cornell Int'l L.J.* 331, 352. According to Pharand, the Northwest Passage consists of five basic routes: Route 1, through the Prince of Wales Strait; Route 2, through the M'Clure Strait; Route 3, through Peel Sound and the Victoria Strait; Route 3A, through Prince Regent Inlet; Route 5, through the Fury and Hecla Strait; and Route 5A, through the Fury and Hecla Strait and Prince Regent Inlet. However, at present, only Routes 1 and 2, referred to as the northern routes, are known to be suitable for deep-draft ships: Donat PHARAND, *Canada's Arctic Waters in International Law*, Cambridge, Cambridge University Press, 1988, at 189-201 (see map at 190 and 191).

² See for instance: Ted L. McDORMAN, "In the Wake of the 'Polar Sea': Canadian Jurisdiction and the Northwest Passage", (1986) 27 *C. de D.* 623, 645: "The Passage is not a crucial international thoroughfare, it has limited strategic importance, it is used almost exclusively by Canadians ...".

political and strategic landscape, already in a state of flux³, is about to change, and change even more drastically.

The spectre of global warming with its implications for Canadian Arctic waters, as well as the growing issue of the world's limited water reserves, can no longer simply be ignored by Canadian policy makers. A recent study by the Intergovernmental Panel on Climate Change has warned of the alarming pace at which the earth's temperature is rising and the rate at which the polar ice caps are melting⁴. These findings echo the conclusions of other independent scientific studies to which we can no longer turn a blind eye.

The facts are clear. Using data collected by American nuclear submarines in U.S. waters, a Washington University study compared the thickness of the Arctic sea-cover in the years 1958 to 1976 with that in 1993 and 1997⁵. Scientists established that the Arctic ice had thinned by about 40% on average over those years and there was clear evidence that the thinning had actually accelerated in the 1990s. Professors Rothrock, Yu and Maykut comment: "The thinning is remarkable in that it has occurred in a major portion of the perennially ice covered Arctic Ocean ... The present

³ Recent engineering developments in navigation, spurred on by the discovery of natural resources in the Arctic, have led to global interest in the region. Furthermore, as Roth reports, "several basic features of the Arctic waters have made the region critical for strategic military purposes": the fact that the Arctic Ocean is a semi-enclosed sea separated from the waters of the south, that it is shallow, that it has a scoured bottom and is continually ice covered, have all made it an attractive "strategic playground" for the nuclear submarines of the superpowers bordering the region: R.R. ROTH, "Sovereignty and Jurisdiction over Arctic Waters", (1990) 28 *Alta L. Rev.* 845, 846 and 847. See also: Gary LUTON, "Strategic Issues in the Arctic Region", in *Ocean Yearbook* 6, Chicago, University of Chicago Press, 399 at 401 (1986).

⁴ The ICPP was established by the World Meteorological Organization (WMO) and the U.N. Environment Program (UNEP). One of the ICPP's findings is that "[t]he increase in surface temperature over the 20th century for the Northern Hemisphere is likely to have been greater than that for any other century in the last thousand years. Globally, it is very likely that the 1990s was the warmest decade ...": *Synthesis Report of the IPCC Third Assessment Report*, as approved by the XVIIIth Session of the IPCC at Wembley, United Kingdom, 24-29 September 2001 at 4.

⁵ Measuring the ice from points below, the study also compared the numbers for 1993 with those for 1997: Drew ROTHROCK, Yanling YU and Gary MAYKUT, "Thinning of the Arctic Sea-Ice Cover", (1999) 26 *Geophysical Research Letters* 3469.

analysis ... shows a widespread decrease in ice draft [thickness] within the central Arctic Ocean, with the strongest decrease occurring in the eastern Arctic. Not only is the ice cover thinner in the 1990s than earlier, it appears to be continuing to decline ...”⁶.

John Falkingham, former director of the Canadian Ice Service⁷, is on record as stating that signs of the melt in Canadian waters, including the Northwest Passage, are similar to those found in the astonishing U.S. study. “We fully expect that that trend is repeated in the Canadian Arctic as well”, he said in an interview with the *Globe and Mail*.⁸ While the American study measured thinness, Canada has been measuring the shrinkage of the area the ice covers. Using pictures taken by satellite or by air, the Canadian Ice Service has established a long-term decline of about 3% a decade since 1978⁹.

*The kinds of changes we’ve seen and the rate of those changes is alarming. What we’re looking at is the potential that within our lifetimes, say 10 to 20 years, the amount of ice in the Canadian Arctic could decrease to the extent that the Northwest Passage becomes a viable and attractive shipping route.*¹⁰

According to Falkingham, it is instructive to think about how a pond melts in spring. For months, it is covered with shiny ice, then, all at once, a dark spot appears and the ice soon vanishes. In climatological circles, this is known as a “positive feedback mechanism”, which simply means that the process feeds on itself: “When ice is covered with snow, it bounces energy back up into the atmosphere. But when it starts to melt, the black of the water collects all solar radiation and melts even more ice”¹¹. As Falkingham explains, “[t]he less ice there is, the stronger the conditions that melt the ice” adding that this process appears to be unfolding in the Arctic¹².

⁶ *Id.*, 3472.

⁷ The Canadian Ice Service is a branch of the Meteorological Service of Canada.

⁸ A. MITCHELL, “The Northwest Passage Thawed”, *The Globe and Mail*, 5 February 2000, A14.

⁹ In some parts of the Canadian Arctic, that shrinkage has been even more pronounced. According to Falkingham, the area of ice in Hudson Bay has shrunk by more than 30% since 1978. *Id.*

¹⁰ A. MITCHELL, *loc. cit.*, note 8.

¹¹ *Id.*

¹² *Id.*

SHEBA¹³, a long-running research experiment by the U.S. and Canada, provides further evidence of the impact global warming is having on the Arctic. In 1997, the Canadian Coast Guard vessel the *Des Groseillers*, staffed with scientists, was thrust into the oldest, most compact ice of the Beaufort Sea to see how the ice was holding up. Not only did scientists find that the ocean water was warmer in 1997 compared to 1975, the water was also much less salty. Both are considered signs of a dramatic warming trend¹⁴.

While scientists focus on the percentage of thinning or the degree of shrinkage, Professor Huebert, a political scientist at the University of Calgary, worries about other statistics: 12 600 is the number of nautical miles between Asia and Europe using the Panama Canal; 7 900 is the number of miles using a navigable Northwest Passage¹⁵. As Professor Huebert points out, a difference of that magnitude could mean a great deal of money in transportation costs. In fact, as early as 1985, Joe Clark, then Secretary of State for External Affairs, was warning members of the House of Commons that many countries, including the United States and the Federal Republic of Germany, were actively preparing for commercial navigation of the Arctic¹⁶. And there is now growing evidence of foreign commercial interest in the Northwest Passage. In the fall of 1999, a Russian ship pulled a massive floating dry dock all the way through the passage, the first foreign industrial use in the entire history of the Northwest Passage.

For decades, Canada has asserted, with varying degrees of clarity, its sovereign right to control activities in the Arctic waters lying off its Northern coast, which since 1986, it claims as internal waters. To this point in time, Canada's claim has not often been put to the test. However, with a growing number of states already including the Northwest Passage in their strategic economic planning, Canada must equip itself with the means to defend its interests or risk for-

¹³ Surface Heat Budget of the Arctic.

¹⁴ A. MITCHELL, *loc. cit.*, note 8, A14.

¹⁵ *Id.*

¹⁶ *House of Commons Debates*, 10 September 1985, at 6463. He added: "Developments are accelerating in ice science, ice technology, and in tanker design. Several major Japanese firms are moving to capture the market for ice breaking tankers once polar oil and gas come on stream". Mitchell also reports that in recent years, the Japanese have invested millions of dollars on ice research: A. MITCHELL, *loc. cit.*, note 8, A14.

feiting those rights. As Colonel Leblanc, then Canada's military commander of the North, declared in the *Globe and Mail* report: "It's fine to say it's our own back yard. But if we don't watch it, people will go and play in it"¹⁷.

The purpose of this article is not to analyse in-depth the legitimacy of Canada's claim to the Arctic waters. Leading scholars have already discussed the complex legal arguments supporting Canada's position and those of rival claimants. Rather, irrespective of the outcome of the legal debate regarding the specific status of the Arctic waters in the Canadian archipelago, our aim is to focus upon the question of enforcement. Canada must have the will and the means to enforce those rights conferred upon it by international law. Indeed, whether Canada is successful in asserting absolute sovereignty over the Arctic waters as Canadian internal waters or whether a right of foreign transit is found to exist through a Northwest Passage recognized as an international strait, Canada, as the coastal State, is attributed important powers and prerogatives.

To identify the rights Canada may be entitled to enforce, it is necessary to touch on the events which have helped shape Canada's policy, and also to consider the various legal regimes which might apply to the Arctic waters. As noted, the legal arguments for and against each particular regime have already been carefully explored by a number of authorities. What remains to be established however, is an inventory of the specific rights and duties which accrue to Canada under each regime. Having established this catalogue of prerogatives, it will then be possible to investigate Canada's actual ability to enforce such rights and duties.

I. In Search of a Canadian Arctic Policy

A. The Pre-*Manhattan* Period

Relying on the traditional modes of acquiring territorial sovereignty, such as acts of discovery, treaties of cession and effective occupation, Canada has been successful in asserting sovereignty

¹⁷ *Id.*

over the land and islands lying off its northern coast¹⁸. According to Roth, a legal regime based on absolute sovereignty has existed since the 1930s when the last challenges to Canada's title over its Arctic islands were settled (Denmark with respect to Ellesmere Island in 1920 and Norway with respect to the Sverdrup Islands in 1928-30)¹⁹. Indeed, according to the American scholar Howson, "[n]o nation, including the United States, challenges Canada's territorial sovereignty over the ice-covered islands of the Arctic archipelago"²⁰. Rather, the controversy surrounding Canada's claim in the Arctic has centered on the legal status of the channels and straits that cut between the islands.

Attention only began to shift to the waters of the Arctic once ownership of the lands had been resolved. Although some advances were made in developing a Canadian policy during the 1940s and 50s, for the most part the law pertaining to the waters remained unclear and uncertain. In 1957, following an easterly crossing of the Northwest Passage by three U.S. ships, Prime Minister St. Laurent declared to the House of Commons that "the Canadian government considers that these are Canadian territorial waters"²¹. However, this one time statement was not affirmed until a more specific claim was advanced by the Canadian government in the 1970s²². Indeed until the mid 1960s, the only law applicable to the Canadian Arctic waters was the implicit definition of a three mile territorial sea in the *Criminal Code*,²³ supplemented by a definition of "territorial waters" in the *Coastal Fisheries Protection Act*.²⁴

¹⁸ For a historical perspective to territorial sovereignty in the Canadian Arctic, see: I.L. HEAD, "Canadian Claims to Territorial Sovereignty in the Arctic Regions", (1963) 9 *McGill L.J.* 200, 210; R.S. REID, "The Canadian Claim to Sovereignty over the Waters of the Arctic", (1974) 12 *Can. Y.B. Int'l L.* 111, 112-114.

¹⁹ R.R. ROTH, *loc. cit.*, note 3, 851. See also: R.S. REID, *loc. cit.*, note 18, 114.

²⁰ N.C. HOWSON, "Breaking the Ice: The Canadian-American Dispute over the Arctic's Northwest Passage", (1988) 26 *Colum. J. Transnat'l L.* 337 at 346.

²¹ *House of Commons Debates*, 6 April 1957, at 3186.

²² See discussion below.

²³ *Criminal Code of Canada*, S.C. 1953-54, c.51, s. 420.

²⁴ *Coastal Fisheries Protection Act*, S.C. 1953, c. 15, s. 2(6). See: J.B. MCKINNON, "Arctic Baselines: A Litore Usque ad Litus", (1987) 66 *Can. Bar Rev.* 790, 797.

During this same period, the United States adopted a different approach, refusing to make any claims over the Arctic waters²⁵. It preferred, instead, to exploit the Arctic region in its entirety, regarding it as *res communes*, that is, the property of all subject to the acquisition and appropriation of none²⁶. This policy reflected the United States' enduring commitment to the concepts of freedom of the seas and navigation. Indeed, the United States has consistently fought against "the creeping offshore jurisdictional expansionism of coastal states" to the point, according to McDorman, that it has become almost a reflex action²⁷. Thus, in the absence of any clear policy on the part of the Canadian government, and in light of U.S. opposition to all and any territorial claims, the legal status of the waters was never satisfactorily resolved.

B. The *Manhattan* Crossing

An opportunity for Canada to clearly assert its claim over the waters of its Arctic archipelago arose over the *Manhattan* incident in September 1969. The *Manhattan*, an American icebreaking oil tanker, successfully completed an easterly crossing of the Northwest Passage and "touched off the first major clash between Canada and the United States over the Arctic waters"²⁸. While the purpose of the voyage was innocent enough, it did spark concern over the potential for massive oil spills in the delicate Arctic environment²⁹. According to Rothwell, this anxiety, combined with the disturbing realization that Canada's legal position regarding the Northwest Passage and the waters of the Canadian Arctic had not in fact been clearly established, "allowed the *Manhattan's* voyage through these

²⁵ "The U.S. believed that no state could or should claim water or ice as territory": L. KUTNER, "The Arctic Ocean: A Contest of Sovereignty", (1983) 8, no. 5 *The Common Law Lawyer* 1, 6.

²⁶ *Id.* Brownlie explains that the high seas are commonly described as *res communis omnium*: "The *res communis* may not be subjected to the sovereignty of any state, general acquiescence apart, and states are bound to refrain from any acts which might adversely affect the use of the high seas by other states or their nationals": I. BROWNLIE, *Principles of Public International Law*, 4th ed., Oxford, Clarendon Press, 1990, at 178.

²⁷ T.L. McDORMAN, *loc. cit.*, note 2, 637.

²⁸ N.C. HOWSON, *loc. cit.*, note 20, 350.

²⁹ *Id.*

waters to be portrayed as a direct threat to Canadian sovereignty which required an immediate Canadian response³⁰.

The difficulty Canada faced was that apart from the proclamation of the *Territorial Sea and Fishing Zones Act* in 1964, which had established a three mile territorial sea around the islands of the Canadian Arctic archipelago³¹, there had been no official assertion of Canadian sovereignty over the entire Arctic waters³². Consequently, the *Manhattan* would only have traversed Canadian territorial waters if it had borrowed the narrow Prince of Wales Strait where the three mile territorial waters overlapped. However, the *Manhattan* had forced its way through the M'Clure Strait and thus, according to the Americans, had navigated through high seas during its transit of the Passage.

The Canadian government's immediate response to the *Manhattan* crossing came by way of a policy statement by Prime Minister Trudeau before Parliament on 15 May 1969.

With respect to the waters between the islands of Canada's Arctic archipelago, it is well known that in 1958 the then minister of northern affairs stated the Canadian position as follows:

The area to the north of Canada, including the islands and the waters between the islands and areas beyond, are looked upon as our own, and there is no doubt in the minds of this government, nor do I think was there in the minds of former governments of Canada, that this is national terrain.

*It is also known that not all countries would accept the view that the waters between the islands of the archipelago are internal waters over which Canada has full sovereignty. The contrary view is indeed that Canada's sovereignty extends only to the territorial sea around each island. The law of the sea is a complex subject which, as can be understood, may give rise to differences of opinion. Such differences, of course, would have to be settled not on an arbitrary basis but with due regard for established principles of international law.*³³

³⁰ D.R. ROTHWELL, *loc. cit.*, note 1, 337 and 338. See also: Edgar J. DOSMAN, *The National Interest: The Politics of Northern Development*, Toronto, McClelland and Steward, 1975, at 46 and 47.

³¹ Art. 3(1) *Territorial Sea and Fishing Zones Act*, S.C. 1964-65, c. 22.

³² D.R. ROTHWELL, *loc. cit.*, note 1, 338.

³³ *House of Common Debates*, 15 May 1969, at 8720.

Criticized for the weakness and ambiguity of its policy, the following year the Trudeau government adopted three fairly controversial measures destined to strengthen Canada's position in the Arctic.

First, the Federal government enacted the *Arctic Waters Pollution Prevention Act* (AWPPA) which created a 100 mile pollution prevention zone around Canada's Arctic coasts³⁴. This extended jurisdiction conferred on Canada the right to enforce pollution control regulations on all ships passing through the zone, including construction, equipment and staffing standards for Arctic-going vessels. Under the Act, this broad assertion of jurisdiction was justified with reference to Canada's responsibility for the exploitation of the Arctic's natural resources as well as for the welfare of its inhabitants and the preservation of its unique ecological balance³⁵. Failure to comply with these standards would result in the prohibition of passage by such vessels³⁶.

At a press conference following the introduction of the Bill, Prime Minister Trudeau explained Canada's position:

*[I]t is not an assertion of sovereignty, it is an exercise of our desire to keep the Arctic free of pollution by defining 100 miles as the zone within which we are determined to act, we are indicating that our assertion there is not one aimed towards sovereignty but aimed towards one of the very important aspects of our action in the Arctic.*³⁷

³⁴ *Arctic Waters Pollution Prevention Act*, R.S.C. 1970 (1st Supp.), c. 2, amended S.C. 1977-78, c. 41.

³⁵ Preamble, *id.* See also: N.C. HOWSON, *loc. cit.*, note 20, 350. For an articulation of the two-pronged theoretical basis for the AWPPA, see: A. GOTLIEB and C. DALFEN, "National Jurisdiction and International Responsibility: New Canadian Approaches to International Law", (1973) 67 *A.J.I.L.* 229, 240-247; L. LEGAULT, "The Freedom of the Seas: A License to Pollute?", (1971) 21 *U.T.L.J.* 211.

³⁶ Art. 12 AWPPA. See: D.R. ROTHWELL, *loc. cit.*, note 1, 339; Donat PHARAND, *The Law of the Sea of the Arctic with Special Reference to Canada*, Ottawa, University of Ottawa Press, 1973, at 224-232; R.S. REID, *loc. cit.*, note 18, 117-129.

³⁷ Press Release, 8 April 1970, reprinted in (1970) 9 *I.L.M.* 600, 600 and 601.

The next day, Mitchell Sharp, Secretary of State for External Affairs, emphasized during a speech in the House of Commons the preventive aspect of the legislation:

*The Arctic waters bill represents a constructive and functional approach to environmental preservation. It asserts only the limited jurisdiction required to achieve a specific and vital purpose. It separates a limited pollution control jurisdiction from the total bundle of jurisdictions which together constitute sovereignty.*³⁸

Thus, as noted by McDorman, the Canadian response was “not to assert *absolute jurisdiction* over Arctic waters, but to approach the problem functionally” with the primary goal of protecting the unique and fragile environment of the Arctic³⁹.

Despite these government pronouncements, the AWPPA and its 100 mile zone was denounced by a number of countries, most notably the United States, as contrary to international law⁴⁰. Spokespersons for the State Department reiterated the basic policy of the United States: while the United States conceded ownership of the lands to Canada, it maintained that the waters around them were part of the high seas and that the Northwest Passage was an international waterway. As the Canadian 100 mile pollution zone predated the introduction of the 200 mile exclusive economic zone, the United States perceived the Canadian initiative as a dangerous precedent which might be imitated in other areas of the world and which could adversely affect its security and commercial interests⁴¹. No doubt aware that the legislation might not accord with international principles and instruments, the Canadian government’s second measure was to modify its acceptance of the compulsory jurisdiction of the International Court of Justice⁴². It was made clear

³⁸ *House of Commons Debates*, 16 April 1970, at 5951. See also: *House of Commons Debates*, 16 April 1970, at 5948 and 5949; R.S. REID, *loc. cit.*, note 18, 127.

³⁹ T.L. McDORMAN, *loc. cit.*, note 2, 626. Emphasis in the original text.

⁴⁰ The U.S. government responded to the introduction of the AWPPA with a diplomatic note entitled “U.S. Opposes Unilateral Extension by Canada of High Seas Jurisdiction”: Press Release, No. 121, 15 April 1970, reprinted in 62 *Dep’t St. Bull.*, 11 May 1970, at 610 and 611. At the time, enforcement of pollution standards was only accepted within a State’s internal waters and territorial sea.

⁴¹ R.S. REID, *loc. cit.*, note 18, 121.

⁴² *Canadian Declaration Concerning the Compulsory Jurisdiction of the International Court of Justice*, 7 April 1970, reprinted in (1970) 9 *I.L.M.* 598.

that Canada would not accept the Court's jurisdiction on issues arising out of its anti-pollution measures⁴³.

In a third and final response to the voyage of the *Manhattan*, the Trudeau government proclaimed the extension of Canada's territorial waters (including those around the islands of the Arctic archipelago), from 3 miles to 12 miles⁴⁴. As McDorman explains, with a twelve mile limit, it became impossible to navigate through the Northwest Passage without passing through Canada's territorial sea at certain "geographical choke-points" where the waters between the islands measured less than 24 miles in width⁴⁵. With the exception of these narrow stretches of water, however, the right of high seas navigation remained in place⁴⁶. Consequently, this third measure also fell far short of advancing any general claim of sovereignty over the waters of the archipelago. And most notably perhaps, no government pronouncement addressed the issue of enforcement. No government initiatives or programmes were introduced in support of the regulatory powers contained in the AWPPA nor were additional resources allocated for the effective enforcement of Canada's sovereign rights within its extended territorial sea.

During the following decade, Canada expended considerable energy in ensuring that the international community recognized the legitimacy of its Arctic policy⁴⁷. The Canadian government was eventually successful in this quest with the recognition of a 200 mile exclusive economic zone for coastal States in articles 55 and 57 and

⁴³ Canada's reservation now excluded from the Court's jurisdiction "disputes arising out of or concerning jurisdiction or rights claimed or exercised by Canada in respect of the conservation, management or exploitation of the living resources of the sea, or in respect of the prevention or control of pollution or contamination of the marine environment in marine areas adjacent to the coast of Canada". The reservation effectively shielded Canada from any claims regarding the validity of the AWPPA. See generally: R. St. J. MacDONALD, "The New Canadian Declaration of Acceptance of the Compulsory Jurisdiction of the International Court of Justice", (1970) 8 *Can. Y.B. Int'l L.* 3.

⁴⁴ *Act to Amend the Territorial Sea and Fishing Zones Act*, S.C. 1969-70, c. 68, s. 1243. The Act also authorized the government to establish exclusive Canadian fishing zones in marine areas adjacent to the coasts of Canada but not beyond the new 12-mile territorial sea.

⁴⁵ T.L. McDORMAN, *loc. cit.*, note 2, 627.

⁴⁶ D.R. ROTHWELL, *loc. cit.*, note 1, 338.

⁴⁷ T.L. McDORMAN, *loc. cit.*, note 2, 627; Donat PHARAND, "Canada's Arctic Jurisdiction in International Law", (1983) 7 *Dal. L.J.* 315, 325.

the inclusion of article 234 in the 1982 *United Nations Convention on the Law of the Sea* (UNCLOS)⁴⁸. Article 234 provides:

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 would 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.

According to Howson, article 234 “explicitly legitimized the theory and scope of the AWPPA”⁴⁹. Certainly, it has been the Canadian government’s position that article 234 of UNCLOS is evidence that the Canadian concept of a pollution prevention zone has passed into the corpus of customary international law⁵⁰. In an address to Parliament on 10 September 1985, External Affairs Minister Joe Clark stated:

*Canada’s jurisdiction over its continental margin and 200-mile fishing zone is unchallenged in the Arctic as elsewhere. Canada also exercises jurisdiction over a 100-mile pollution prevention control zone in arctic waters, in order to protect the unique ecological balance in the area. That too has been recognized by the international community, in a special provision in the United Nations Convention on the Law of the Sea.*⁵¹

Canada’s second controversial measure, the extension of its territorial sea from 3 to 12 miles, was also eventually endorsed by the international community. Indeed, the concept of the 12-mile territorial sea, which had been gaining international acceptance through-

⁴⁸ Concluded at Montego Bay, 10 December 1982, U.N. Doc. A/Conf.62/122, 7 October 1982, reprinted in (1982) 21 *I.L.M.* 1261 [hereinafter “UNCLOS”]. Though initially some influential States refused to become parties to UNCLOS, the Convention came into force on 16 November 1994 and as of 20 February 2002, numbered 138 State parties, including the United Kingdom, Russia, Germany and Japan. Canada, which signed the Convention on 10 September 1982, has yet to ratify it. However, as a law-making treaty, UNCLOS impacts on non-parties as the majority of its articles are deemed to reflect customary law.

⁴⁹ N.C. HOWSON, *loc. cit.*, note 20, 354.

⁵⁰ *Id.* See also: D. PHARAND, *loc. cit.*, note 47, 325.

⁵¹ *House of Commons Debates*, 10 September 1985, at 6463.

out the 1970s despite U.S. opposition, was codified in article 3 of UNCLOS⁵². However, though Canada's jurisdictional claims over the waters of the Arctic achieved some measure of legitimacy with the adoption of UNCLOS in 1982, what remained unclear was whether in the future, Canada would be in a position to effectively defend its interests.

C. The *Polar Sea* Crisis

Canada's effective control over the Arctic waters was in fact called into question in the summer of 1985 when the United States announced that its icebreaker *Polar Sea* would effect a westerly crossing of the Northwest Passage. Although the United States informed Canadian authorities of the proposed voyage, it did not seek Canada's official permission. On the eve of the *Polar Sea's* departure, an official statement was issued in which the Canadian government noted that while the United States "had made known that it [did] not share Canada's view regarding the status of these waters, it [had] assured the Government of Canada that the purpose of the voyage [was] solely operational ... [and] ... without prejudice to the position of either country regarding the Northwest Passage"⁵³. As Howson reports, the Canadian statement also declared that the *Polar Sea* complied with standards substantially equivalent to those prescribed under the AWPPA, that two Canadian Coast Guard captains would be on board as invited observers and furthermore, that the *Polar Sea's* progress would be closely monitored by Canadian military aircraft⁵⁴.

Many Canadian commentators denounced the government's response as weak and ineffective and felt that a valuable opportunity to strengthen Canada's legal position had been squandered. Loud calls were made for Prime Minister Mulroney's government to issue an official protest against the voyage. According to McDorman, it would however have been difficult for Canada to issue such a protest

⁵² Art. 3 provides: "Every State has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from baselines determined in accordance with this Convention". See: T.L. McDORMAN, *loc. cit.*, note 2, 627.

⁵³ GOVERNMENT OF CANADA, Press Release No. 114, "Voyage of the Polar Sea", 31 July 1985, at 2. See also: N.C. HOWSON, *loc. cit.*, note 20, 339.

⁵⁴ N.C. HOWSON, *loc. cit.*, note 20, 340 and 341.

having itself negotiated the “agreement to disagree”, and particularly as Canada did not in fact have the capacity to stop the *Polar Sea* from navigating the Passage⁵⁵. Howson reports that despite the tone of Canada’s announcement, politicians of all stripes were outraged by the *Polar Sea*’s successful transit⁵⁶. Prime Minister Brian Mulroney asserted that the Passage “belongs to Canada lock, stock and barrel”⁵⁷. John Turner, leader of the opposition, referred to the voyage as “an affront to Canada”⁵⁸ and Jim Fulton of the New Democratic Party called it “psychological rape”⁵⁹. For his part, Jean Chrétien, then Foreign Affairs critic in the Liberal opposition, directed his outrage at the Mulroney government:

*If it is true that there is a policy of friendship with the Government of the United States, it is a shame that President Reagan sent a quasi military ship in our water[s] this summer despite the requests and pleas of the Secretary of State for External Affairs. If we had a Prime Minister who did not always go to the President on his knees, we would have been in a position to challenge the President and say that we will not tolerate such action. We would not be put in the shameful position we are today.*⁶⁰

The Canadian government’s official response to the *Polar Sea* voyage came on 19 September 1985 in a comprehensive statement on Arctic sovereignty delivered to the House of Commons by Joe Clark, Secretary of State for External Affairs:

Canada’s sovereignty in the Arctic is indivisible. It embraces land, sea and ice. It extends without interruption to the seaward-facing coasts of the Arctic islands. These islands are joined, and not divided, by the waters between them. They are bridged for most of the year by ice. From time immemorial Canada’s Inuit people have used and occupied the ice as they have used and occupied the land. The policy of the Government is to maintain the natural unity of the Canadian Arctic archipelago and

⁵⁵ T.L. McDORMAN, *loc. cit.*, note 2, 635.

⁵⁶ N.C. HOWSON, *loc. cit.*, note 20, 341.

⁵⁷ Canadian Press dispatch, 16-17 July 1986.

⁵⁸ K. MacQUEEN and A. NIKIFORUK, “The New Race for the North”, *Maclean’s*, 19 August 1985, 16.

⁵⁹ *House of Commons Debates*, 10 September 1985, at 6467. Turner and Fulton statements reproduced in N.C. HOWSON, *loc. cit.*, note 20, 341, footnote 15.

⁶⁰ *House of Commons Debates*, 10 September 1985, at 6465.

*to preserve Canada's sovereignty over land, sea and ice undiminished and undivided.*⁶¹

And to remove any doubts as to Canada's intentions with respect to the waters of the Canadian Arctic, Clark further added:

*The policy of this Government is to exercise full sovereignty in and on the waters of the Arctic Archipelago and this applies to the airspace above as well. We will accept no substitute.*⁶²

This statement led to the announcement of six major government initiatives:

*In summary, Mr. Speaker, these are the measures we are announcing today: first, immediate adoption of an Order in Council establishing straight baselines around the Arctic archipelago, to be effective January 1, 1986; second, immediate adoption of a Canadian Laws Offshore Application Act⁶³; third, immediate talks with the United States on co-operation in Arctic waters on the basis of full respect for Canadian sovereignty; fourth, an immediate increase of surveillance overflights of our Arctic waters by aircraft of the Canadian Forces, and immediate planning for Canadian naval activity in the Eastern Arctic in 1986; fifth, the immediate withdrawal of the 1970 reservation to Canada's acceptance of the compulsory jurisdiction of the International Court of Justice; and sixth, construction of a polar, class 8 ice-breaker and urgent consideration of other means of exercising more effective control over our Arctic waters.*⁶⁴

The Clark statement finally established, clearly and unequivocally, Canada's position with respect to Arctic sovereignty. For with the adoption of the *Territorial Sea Geographical Coordinates (Area 7) Order*⁶⁵ establishing straight baselines around the perimeter of Canada's Arctic archipelago⁶⁶, all of the enclosed waters became Canadian internal waters. Under international law, internal waters

⁶¹ *Id.*, at 6463 [hereinafter "Clark statement"].

⁶² *Id.*

⁶³ This Act was designed to extend "the application of Canadian civil and criminal laws to offshore zones in the Arctic and elsewhere": *House of Commons Debates*, 10 September 1985, at 6463.

⁶⁴ *Id.* at 6464. Underline added. See generally: N.C. HOWSON, *loc. cit.*, note 20, 341 and 342; D.R. ROTHWELL, *loc. cit.*, note 1, 344.

⁶⁵ S.O.R./85-872. The regulation was enacted pursuant to the *Territorial Sea and Fishing Zones Act*, R.S.C. 1970, c.T-7, as amended.

⁶⁶ See map in Donat PHARAND, "Canada's Sovereignty over the Newly-Enclosed Arctic Waters", (1987) 25 *Can. Y.B. Int'l Law* 325, 330.

are assimilated to land territory, thus conferring upon the coastal State full administrative, civil and criminal jurisdiction. In addition to the legislation asserting its sovereignty, the Canadian government also and for the first time, announced accompanying enforcement measures designed to ensure the effectiveness of the Canadian action.

The United States expressed its regret over the Canadian decision to assert its sovereignty over the entire Arctic archipelago and together with other States, formally objected in writing to the Canadian initiative⁶⁷. However, in an effort to advance their shared interests in Arctic development and security, the United States did indicate a willingness to engage in bilateral discussions over the status of the Arctic waters⁶⁸. As a result of these discussions, on 11 January 1988 Canada and the U.S. signed a four-clause "Arctic Cooperation Agreement"⁶⁹. Pursuant to clause 3(c) of the Agreement, the United States agreed to seek the consent of the Canadian government when sending U.S. icebreakers through the Passage. However, under clause 4, both parties specifically reserved their respective positions concerning the question of sovereignty over the waterways of the Arctic archipelago⁷⁰. Thus, no progress was made on the issue of the legal status of the Canadian Arctic waters⁷¹.

⁶⁷ D.R. ROTHWELL, *loc. cit.*, note 1, 345. See also: "Sovereignty – Arctic Region", (1985) *Int'l Can.* 9.

⁶⁸ For a discussion of United States' policy concerning the *Polar Sea* voyage, see: T.L. McDORMAN, *loc. cit.*, note 2, 636-639.

⁶⁹ *Agreement on Arctic Cooperation*, 11 January 1988, U.S.-Can., reprinted in (1989) 28 *I.L.M.* 142. For a list of other bilateral and multilateral agreements and arrangements relating to the Arctic waters, see: R.R. ROTH, *loc. cit.*, note 3, 868.

⁷⁰ Clause 4 provides: "Nothing in this Agreement of cooperative endeavour between Arctic neighbors and friends nor any practice thereunder affects the respective positions of the Government of the United States and of Canada on the Law of the Sea in this or other maritime areas or their respective position regarding third parties".

⁷¹ Indeed, Rothwell comments: "Thus by entering into the Agreement, the United States is not viewed as making any concession towards Canada's claim over the Northwest Passage. The Canadian position that the Passage is not an international strait also remains intact": D.R. ROTHWELL, *loc. cit.*, note 1, 346, footnotes omitted.

II. The Debate over Legal Regimes in the Arctic

A. Straight Baselines and Canadian Internal Waters

The straight baseline approach to coastal delimitation, explains Howson, was first developed by Norway. Between 1812 and 1935, the Norwegian government established the inner boundary of its territorial sea by drawing straight lines along the outermost points of the islands off its fragmented and indented coastline⁷². In the *Norwegian Fisheries* case in 1951⁷³, the International Court of Justice (ICJ) upheld Norway's delimitation system declaring that under specified conditions, international law permitted a coastal State to draw straight baselines from which its territorial sea could be measured. All waters within these baselines would then be considered internal waters over which complete sovereignty could be exercised. However, in only two geographically defined circumstances would international law sanction the use of the straight baseline method: "Where a coast is deeply indented and cut into, as is that of Eastern Finmark, or where it is bordered by an Archipelago such as the 'skjaergaard'"⁷⁴. In giving its reasons for decision, the Court stressed three criteria in determining whether straight baselines should be permitted⁷⁵.

The first consideration pertained to locating the baselines:

[W]hile ... a [coastal] State must be allowed the latitude necessary in order to be able to adapt its delimitation to practical needs and local requirements, the drawing of baselines must not depart to any appreciable extent from the general direction of the coast.⁷⁶

⁷² N.C. HOWSON, *loc. cit.*, note 20, 356.

⁷³ *Fisheries Case (United Kingdom v. Norway)*, [1951] I.C.J. Rep. 115 [hereinafter "*Norwegian Fisheries Case*"].

⁷⁴ *Id.*, 128.

⁷⁵ See: J.B. MCKINNON, *loc. cit.*, note 24, 801-803 for an excellent summary of the decision.

⁷⁶ *Norwegian Fisheries Case*, *supra* note 73, 133. Roman characters added.

The second important consideration was the fact that there needed to be a “more or less close relationship” between the territorial sea and land domain enclosed by the baselines:

*The real question raised in the choice of baselines is in effect whether certain sea areas lying within these lines are sufficiently closely linked to the land domain to be subject to the regime of internal waters.*⁷⁷

The Court further declared that geographical criteria were not the only important factors which needed to be taken into account. “Economic interests peculiar to a region, the reality and importance of which are clearly evidenced by long usage”⁷⁸ should also be taken into account⁷⁹.

The criteria elaborated in the *Norwegian Fisheries* case were generally approved by the international community and eventually codified in the 1958 *Territorial Sea Convention*⁸⁰ and UNCLOS, though with some important changes. As both Conventions contain similar provisions, this analysis will focus on the most recent expression of the international rules pertaining to acceptance of baselines. One of the most important changes made to the *Norwegian Fisheries* baseline criteria is found in Article 7(1) of the 1982 Convention, which defines the threshold geographical requirement as “where the coastline is deeply indented and cut into, or if there is a *fringe of islands along the coast in its immediate vicinity*”. According to Killas, the introduction of the word “fringe” in the Convention makes the test somewhat more stringent than that articulated in the ICJ decision⁸¹. McKinnon also argues that the “fringe of islands” criterion significantly narrows the customary law position as stated by the International Court of Justice⁸².

⁷⁷ *Id.* Roman characters added.

⁷⁸ *Id.*

⁷⁹ See: J.B. MCKINNON, *loc. cit.*, note 24, 802. See also generally: J. BYRNE, “Canada and the Legal Status of Ocean Space in the Canadian Arctic Archipelago”, (1970) 28 *U.T. Fac. L. Rev.* 1, 6 and 7; I.L. HEAD, *loc. cit.*, note 18, 219; R.R. ROTH, *loc. cit.*, note 3, 860-862.

⁸⁰ *Convention on the Territorial Sea and Contiguous Zone*, 29 April 1958, 516 U.N.T.S. 205 (entered into force on 10 September 1964) [hereinafter “1958 Territorial Sea Convention”].

⁸¹ M. KILLAS, “The Legality of Canada’s Claims to the Waters of its Arctic Archipelago”, (1987) 19 *Ottawa L. Rev.* 95, 111.

⁸² J.B. MCKINNON, *loc. cit.*, note 24, 804.

*The northern mainland coast of Canada is deeply indented, but this fact would justify using straight baselines only along the coast ... [I]t seems difficult to describe the islands of the Arctic archipelago as a "fringe of islands" in the "immediate vicinity" of the coast. The islands extend almost 1,000 miles north from the mainland. Moreover, the northern group of island is separated by a wide body of water from the southern group. Thus, even if the southern group could be treated as a fringe of islands in the immediate vicinity of the mainland, it would be more difficult to include the northern group despite the existence of a few small islands in Barrow Strait linking the two groups of islands.*⁸³

However, according to Pharand, while the Arctic archipelago may not constitute a "fringe of islands along the coast" if the convention is interpreted literally, "a legalistic and formalistic application of the subjective rule of article 7(1) is unnecessary and inappropriate"⁸⁴. Referring to the Court's statement in the *Norwegian Fisheries* case that the islands, islets, rocks and reefs off the Norwegian coast were "in truth but an extension of the Norwegian mainland"⁸⁵, Killas argues that the islands of the Canadian Arctic archipelago are "in many places very close to the northern shore, and can reasonably be viewed as being 'but an extension' of the Canadian mainland"⁸⁶. And while acknowledging the existence of two distinct island groups, Killas maintains that when viewed on a large-scale chart, the Arctic archipelago does form a "coherent, triangular, frozen unity".

*The whole is greater than the sum of the parts. A fringe is created by islands fringing other islands which in turn fringe the coast.*⁸⁷

⁸³ *Id.*, 804 and 805. See also: J. BYRNE, *loc. cit.*, note 79, 8.

⁸⁴ Donat PHARAND, "The Legal Regime of the Arctic: Some Outstanding Issues", (1984) 39 *Int'l J.* 742, 780. Indeed subsequent State practice does appear to indicate that a liberal interpretation has been given to the provision. O'Connell lists some eighteen coastal archipelagos where straight baselines have been used and which constitute very doubtful fringes of islands. D.P. O'CONNELL, *International Law of the Sea*, vol. 1, Oxford, Clarendon Press, 1982, at 212.

⁸⁵ *Norwegian Fisheries Case*, *supra* note 73, 127.

⁸⁶ M. KILLAS, *loc. cit.*, note 81, 113. He adds: "Indeed, the coastline in many places extends right into the mass of islands with peninsulas which appear more as islands connected by way of isthmus to the mainland".

⁸⁷ *Id.* For a detailed analysis of the "fringe" criterion, refer to M. KILLAS, *loc. cit.*, note 81, 111-116.

Both Killas⁸⁸ and Pharand⁸⁹ emphasize that nearly all the bodies of water in the archipelago are studded with countless islands, rocks and reefs⁹⁰.

The 1958 Territorial Sea Convention and UNCLOS also codified the three specific criteria elaborated by the Court in the *Norwegian Fisheries* case. Without a doubt, the greatest hurdle for Canada in sustaining its fringe of islands baseline position, is in satisfying the “general direction” criteria. As Killas explains, since the archipelago is triangularly-shaped, the baselines necessarily depart from the more straightforward west to east direction of the northern coast of continental Canada⁹¹. However, Killas argues that two important factors must be considered. First, that the particular configuration of the coast, with its indentations and peninsulas, is such that a general direction cannot be discovered with any accuracy⁹². Secondly, that the inherent ambiguity of the word “coast” may entitle Canada to claim the seaward coast of the islands as the relevant coastline⁹³. This argument has also been raised by Pharand: “What really constitutes the Canadian coastline is the outer line of the archipelago, and the straight baselines follow such an outer line”⁹⁴.

Canada’s position is certainly much stronger with respect to the other two criteria. As the waters of the Arctic archipelago are frozen for a good part of the year, some scholars have argued that they are more like land than water and that therefore Canada’s baseline sys-

⁸⁸ *Id.*, 114.

⁸⁹ D. PHARAND, *loc. cit.*, note 66, 325, 331.

⁹⁰ See also: D.L. VANDERZWAAG and Donat PHARAND, “Inuit and the Ice: Implications for Canada’s Arctic Waters”, (1983) 21 *Can. Y.B. Int’l L.* 53, 79-83.

⁹¹ M. KILLAS, *loc. cit.*, note 81, 117.

⁹² *Id.*, 118.

⁹³ *Id.*

⁹⁴ Donat PHARAND, “Sovereignty and the Canadian North”, in *Report of the Royal Commission on the Economic Union and Development Prospects for Canada*, Ottawa, The Commission, 1985, 141, at 152. In Chapter 10 of his work *Canada’s Arctic Waters in International Law*, *op. cit.*, note 1, at 153, Pharand refers to a Soviet decree in January 1985 establishing straight baselines along its northern coast and three Arctic archipelagos. Two of these archipelagos, far from following the general direction of the coast, extend almost at right angles from the mainland coast. However, Howson dismisses Pharand’s argument on the “general direction criterion” as “rather circular reasoning”: N.C. HOWSON, *loc. cit.*, note 20, 358, footnote 100.

tem meets the second “close link” requirement⁹⁵. Of course, with the ice in the Arctic archipelago shrinking at an alarming rate, this may no longer be a very persuasive argument. However, Pharand has proposed an alternative justification by quantifying the “close link” criterion. Assimilating the “close link” requirement to a sea to land ratio, Pharand argues that the Canadian archipelago, with a 0.822:1 sea to land ratio, presents a much more compelling case than the Norwegian coast’s 3.5:1 ratio⁹⁶. Killas has also argued that the “ratio of sea to land” test, explicitly adopted by consensus during the Third Conference on the Law of the Sea, is the most appropriate in interpreting article 7(3)⁹⁷.

Finally, Canada’s position may well be at its strongest in meeting the third criteria – economic interests peculiar to the region. Pharand, Howson and McKinnon all refer to the long-standing “economic interests of the local Inuit populations, whose livelihood has depended exclusively on fishing, hunting and trapping in those water areas since time immemorial”⁹⁸. Their view is supported by a 1976 government-sponsored study on Inuit land use and occupancy⁹⁹ which revealed that “Inuit traditional sea-ice use [covered] all the waters of the central and eastern Arctic, as well as those of the western Arctic as far west as Canada’s boundary in the Beaufort Sea and in a northerly direction up to M’Clure Strait and Viscount Melville Sound”¹⁰⁰. Head adds that the “hazards of navigation and the remoteness of the archipelago” have also prevented any other State from acquiring any sort of economic interest in the Arctic waters¹⁰¹.

⁹⁵ See: I.L. HEAD, *loc. cit.*, note 18, 223; J. BYRNE, *loc. cit.*, note 79, 4 and 5. Clark found this an appealing argument after the *Polar Sea* voyage stating that the Arctic waters were “joined and not divided by the waters between them. They are bridged for most of the year by ice”: *House of Commons Debates*, 10 September 1985, at 6463.

⁹⁶ D. PHARAND, *op. cit.*, note 1, at 163.

⁹⁷ M. KILLAS, *loc. cit.*, note 81, 119.

⁹⁸ D. PHARAND, *loc. cit.*, note 66, 331. See also: D. PHARAND, *op. cit.*, note 1, at 164, N.C. HOWSON, *loc. cit.*, note 20, 359; J.B. MCKINNON, *loc. cit.*, note 24, 809.

⁹⁹ M.R. FREEMAN (ed.), *Report: Inuit Land Use and Occupancy Project*, 3 vol., Can. Gov. Cat. No. R2-46/1976.

¹⁰⁰ Summary of conclusions by D. PHARAND, *op. cit.*, note 1, at 164.

¹⁰¹ I.L. HEAD, *loc. cit.*, note 18, 220. For a more detailed analysis, see: J.B. MCKINNON, *loc. cit.*, note 24, 808 and 809.

However, an analysis of the ICJ's criteria in the *Norwegian Fisheries* case does not definitely resolve the question of the status of the Arctic waters in light of the second major innovation introduced by the 1958 and 1982 Conventions. As an important concession to maritime States such as the United States, which have long advocated the right to freedom of navigation, both article 5(2) of the 1958 Geneva Convention and article 8(2) of UNCLOS recognized the continuation of certain pre-existing navigation rights following the proclamation of baselines. Article 8(2) provides:

Where the establishment of a straight baseline in accordance with the method set forth in Article 7 has the effect of enclosing as internal waters areas which had not previously been considered as such, a right of innocent passage as provided in this Convention shall exist in those waters.

Focusing on the words "not previously considered as such", two principal arguments have been put forward to defend Canada's claim to complete control over the Arctic waters: their prior legal status as Canadian internal waters or alternatively, their status as historic waters. Thus, as Howson accurately points out, "the inquiry shifts from the validity of Canada's baseline system under international law to a determination of the status of the Arctic waters prior to their enclosure" in 1986¹⁰².

If prior to 1985, the waters of the Canadian Arctic archipelago were considered by Canada and recognized by the international community as Canadian internal waters, no right of innocent passage would exist. However, persistent objections by the United States and protests by other foreign governments concerning Canada's Arctic policy raise serious doubts as to whether the Arctic waters were "previously considered as internal waters". Furthermore, Canada's own inconsistent actions and pronouncements regarding the Arctic waters and the Northwest Passage since the 1950s, may themselves have irretrievably damaged its claim to exclusive sovereignty.

Though Prime Minister Trudeau declared in May 1969, in the wake of the *Manhattan* voyage, that the islands and the waters between the islands in the Canadian Arctic were considered "our own"¹⁰³, the government, as we have seen, stopped short of assert-

¹⁰² N.C. HOWSON, *loc. cit.*, note 20, 360.

¹⁰³ *House of Commons Debates*, 15 May 1969, at 8720.

ing Canadian sovereignty over the Arctic waters. Indeed, Trudeau was at pains to distinguish Canada's claim to partial jurisdiction under the AWPPA from a claim to exclusive sovereignty.

*[T]he distinction between the absolute claim of sovereignty which means that you own everything, the land, the water, the resources in the water and so on, which is the case for the [internal] waters of any nation – this is the sovereignty aspect of it – against the other aspect which is not an assertion of sovereignty, but an assertion of determination of control certain aspects of what is happening here.*¹⁰⁴

The “gate of territorial waters” theory, propounded following Canada's decision to extend its territorial sea from three miles to twelve miles is also, according to Howson, another inconsistency which severely weakens the Canadian position.

*By implying that the territorial waters at either end of the Northwest Passage gave Canada the basis for “undisputed control ... over two of the gateways to the Northwest Passage”, the Canadian government created the negative inference that whatever ocean space in the archipelago lay between the two limits of territorial waters should be considered “high seas”.*¹⁰⁵

Finally, the decision to draw baselines around the Canadian Arctic archipelago, though intended to strengthen Canada's claim, contradicted the position of previous Canadian governments that the waters had always been internal. In April 1970, during the House of Commons debate on the AWPPA and the extension of Canada's territorial sea from 3 to 12 miles, the following question was asked of the government:

*Regarding the Arctic Islands, will Bill C-202 draw geographic lines of the 12 mile-limit around each island, or is it intended to draw a line enclosing all the Arctic islands? In other words, will the territorial sea as defined in Bill C-203, include areas between Arctic Islands of more than 24 miles?*¹⁰⁶

The response from then Minister for Foreign Affairs, Mitchell Sharp, reflected the position he had adopted earlier in the same debate, when he declared that “Canada has always regarded the

¹⁰⁴ Press Release, 8 April 1970, reprinted in (1970) 9 *I.L.M.* 600, at 602.

¹⁰⁵ N.C. HOWSON, *loc. cit.*, note 20, 361, quoting D. PHARAND, *loc. cit.*, note 94, 149.

¹⁰⁶ *House of Commons Debates*, 16 April 1970, at 5953.

waters between the islands of the Arctic archipelago as being Canadian waters¹⁰⁷. He replied: "Since obviously we claim these waters to be Canadian internal waters we would not draw such lines, Mr. Speaker"¹⁰⁸. As Howson points out: "If they were previously 'internal waters', then there was no need to draw baselines in order to curtail the right of innocent passage ..."¹⁰⁹.

Pharand on the other hand, contends that Canada has given a number of indications, over a significant period of time, that it considers the waters of the Arctic archipelago to be Canadian internal waters¹¹⁰. In addition to Mitchell Sharp's statement reproduced above¹¹¹, Pharand points to a December 1973 letter in which the Bureau of Legal Affairs wrote that "Canada also claims that the waters of the Canadian Arctic Archipelago are internal waters of Canada ..."¹¹². This view, argues Pharand, was subsequently confirmed in May 1975 by the Secretary of State for External Affairs, Allan MacEachen, when he stated that the Arctic waters were considered to be Canadian "internal waters"¹¹³. Rothwell adds to this list of key pronouncements, a 1980 legal memorandum in which the Department of External Affairs stated: "Canada continues to maintain the position that the Northwest Passage is not an international strait; that the waters making up the passage are internal ..."¹¹⁴. Though relying on the same statements as Pharand, Rothwell concludes, however, that they cannot overcome the combined effect of the *Arctic Waters Pollution Prevention Act* and Canada's claim to an extended territorial sea¹¹⁵.

¹⁰⁷ *Id.*, at 5948.

¹⁰⁸ *Id.* at 5953.

¹⁰⁹ N.C. HOWSON, *loc. cit.*, note 20, 360.

¹¹⁰ D. PHARAND, *loc. cit.*, note 47, 329 and 330.

¹¹¹ "Since obviously we claim these waters to be Canadian internal waters we would not draw such lines, Mr. Speaker".

¹¹² (1974) 12 *Can. Y.B. Int'l L.* 279, reproduced in D. PHARAND, *loc. cit.*, note 47, 329.

¹¹³ CANADA, *Minutes of Proceedings and Evidence of the Standing Committee on External Affairs and National Defence*, No. 24, 22 May 1975, at 6, reproduced in D. PHARAND, *loc. cit.*, note 47, 329.

¹¹⁴ "Canadian Practice in International Law during 1980 as Reflected Mainly in Public Correspondence and Statements of the Department of External Affairs", (1980) 19 *Can. Y.B. Int'l L.* 320, 322, reproduced in D.R. ROTHWELL, *loc. cit.*, note 1, 342.

¹¹⁵ *Id.*

Successive Canadian governments have also pursued a strategy based on the concept of historic title¹¹⁶. In the *Norwegian Fisheries* case, the ICJ declared: "By 'historic waters' are usually meant waters which are *treated as internal waters* but which would not have had that character were it not for the existence of historic title"¹¹⁷. According to this argument, Canada's claim to jurisdiction over the Arctic waters is not subject to a right of innocent passage as the 1986 baseline delimitation simply enclosed waters which *had* previously been considered as Canadian internal waters on the basis of historical usage.

The general criteria for the establishment of historic title were identified in the 1962 U.N. Secretariat study "Juridical regime of historic waters, including historic bays"¹¹⁸. A State may validly claim title to waters on historic grounds if it can show that it has, for a considerable period of time, effectively exercised its exclusive authority over the maritime area claimed. In addition, it must be shown that during this time, the claim has received the acquiescence of other States, particularly those directly affected by the claim¹¹⁹.

Pharand provides a detailed analysis of Canada's claim to historic title over its Arctic waters in his work *Canada's Arctic Waters in International Law*, chapters five through eight¹²⁰. While he identifies a number of positive acts through which Canada has sought to assert its authority over the Arctic during the past century¹²¹, his

¹¹⁶ For instance, in December 1973, the Bureau of Legal Affairs of the Department of External Affairs wrote that "Canada also claims that the waters of the Canadian Arctic Archipelago are internal waters of Canada, on an historical basis, although they have not been declared as such in any treaty or by any legislation", reproduced in (1974) 12 *Can. Y.B. Int'l L.* 279.

¹¹⁷ [1951] I.C.J. Rep. 115, at 130. Emphasis added.

¹¹⁸ *Yearbook of the International Law Commission 1962*, vol. 2, at 1-26.

¹¹⁹ See D. PHARAND, *op. cit.*, note 1, at 97-100. See also generally: D. PHARAND, *loc. cit.*, note 94, 147-151; Donat PHARAND, "Historic Waters in International Law with Special Reference to the Arctic", (1971) 21 *U.T.L.J.* 1; N.C. HOWSON, *loc. cit.*, note 20, 362-365.

¹²⁰ D. PHARAND, *op. cit.*, note 1, at 91-130.

¹²¹ For example, the creation in 1922 of the Eastern Arctic Patrol, followed in 1926 by the creation of the Arctic Islands Preserve. He also points to the surveying activities carried out by Canadian ships since 1970 and the establishment in 1977 of the NORDREG reporting system: D. PHARAND, *op. cit.*, note 1, at 121 and 122.

list of negative elements in relation to Canada's claim considerably outweighs these considerations¹²². Howson in his article on the Northwest Passage, succinctly identifies the principal obstacles barring the way to a successful Canadian claim:

*Clearly, a series of events over the past two decades – the 1970 U.S. diplomatic note objecting to the enactment of the AWPPA, the unwelcome 1985 transit of the Polar Sea, and Canada's inability even to monitor adequately Russian and American submarine traffic through the Passage – all serve to deal a serious, if not mortal, blow to the perfection of Canada's "historic title" over the waters of the Arctic archipelago.*¹²³

Obviously sharing this view of Canada's position, Rothwell writes that most commentators "doubt the validity of Canada's claim [historic title to the Arctic waters] to such a degree that they wholly disregard it on the grounds of legal impossibility"¹²⁴. It therefore appears unlikely that Canada will be able to rely on historic title to deny the right of innocent passage conferred on foreign vessels by article 8(2) of UNCLOS.

However, McKinnon believes that one important argument remains, deriving from the fact that Canada is neither a party to the 1958 Territorial Sea Convention nor UNCLOS. Both articles 5(2) and 8(2), which provide for the right of innocent passage in newly enclosed areas, begin with the following proviso: "Where the establishment of a straight baseline *in accordance with the method set forth in Article [4 or 7]* has the effect ...". Canada could therefore argue that its Arctic straight baselines were not established in 1986 in accordance with the treaty provisions since it was not a party to either treaty at the time the lines were drawn¹²⁵. If neither article 5(2) nor article 8(2) are binding on Canada, the validity of its baseline claim would be assessed solely under customary international

¹²² For example, Pharand emphasizes (at p. 123) that both British and Canadian explorer "confined their takings of possession to lands and islands". According to him, a "further and more conflicting aspect of Canada's claim of historic waters" is found in some official government statements made in 1970. He also points to the United States' formal protest in 1970 not only against Canada's extension of its territorial sea but also against the AWPPA. *Id.*, at 122-125.

¹²³ N.C. HOWSON, *loc. cit.*, note 20, 365, footnotes omitted.

¹²⁴ D.R. ROTHWELL, *loc. cit.*, note 1, 359, footnote omitted. See also: J.B. MCKINNON, *loc. cit.*, note 24, 792-801; D. PHARAND, *op. cit.*, note 1, at 125; D.M. McRAE, "Arctic Waters and Canadian Sovereignty", (1983) 38 *Int'l J.* 476, 480-482; R.S. REID, *loc. cit.*, note 18, 133.

¹²⁵ J.B. MCKINNON, *loc. cit.*, note 24, 814.

law. And as McKinnon points out, the International Court of Justice in the *Norwegian Fisheries* case “clearly assumed that foreign ships would not have a right of innocent passage in waters enclosed by straight baselines”¹²⁶.

However, McDorman joins McKinnon in warning that Canada will only be entitled to rely on this rule of customary law from the *Norwegian Fisheries* case if the Court’s 1951 decision has not been superseded by the 1958 and 1982 conventions¹²⁷. McRae, noting that article 8(2) was adopted with little if any dispute at the Third United Nations Conference on the Law of the Sea, suggests that it may therefore reflect current customary law¹²⁸. While acknowledging that this argument has considerable force, McKinnon refers to State practice which, on the other hand, may tend to prove that customary law has remained unaltered¹²⁹. McKinnon refers to two examples involving regularly used international straits.

*The southern end of Chile consists of a complex archipelago containing the Straits of Magellan. At its narrowest point the strait is less than three miles wide. The eastern coast of Denmark contains a number of large and important islands ... Except for a strait known as the Belts, these islands effectively block the entrance for large ships to the Baltic Sea. Both Chile and Denmark have used straight baselines around their groups of islands, but the two countries have drawn the lines so that they do not enclose the waters in the international straits.*¹³⁰

According to McKinnon, the fact that Chile and Denmark deliberately chose not to enclose major international straits within their baseline systems suggests that the two States consider that a right of innocent passage does not exist in waters enclosed by straight baselines¹³¹.

B. Impact of the Legal Regime

Undoubtedly, the best possible result for Canada would be a recognition that the legitimacy of its Arctic baseline delimitation

¹²⁶ *Id.* Readers should note that while this argument was valid when McKinnon’s article was published in 1987 and at the time this article was submitted in 2002, it can no longer be relied upon following Canada’s ratification of UNCLOS on 7 November 2003.

¹²⁷ T.L. McDORMAN, *loc. cit.*, note 2, 663; J.B. McKINNON, *loc. cit.*, note 24, 815.

¹²⁸ D.M. McRAE, *loc. cit.*, note 124, 486.

¹²⁹ J.B. McKINNON, *loc. cit.*, note 24, 810.

¹³⁰ *Id.*

¹³¹ *Id.*, 815.

should only be assessed according to the customary law principles laid out by the ICJ in the *Norwegian Fisheries* case. Not only would Canada benefit from the more generous geographical criteria but it would also avoid the right of innocent passage provided for in both Conventions.

However, in light of a growing consensus that UNCLOS reflects, for the most part, current customary law, Canada should perhaps continue to assert that its 1986 baselines also conform to the treaty provisions. Indeed, Canadian scholars have formulated persuasive arguments defending Canada's Arctic baseline system under the Convention¹³². And as noted, UNCLOS clearly provides that should Canada be successful in establishing the Arctic waters' prior status as Canadian internal waters, article 8(2) and thus the right of innocent passage for foreign vessels, will not apply.

In either of these two cases, Canada would be granted the full panoply of rights and privileges which attach to territorial sovereignty. Accordingly, Canada would be entitled to enforce its laws against foreign ships and those on board, subject only to the normal rules concerning sovereign and diplomatic immunity¹³³. Most importantly, with respect to the Arctic waters and the Northwest Passage, this would include the right to control access, not only to the surface waters but to the airspace above and the depths below¹³⁴.

¹³² See for example: M. KILLAS, *loc. cit.*, note 81.

¹³³ R.R. CHURCHILL and A.V. LOWE, *The Law of the Sea*, 2nd ed., Manchester, University Press, 1988, at 54.

¹³⁴ However, as Pharand comments, even if Canada would have complete sovereignty over the enclosed waters, "it might well very well permit innocent passage and, indeed, probably should, but would not have to": D. PHARAND, *loc. cit.*, note 47, 331. Indeed as Canada's Prime Minister declared in 1969, "[t]o close off those waters and to deny passage to all foreign vessels in the name of Canadian sovereignty ... would be as senseless as placing barriers across the entrances to Halifax and Vancouver harbours": *House of Commons Debates*, 24 October 1969, at 39. The Canadian Government's policy has always been that the Arctic waters should be open to international shipping but with Canada acting as manager or caretaker. In his 1985 Arctic Statement, Clark declared: "The policy of the Government is also to encourage the development of the navigation in Canadian Arctic waters. Our goal is to make the Northwest Passage a reality for Canadians and foreign shipping as a Canadian waterway ... Navigation, however, will be subject to the controls and other measures required for Canada's security, for the preservation of the environment, and for the welfare of the Inuit and other inhabitants of the Canadian Arctic": *House of Commons Debates*, 10 September 1985, at 6463.

In fact, Canada would be entitled to enact any number of measures in order to enforce its exclusive jurisdiction. For example, it could require foreign ships to carry a Canadian pilot when in the Northwest Passage and it could impose a levy on foreign ships using the Passage to help defray the cost of providing navigational aids, ice-breakers and air/sea rescue facilities¹³⁵.

However, in light of Canada's inconsistent actions and pronouncements in the past, an article 8(2) right of innocent passage may well be found to exist through the Canadian Arctic waters. This right of innocent passage through a zone otherwise subjected to the coastal State's absolute sovereignty is particularly noteworthy as this right has historically been restricted to the territorial sea. Indeed, according to Ngantcha,

*from the Draft Proposals of the 1930 Hague Codification, via the International Law Commission's work and the 1958 Convention on the Territorial Sea and the Contiguous Zone, to the Articles of the 1982 Convention, the right of innocent passage has consistently been associated with the legal status of the territorial sea proper.*¹³⁶

But, as Sir Gerald Fitzmaurice explained during a discussion of this question before the Institute of International Law in 1954:

*Under no circumstances should the extension of internal waters made possible by the new baseline method operate so as to impede the right of innocent passage through what would be territorial sea if the older coast-line (or tide-mark) rule were still applied.*¹³⁷

This position was later adopted by the British government in responding to the International Law Commission's draft articles on the Law of the Sea.

*Her Majesty's Government regard it as imperative that, in any new code which would render legitimate the use of baselines in proper circumstances, it should be clearly stated that the right of innocent passage should not be prejudiced thereby, even though this may involve that, in certain cases, this right shall become exercisable through internal as well as through territorial waters.*¹³⁸

¹³⁵ J.B. MCKINNON, *loc. cit.*, note 24, 813.

¹³⁶ F. NGANTCHA, *The Right of Innocent Passage and the Evolution of the International Law of the Sea*, London, Pinter Publishers, 1990, at 70.

¹³⁷ Quoted in *id.*, at 75, n. 28. Roman characters added.

¹³⁸ *Id.* at 76, n. 32. Roman characters added.

This concern, shared by a number of States, was eventually reflected in the wording of article 8(2) of UNCLOS:

Where the establishment of a straight baseline in accordance with the method set forth in article 7 has the effect of enclosing as internal waters areas which had not previously been considered as such, a right of innocent passage as provided in this Convention shall exist in those waters.

Thus, the Convention's detailed provisions regulating the right of innocent passage through the territorial sea also apply to internal waters enclosed by straight baselines.

Despite widespread acceptance of the Territorial Sea Convention, the comparatively simple definition of "innocent passage" in the 1958 Convention was substantially amended in UNCLOS with the addition of much more detailed provisions. Article 19 of UNCLOS retains, as paragraph 1, the text of article 14(4) of the 1958 Convention:

Passage is innocent so long as it is not prejudicial to the peace, good order or security of the coastal State. Such passage shall take place in conformity with this Convention and with other rules of international law.

However, the article goes on to provide in paragraph 2 that "[p]assage of a foreign ship shall be considered prejudicial to the peace, order or security of the coastal State if in the territorial sea it engages in any of the following activities ...". There then follows a detailed list of activities including the carrying out of weapons exercises (b); spying (c); engaging in acts of propaganda (d); launching, landing or taking on board aircraft (e) or military devices (f); loading or unloading commodities or persons contrary to the customs, fiscal, immigration or sanitary laws of the coastal State (g); wilfully and seriously polluting (h); fishing (i); carrying out research or survey activities (j); and interfering with coastal communication and other facilities (k)¹³⁹. Finally, the list is completed by two general categories of activities:

(a) any threat or use of force against the sovereignty, territorial integrity or political independence of the coastal State, or in any other manner in violation of the principles of the international law embodied in the Charter of the United Nations;

¹³⁹ Art. 19(2) UNCLOS.

...

(l) any other activity not having a direct bearing on passage.

Bernaerts provides an extremely useful summary of the rights and obligations which attach to the concept of innocent passage in UNCLOS¹⁴⁰. As a starting point, it is clear that to benefit from the right of innocent passage, vessels must truly be “in passage”, continuous and expeditious. For its part, and provided they are given due publicity, a coastal State may adopt laws and regulations in the areas enumerated in article 21(1): the safety of navigation and the regulation of maritime traffic (a); the protection of navigational aids, facilities and installations (b); the protection of cables and pipelines (c); the conservation of living resources (d); the enforcement of the coastal State’s fisheries laws (e); the preservation of the environment and the prevention, reduction and control of pollution (f); the conduct of marine scientific research and hydrographic surveys (g); and the enforcement of customs, fiscal, immigration or sanitary laws and regulations (h). A coastal State may also implement pollution measures under article 211(4)¹⁴¹ and create safety zones under article 260¹⁴².

Under article 22 of UNCLOS, a coastal State is also entitled to establish sea lanes and traffic separation schemes. When exercising the right of innocent passage, nuclear-powered ships and ships carrying dangerous materials are required to carry appropriate documentation and to take established precautions (art. 23). Of course, a coastal State may not adopt laws or regulations “which have the practical effect of denying or impairing the right of innocent passage” (art. 24(1)(a)) nor can it discriminate against the ships of any particular State (art. 24(1)(b)). The coastal State is also obliged to publicise any danger to navigation of which it has knowledge (art. 24(2)).

¹⁴⁰ A. BERNAERTS, *Bernaerts’ Guide to the Law of the Sea*, Coulsdon, Fairplay Publications, 1988, at 29.

¹⁴¹ “Coastal States may, in the exercise of their sovereignty within their territorial sea, adopt laws and regulations for the prevention, reduction and control of marine pollution from foreign vessels, including vessels exercising the right of innocent passage”.

¹⁴² “Safety zones of a reasonable breadth not exceeding a distance of 500 metres may be created around scientific research installations in accordance with the relevant provisions of this Convention. All States shall ensure that such safety zones are respected by their vessels”.

Article 25(1) of UNCLOS confers on the coastal State the right to take all the necessary steps to prevent passage which is not innocent as well as to prevent breach of the conditions for admission to its internal waters (art. 25(2)). The discretionary power of the coastal State under article 25(3) to “suspend temporarily” the right of innocent passage where it is “essential for the protection of its security” is also very broad. Arrest and investigation by the authorities of the coastal State can take place as specified in articles 27 and 28 which set out the coastal State’s criminal and civil jurisdiction on board foreign ships. Of tremendous importance with respect to the Canadian Arctic waters, article 20 provides that in exercising their right of innocent passage, “submarines ... are required to navigate on the surface and to show their flag”. Furthermore, article 30 provides that if any warship or other government vessel does not comply with the laws and regulations of the coastal State concerning passage and disregards any request for compliance, the coastal State may require it to leave the area immediately. Finally, charges may be levied by the coastal State for specific services rendered (art. 26(2)).

If the Canadian Arctic baselines are valid, the enclosed waters are Canadian internal waters subject to Canada’s sovereignty and the only right which foreign vessels enjoy within those waters, apart from any specific treaty provisions which might exist, is the right of innocent passage. As noted, article 25(1) of UNCLOS clearly confers on Canada the right to take the necessary steps to prevent passage which is not innocent. Therefore, any vessel navigating the Arctic waters and which engaged in activities prejudicial to Canada’s peace and security, would become subject to Canada’s enforcement jurisdiction, including a right of arrest for violation of Canadian laws¹⁴³. And Canada has taken the position that “any passage threatening the environment of a coastal state cannot be considered innocent since it represents a threat to the coastal state’s security”¹⁴⁴. As Ngantcha confirms, “[w]hereas the obligations of the coastal State

¹⁴³ R.R. CHURCHILL and A.V. LOWE, *op. cit.*, note 133, at 73 and 74. The authors note that Canada’s jurisdiction is “subject to the usual exception for warships and other vessels enjoying sovereign immunity”: *id.*, at 74.

¹⁴⁴ Statement by Mr. Beesley, legal advisor, Department of External Affairs, to the Standing Committee on External Affairs and National Defence, see: *Minutes of Proceedings and Evidence*, No. 25, 29 April 1970.

are essentially preventive, its rights are of a prescriptive and a punitive nature¹⁴⁵.

From the foregoing analysis it is clear that even though a right of innocent passage may exist through the waters of the Arctic archipelago, Canada will nevertheless retain a very wide measure of control which it must be in a position to assert. However, and no doubt in light of the considerable powers conferred upon coastal States in regulating the right of innocent passage, the United States has persistently denied that the Northwest Passage is within Canadian internal waters. Rather, as McDorman reports, the American response to Canada's claims has consistently been that the waters of the Passage are part of an international strait through which the freedom of navigation prevails.

*On issues involving navigational rights the United States has persistently taken a strong stand to protect the right of navigational passage ... While the trend in this century has been for coastal states to extend their jurisdiction ever seaward, the United States, along with other maritime powers, have sought to ensure a continued right of unimpeded navigation over as wide an area as possible. One must not underestimate the resolve of the United States regarding navigational issues and in particular regarding passage rights in international straits.*¹⁴⁶

C. The Northwest Passage as an International Strait

“Strait” is not a term of art and has never been defined in international treaty law. According to Churchill and Lowe, “[i]t bears its ordinary meaning, describing a narrow natural passage or arm of water connecting two larger bodies of water”¹⁴⁷. The only source of law for the meaning to be ascribed to an “international strait” is the 1949 International Court of Justice decision in the *Corfu Channel* case¹⁴⁸. The case concerned incidents which had taken place on 22 October 1946 in the Corfu Strait, which at the time Albania claimed as territorial waters. While navigating the Strait, two British destroyers had struck mines and had suffered damage, including a serious loss of life. As well as the question of Albania's responsibility for the explosions, the Court was asked to consider whether the

¹⁴⁵ F. NGANTCHA, *op. cit.*, note 136, at 163.

¹⁴⁶ T.L. McDORMAN, *loc. cit.*, note 2, 635.

¹⁴⁷ R.R. CHURCHILL and A.V. LOWE, *op. cit.*, note 133, at 87.

¹⁴⁸ [1949] I.C.J. Rep. 4.

United Kingdom had violated international law through the acts of its Navy, by failing to obtain Albania's authorization before entering the North Corfu Channel. The Court's conclusion on this second issue, that in peacetime States had a right to send their warships through straits, rested on two critical findings: that the Corfu Strait connected two parts of the high seas (geographic criterion) and that it was used for international navigation (functional criterion)¹⁴⁹.

The Court's geographic criterion was subsequently enlarged by the 1958 Territorial Sea Convention and UNCLOS. Indeed, as a result of the inclusion of article 16(4) in the 1958 Convention¹⁵⁰ and the concept of the exclusive economic zone in UNCLOS¹⁵¹, it is now accepted that an "international strait" may also join a part of the high seas with the territorial sea of a foreign State or two parts of the exclusive economic zone¹⁵². According to Pharand, the geographic criterion is easily met in the case of Canada's Northwest Passage in that it links two parts of the high seas.

*Indeed, the eastern end of the Passage leads to Baffin Bay, Davis Strait, the Labrador Sea and the Atlantic Ocean, whereas the western end leads to the Beaufort Sea, the Chukchi Sea, the Bering Strait and the Pacific Ocean.*¹⁵³

As to the second functional criterion—that the strait be used for international navigation—there has been considerable debate over its precise meaning. The critical question is whether an "international strait" is one that *has been used* by foreign vessels (actual use) or, on the other hand, that merely *could be used* by foreign vessels (potential use). Once again, the only source of guidance on this issue appears to be the ICJ's decision in the *Corfu Channel* case.

¹⁴⁹ From the International Court of Justice website at [http://212.153.43.18/icjwww/icas/icc/icc_isummaries/icc_isummary_19490409.htm] (date accessed: 16 March 2004).

¹⁵⁰ Art. 16(4) provides: "There shall be no suspension of the innocent passage of foreign ships through straits which are used for international navigation between one part of the high seas and another part of the high seas or the territorial sea of a foreign State". Roman characters added.

¹⁵¹ Art. 37 of UNCLOS states: "This section applies to straits which are used for international navigation between one part of the high seas or an exclusive economic zone and another part of the high seas or an exclusive economic zone". Emphasis added.

¹⁵² D. PHARAND, *op. cit.*, note 1, at 216.

¹⁵³ *Id.*, at 223.

*It may be asked whether the test is to be found in the volume of traffic passing through the Strait or in its greater or lesser importance for international navigation. But in the opinion of the Court the decisive criterion is rather its geographical situation as connecting two parts of the high seas and the fact of its being used for international navigation. Nor can it be decisive that this Strait is not a necessary route between two parts of the high seas, but only an alternative passage between the Aegean and the Adriatic Seas. It has nevertheless been a useful route for international maritime traffic.*¹⁵⁴

The functional criterion was later codified in the 1958 Territorial Sea Convention and copied in UNCLOS, without however, any of the Court's refinements. Both article 16(4) of the Geneva Convention and article 34(1) of UNCLOS merely refer to "straits used for international navigation". However, according to Howson, the past tense "used" appearing in the *Corfu Channel* decision and in both statutory formulations confirms that "actual use" is the more tenable interpretation¹⁵⁵.

Nandan and Anderson, both delegates at the Third U.N. Conference on the Law of the Sea, also take the view that potential use is insufficient, insisting that there must be actual use though such use need not be "regular or ... reach any predetermined level"¹⁵⁶. Tommy Koh, President of the Conference from 1981 to 1982, agrees that potential use of a strait is not enough and that actual use is necessary. Koh argues that UNCLOS requires evidence "that a strait is usually being used, the volume of such usage being irrelevant, for international navigation"¹⁵⁷.

Pharand takes a somewhat different view of the functional criterion arguing that the Court in the *Corfu Channel* case required not only that a strait have a history of usage for international navigation, but also that the volume of traffic be of some importance. While acknowledging that the Court did not specify what level of

¹⁵⁴ *Corfu Channel*, *supra* note 148, 28. Roman characters added.

¹⁵⁵ N.C. HOWSON, *loc. cit.*, note 20, 370.

¹⁵⁶ S.N. NANDAN and D.H. ANDERSON, "Straits used for International Navigation: A Commentary on Part III of the United Nations Convention on the Law of the Sea", (1989) 60 *B.Y.I.L.* 159, 167-169.

¹⁵⁷ T.B. KOH, "The Territorial Sea, Contiguous Zone, Straits and Archipelagoes under the 1982 Convention on the Law of the Sea, (1987) 29 *Malaya L. Rev.* 163, 178, quoted in D.R. ROTHWELL, *loc. cit.*, note 1, 355.

activity was necessary¹⁵⁸, Pharand maintains that at the very least, the strait must be a “useful route for international maritime traffic”¹⁵⁹. In applying this test, Pharand suggests that the level of use be determined principally, but not exclusively, by reference to two factors: the number of ships navigating the strait and the number of flags flown¹⁶⁰. Pointing to the actual degree of usage of the Northwest Passage since the first successful crossing, Pharand concludes that the Passage is not an international strait.

When this criterion [useful route for international maritime traffic] is applied to the Northwest Passage, it becomes readily evident that it fails to be met since, in its 80-year history of exploratory navigation, the Passage has seen only 45 complete transits and, of those, 29 were by Canadian ships. The 16 foreign crossings comprised 11 American ships, 1 Norwegian, 1 Dutch and 1 Japanese, 1 Bahamian and 1 Liberian. The historic Norwegian crossing of 1903-6 by Amundsen was one of discovery, the Dutch and Japanese crossings were for adventures, and the Bahamian and Liberian were pleasure cruises. Aside from the first discovery crossing, all others were pr[o]ceeded by a request for and grant of permission.¹⁶¹

Pharand goes on to emphasize that American transits of the Passage were accomplished with the permission of and aided by Canadian authorities¹⁶². He does however acknowledge the controversy which surrounded the 1986 crossing by the American Coast Guard icebreaker *Polar Sea*¹⁶³.

Other Canadian scholars share Pharand’s view that the Northwest Passage does not constitute an international maritime route. McDorman notes that “[t]he amount of known traffic through the Northwest Passage has been insignificant”¹⁶⁴ and McKinnon argues

¹⁵⁸ D. PHARAND, “The Northwest Passage in International Law”, (1979) 17 *Can. Y.B. Int’l L.* 99, 106 and 107.

¹⁵⁹ D. PHARAND, *op. cit.*, note 1, at 224.

¹⁶⁰ D. PHARAND, *loc. cit.*, note 158, 107.

¹⁶¹ D. PHARAND, *op. cit.*, note 1, at 224.

¹⁶² “As for the American transits, three of them were accomplished by a squadron of icebreakers in 1957 ... and all three ships were led through the narrow Bellot Strait by H.M.C.S. *Labrador* ... The U.S.S. *Seadragon* in 1960 had obtained Canada’s permission and had a Canadian representative aboard in the person of Commodore O.C.S. Robertson ...”: *id.*, at 224 and 225.

¹⁶³ *Id.* at 225.

¹⁶⁴ T.L. McDORMAN, *loc. cit.*, note 2, 636.

that “[t]he Northwest Passage ... does not meet the second, or functional criterion since it has not been sufficiently used for international navigation”¹⁶⁵. McRae also concludes that “[t]he lack of use of the Northwest Passage for international shipping has prevented it from achieving the status of an international strait”¹⁶⁶. However, Rothwell cautions that a special polar standard could be applied in the case of the Northwest Passage.

*Certainly, the amount of traffic through the Northwest Passage is not comparable to that of the Corfu Channel, or other commonly accepted international straits. The need to apply different standards in the polar regions, however, has been recognized.*¹⁶⁷

The presence of ice in the Passage and the polar weather conditions should, according to Rothwell, allow for a test requiring a lower volume of international navigation of the Passage in order to classify it as an international strait¹⁶⁸. Pharand also concedes that allowances should perhaps be made in polar regions and that a brief history of transporting oil and gas by a few flag States might be sufficient¹⁶⁹. However, according to Pharand, a review of shipping activities within the Northwest Passage clearly demonstrates that the functional criterion, even assessed according to a polar standard, has not been met¹⁷⁰.

Some commentators warn however that while the Northwest Passage does not at present fulfil the twin criteria of an “international strait”, the situation may quickly change. Howson writes:

[T]hough at present both the rarity of surface voyages and the difficulty of navigation through the ice-bound waters keep international maritime

¹⁶⁵ J.B. MCKINNON, *loc. cit.*, note 24, 816.

¹⁶⁶ D.M. McRAE, *loc. cit.*, note 124, 488. See also: R.R. ROTH, *loc. cit.*, note 3, 864.

¹⁶⁷ D.R. ROTHWELL, *loc. cit.*, note 1, 357 citing the *Legal Status of Eastern Greenland Case (Norway v. Denmark)*, (1933) *P.C.I.J.* (Ser. A/B) No. 53, at 22 in support.

¹⁶⁸ *Id.* Rothwell reports (at p. 356) that Butler takes a similar view in his study of the Northeast Arctic Passage, “favouring a broad interpretation of the functional requirement in the case of the polar regions”. William E. BUTLER, *Northeast Arctic Passage*, Alphen aan den Rijn: Sijthoff & Noordhoff, 1978, at 135. See also: L.M. ALEXANDER, “Exceptions to the Transit Passage Regime, Straits with Routes of ‘Similar Convenience’”, (1987) 18 *Ocean Dev. & Int’l L.* 479, 480.

¹⁶⁹ D. PHARAND, *loc. cit.*, note 158, 114.

¹⁷⁰ *Id.*

*navigation away from the Northwest Passage, technological advancement will soon complement geographic potential. Indeed, to a certain extent, this has already occurred with rapid advances in submarine technology. Under either "actual" or "potential" use standards, the Passage is likely to become a far more compelling case for the status of an "international strait".*¹⁷¹

While McDorman speculates that promises of mineral wealth in the Arctic will doubtless lead to increased maritime traffic¹⁷², Rothwell points to evidence of an already increasing usage of the Passage – twenty-three transits, eight by non-Canadian flagged vessels recorded during the 1980s alone¹⁷³. Pharand shares this view, warning that international navigation has already begun in the eastern part of the Passage, used for the transportation of minerals from the Nanisivik Mine to the south of Lancaster Sound, and the Polaris mine, north of Barrow Strait. To the question whether such international shipping activities might result in the internationalization of the Passage, Pharand's answer is "probably yes":

*It would seem that the only uncertainty is the time at which this would take place, which depends on the intensity of the use.*¹⁷⁴

And these forecasts do not even take into account the issue of global warming and the alarming rate at which the Arctic ice is melting.

While acknowledging that the eventual internalization of the Northwest Passage will depend on the importance of navigation by foreign flags, Pharand stresses the importance of another critical factor: the effectiveness of the measures taken by Canada to control such navigation. In his 1984 work *The Northwest Passage: Arctic Straits*, Pharand identifies three categories of measures which Canada ought to adopt in order to deny the international character of the Passage: legislative confirmation of its sovereignty claim over the

¹⁷¹ N.C. HOWSON, *loc. cit.*, note 20, 370 and 371.

¹⁷² T.L. McDORMAN, *loc. cit.*, note 2, 636. According to Pharand, it is only a question of time before the shipping of oil from the Beaufort Sea along the full length of the Northwest Passage will take place: Donat PHARAND, *The Northwest Passage: Arctic Straits*, Dordrecht, Martinus Nijhoff Publishers, 1984, at 110. See also: D. PHARAND, *loc. cit.*, note 66, 337.

¹⁷³ D.R. ROTHWELL, *loc. cit.*, note 1, 357.

¹⁷⁴ D. PHARAND, *op. cit.*, note 172, at 110.

Arctic waters, the development of a technological sovereignty and the conclusion of user agreements with shipping States¹⁷⁵.

Regarding sovereignty through legislation, Pharand's recommendation that Canada encircle the Arctic archipelago with strait baselines was of course adopted in 1985 with the enactment of the *Territorial Sea Geographical Coordinates (Area 7) Order*. However, Pharand warns that while legal sovereignty is of prime importance, to make it "credible", it must be accompanied by technological sovereignty:

*In other words, if Canada is to exercise the necessary control to maintain the sovereignty it claims to have acquired over the waters of the Northwest Passage, it must develop a full range of sea and land based services to ensure that its control is factual and effective.*¹⁷⁶

Pharand refers to a 1982 Department of Transport position statement in which it was recognized that in exercising effective control, the Canadian government ought to be in a position to provide the following services: "marine navigational aids, icebreaking and escorting, marine search and rescue, marine emergencies/pollution control, marine mobile communications services, ports, harbors and terminals, vessel inspection services, vessel traffic management, marine re-supply administration and support, pilotage and training"¹⁷⁷. As Pharand reports, the position paper clearly indicated that these services would be in addition to those already provided by various government departments such as hydrography, oceanography, meteorology, analysis of ice properties, distribution and movement, dredging implementation and customs services¹⁷⁸.

Finally, Pharand argues that if Canada succeeded in exerting both legal and factual control of the Arctic waters, it would then be in a position to insist upon the conclusion of bilateral agreements, his third category of recommended measures¹⁷⁹. These agreements would recognize Canada's control over the Northwest Passage by providing, for instance, for the use of Canadian icebreaking and

¹⁷⁵ *Id.* at 111-114.

¹⁷⁶ *Id.* at 112.

¹⁷⁷ DEPARTMENT OF TRANSPORT, Position Statement, Appendix 1, at 22 and 23 cited in D. PHARAND, *op. cit.*, note 172, at 113.

¹⁷⁸ *Id.*

¹⁷⁹ *Id.*

pilotage services by foreign vessels. Thus, with the necessary technological resources at its disposal, "Canada could establish and enforce a transit management system which could become the primary means at its disposal to ensure effective control over foreign shipping" in the Passage¹⁸⁰.

It seems clear that should Canada fail to react to the ever increasing maritime traffic in the Arctic waters, the Northwest Passage may well become an international strait and therefore subject to the right of transit passage created by the 1982 *U.N. Convention on the Law of the Sea*. But while transit passage involves freedom of navigation and overflight for the continuous and expeditious transit of a strait (art. 38(2) UNCLOS) and though the new right of transit undoubtedly allows less coastal State control over passing vessels than does innocent passage, as Churchill and Lowe confirm, it still "falls far short of granting the same freedom of navigation as would have existed had the waters of the straits constituted high seas"¹⁸¹. Indeed, even if the Northwest Passage were to be internationalized, Canada would nevertheless retain two sets of protective rights governing transit by foreign ships. Canada would still have certain general rights given to all States bordering international straits and it would also continue to benefit from special rights which are conferred on those coastal States bordering ice-covered areas.

While there is no criterion of innocence attaching to the regime of transit, article 39(1)(b) of UNCLOS stipulates that ships and aircraft, while exercising the right of transit passage, must refrain from "any threat or use of force against the sovereignty, territorial integrity or political independence of States bordering the strait" or acting in "any other manner in violation of the principles of international law embodied in the Charter of the United Nations". In addition, under paragraph (c), ships and aircraft are under a duty to refrain from any activities other than those incidental to the normal modes of continuous and expeditious transit unless rendered necessary by force majeure or distress. It is also clearly provided in article 38(3) that any activity which is not an exercise of the right of transit passage remains subject to the other applicable provisions of the Convention. Churchill and Lowe therefore conclude that any activity by a foreign ship or aircraft deemed threatening to Canada

¹⁸⁰ *Id.*

¹⁸¹ R.R. CHURCHILL and A.V. LOWE, *op. cit.*, note 133, at 91.

would trigger the general regime of innocent passage, in which case passage could be denied for want of innocence¹⁸².

In their very thorough analysis of the regime of transit passage, Churchill and Lowe also comment that in the absence of any “threatening” activity, the only remedy for any implicit threat – for example, the passage of a large number of warships – would appear to be to “pursue the matter as a breach of international law through diplomatic channels and dispute settlement procedures”¹⁸³. For article 44 of UNCLOS stipulates that States bordering straits have no right to impede or suspend the right of transit passage. Of course, in extreme circumstances, a coastal State might be entitled to take action on the basis of the right of self-defence¹⁸⁴.

While in transit through an international strait, article 39(2) of UNCLOS provides that ships must comply with generally accepted international regulations, procedures and practices for safety at sea and for the prevention of pollution. Thus, standards in the Safety of Life at Sea Conventions and the International Maritime Organisation pollution conventions would be applicable to ships navigating the Northwest Passage even if their flag States were not parties to those conventions. Aircraft must also comply with international standards while exercising their right of overflight (art. 39(3)). While this duty to comply with international safety and pollution standards is independent of any national legislation, under article 42(1), Canada would be entitled to adopt laws and regulations on these matters as long as the Canadian legislation referred to internationally agreed standards. Implementing international safety and pollution standards in domestic legislation would have the advantage of making them directly enforceable by Canadian authorities¹⁸⁵.

Furthermore, bordering States are also given a certain regulatory authority relating to transit passage in international straits. Indeed, referring to an implied power contained in article 40 of UNCLOS, Pharand states that coastal States are entitled to adopt regulations prohibiting research and survey activities without their

¹⁸² *Id.*

¹⁸³ *Id.*

¹⁸⁴ *Id.*

¹⁸⁵ *Id.* at 92.

prior authorization: "This power is implied from a specific prohibition against foreign ships engaging in such activities"¹⁸⁶. Article 41 also empowers Canada to designate sea lanes and to prescribe traffic separation schemes if necessary to promote the safe passage of ships. However, as Pharand notes, such power is carefully circumscribed since article 41(3) stipulates that such sea lanes and traffic separation schemes must conform to generally accepted international regulations and under article 41(4), must be approved by the "competent international organization"¹⁸⁷.

Article 42(1) of UNCLOS contains a more general power to adopt laws and regulations with respect to four categories: (a) the safety of navigation and the regulation of maritime traffic, as provided in article 41; (b) the prevention, reduction and control of pollution, by giving effect to applicable international regulations; (c) with respect to fishing vessels, the prevention of fishing; and (d) the loading or unloading of any commodity, currency, or person in contravention of the customs, fiscal, immigration, or sanitary laws and regulations of States bordering straits. Under article 42(4), foreign vessels exercising the right of transit through the Northwest Passage would have to comply with Canadian laws and regulations pertaining to these matters.

The regime of transit passage under Part III of UNCLOS applies to all ships and aircraft, both military and commercial. As for submarines, Pharand, Churchill and Lowe concede that a right to transit international straits while submerged appears now to have been recognised by the Convention¹⁸⁸. Reference is made to the wording of article 39(1)(c) which requires that passing vessels "refrain from activities other than those incident to their *normal mode* of continuous and expeditious transit". As pointed out succinctly by Professor O'Connell, "since submarines are by definition underwater vehicles, submerged passage is a 'normal mode' of operation for such craft"¹⁸⁹. This interpretation, which according to Churchill and Lowe is consistent with the *travaux préparatoires* of UNCLOS, "underlines the importance of the right of transit passage for submarines,

¹⁸⁶ D. PHARAND, *op. cit.*, note 172, at 118.

¹⁸⁷ *Id.*

¹⁸⁸ D. PHARAND, *op. cit.*, note 1, at 335; RR. CHURCHILL and A.V. LOWE, *op. cit.*, note 133, at 93.

¹⁸⁹ D.P. O'CONNELL, *op. cit.*, note 84, at 333.

which must normally pass through the territorial sea on the surface” and is “of great importance to aircraft, which have no right of innocent passage over the territorial sea”¹⁹⁰.

It must be emphasized however that under Part III of UNCLOS “Straits Used for International Navigation”, enforcement powers, as distinguished from regulatory powers, are expressly denied the coastal State except in one instance. The only case where Canada could take “appropriate enforcement measures” under article 42 is where a warship or government vessel had committed a violation of the laws and regulations pertaining to safety of navigation or prevention of pollution. And even then, the violation would have to cause or threaten to cause major damage to the marine environment of the Passage (art. 233)¹⁹¹. Otherwise, as Pharand explains, the traditional jurisdiction of the flag State would apply¹⁹².

In addition to the general rights described, Canada would also continue to benefit from a special right of protection. As mentioned earlier, Canada’s *Arctic Waters Pollution Prevention Act* has been validated internationally by the incorporation of article 234 in the 1982 Law of the Sea Convention. Article 234, the sole provision under section 8 of Part XII, is not excluded, as are some of the other sections in Part XII, from the regime of straits used for international navigation. Thus, Canada would continue to benefit from this special clause even if the Northwest Passage were to become an international strait. Under article 234, Canada would be entitled to “adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution” from vessels navigating the Passage.

In summary, even if, as a result of a significant increase in use, the Northwest Passage was eventually designated an international strait, the Canadian government would retain important general regulatory powers as well as a special right of protection under article 234 of UNCLOS and the AWPPA. However, the Passage does not appear, at present, to meet the definition of an international strait elaborated by the ICJ in the *Corfu Channel* case. For this reason, Canadian authorities have consistently and strenuously rejected

¹⁹⁰ R.R. CHURCHILL and A.V. LOWE, *op. cit.*, note 133, at 93.

¹⁹¹ D. PHARAND, *op. cit.*, note 172, at 119.

¹⁹² *Id.*

the American claim that the Passage ought to be classified as a strait used for international navigation. On the other hand, Canada's own claim, designating the entire Arctic waters as Canadian internal waters, has been soundly rejected by the American government. And as indicated earlier, Canada's inconsistent stance regarding its jurisdiction over the waters of the Arctic archipelago, has weakened its position. This stalemate between the two countries, arguably the States most interested in the question of the legal status of the Arctic waters, was after all openly acknowledged in the 1988 *Arctic Cooperation Agreement*. What then might be acceptable as a compromise?

D. The Middle Ground

If both the Canadian claim (entire Arctic waters are Canadian internal waters) and the American claim (the Northwest Passage is an international strait) are rejected, the applicable regime would be a mixture of territorial sea and exclusive economic zone (EEZ). In addition, Canada would retain its jurisdiction under the AWPPA. For though the United States initially protested Canada's legislation in 1970, its delegation at the Third Conference on the Law of the Sea¹⁹³ eventually participated in the consensus surrounding the incorporation of article 234 in UNCLOS.

If the international community were to reject Canada's classification of the Arctic waters as internal waters, the territorial sea and exclusive economic zone provisions of the 1982 Convention would apply to each individual island in the archipelago. As Roth points out, the delimitation of a 12-mile territorial sea around each island would not however be sufficient to completely cover all of the waters lying within the archipelago¹⁹⁴. However, as we have seen, it would be impossible for foreign vessels to pass through the Northwest

¹⁹³ The third U.N. Conference on the Law of the Sea was convened in New York in 1973. It ended nine years later with the adoption in 1982 of a constitution for the seas—the U.N. Convention on the Law of the Sea. "During the nine years, shuttling back and forth between New York and Geneva, representatives of more than one hundred and sixty States sat down and discussed the issues, bargained and traded national rights and obligations in the course of the marathon negotiations that produced the Convention". Online: The United Nations [http://www.un.org/Dept/los/convention_agreements/convention_historical_perspective.htm#Historical%20Perspective] [date accessed: 16 March 2004].

¹⁹⁴ R.R. ROTH, *loc. cit.*, note 3, 865.

Passage without at some strategic points going through Canada's territorial sea¹⁹⁵. For instance, the 12-mile zones would overlap in the Barrow Strait as well as the Prince of Wales Strait, subjecting them to Canada's full sovereignty. As previously noted, within its territorial sea, Canada's jurisdiction is only limited by the right of innocent passage conferred on foreign vessels by article 17 of UNCLOS.

Under UNCLOS, States may not legislate so as to hamper (art. 24(1)) or levy charges upon innocent passage. They may however charge for specific services rendered, such as rescue or pilotage services, though not in a manner which discriminates among foreign ships (art. 26(2)). They may legislate for such matters as navigation, pollution, fishing, marine scientific research, etc. listed in article 21 and all ships, whether in innocent passage or not, must comply with such laws while in the territorial sea. Churchill and Lowe also argue that it is settled practice that ships not engaged in innocent passage, either because they are not passing, or are passing but not innocently, are subject to all coastal State laws¹⁹⁶. The same experts further add that it is "a legitimate inference from the principle of coastal sovereignty over territorial waters, that States also retain the right to extend any other legislation, other than that dealing with navigation, to foreign ships in their waters"¹⁹⁷.

Canada also enjoys enforcement jurisdiction in its territorial waters under articles 27 and 28 of UNCLOS. Article 27(1) provides that the criminal jurisdiction of the coastal State should not be exercised on board a foreign ship save in four stipulated cases: (a) if the consequences of the crime extend to the coastal State; (b) if the crime is of a kind to disturb the peace of the country or the good order of the territorial sea; (c) if the assistance of the local authorities has been requested by the master of the ship or by an official of the flag State; or (d) if such measures are necessary for the suppression of illicit traffic in narcotic drugs. However, article 27(5) stipulates that the coastal State should also not take any enforcement action on board a foreign ship in connection with any crime committed before the ship entered its territorial sea. However, these

¹⁹⁵ *Id.*

¹⁹⁶ R.R. CHURCHILL and A.V. LOWE, *op. cit.*, note 133, at 79.

¹⁹⁷ Churchill and Lowe comment that as a matter of comity, coastal States refrain from doing so. *Id.*

provisions are held not to affect the coastal State's powers of arrest and investigation on board a foreign vessel passing through its territorial sea after leaving its internal waters. Article 28, which details the coastal State's civil jurisdiction, states in paragraph (1) that as a general rule, foreign ships passing through the territorial sea should not be stopped or diverted. Yet under paragraph (2), a coastal State is empowered to levy execution against or arrest a foreign ship for the purpose of civil proceedings with respect to obligations or liabilities assumed or incurred by the ship in the course of or for the purpose of its voyage through the waters of the coastal State. And paragraph (2) is without prejudice to the right of the coastal State to exercise its civil jurisdiction with respect to a foreign ship passing through its territorial sea after having left its internal waters (art.28(3)).

“Warships and government ships operated for non-commercial purposes”¹⁹⁸ are immune from coastal State jurisdiction under well-established rules of customary law and article 32 of UNCLOS¹⁹⁹. However, Churchill and Lowe emphasize that such ships remain subject to the legislative, as opposed to the enforcement, jurisdiction of the coastal State and are therefore under an obligation to respect its laws²⁰⁰. Furthermore and pursuant to article 31, the flag State bears international responsibility for any loss or damage arising from the non-compliance by government ships with the coastal State's laws governing passage through the territorial sea or other rules of international law. Finally, article 30 provides that any warship which does not comply “with the laws and regulations of the coastal State concerning passage through the territorial sea and disregards any request for compliance ... may be required to leave the territorial sea immediately” and Churchill and Lowe add that the coastal State may use any force necessary to compel them to do so²⁰¹.

It should also be noted that in a zone contiguous to its territorial sea²⁰², the coastal State may exercise the necessary control to pre-

¹⁹⁸ Art. 32 UNCLOS.

¹⁹⁹ R.R. CHURCHILL and A.V. LOWE, *op. cit.*, note 133, at 83.

²⁰⁰ *Id.*

²⁰¹ *Id.*

²⁰² The contiguous zone may not extend beyond 24 nautical miles from the baselines from which the breadth of the territorial sea is measured (art. 33(2) UNCLOS).

vent infringement of its customs, fiscal, immigration or sanitary laws and regulations within its territorial sea. It may also “punish infringement of the above laws and regulations” committed within its territorial sea (art. 33(1)(b)).

And while the assertion of a 12-mile territorial sea around each individual island would not cover the entire Arctic waters, there is no doubt that the entire Arctic archipelago would fall within Canada’s exclusive economic zone. Canada’s rights and duties in its EEZ relate essentially to the natural resources of the zone. Under article 56 of UNCLOS, Canada has sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the sea-bed and of the sea-bed itself and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds. Article 56 also confers on Canada jurisdiction with regard to the establishment and use of artificial islands, installations and structures, marine scientific research and the protection and preservation of the marine environment. Article 56(2) requires however that coastal States have due regard to the rights and duties of other States in exercising their rights under the EEZ provisions.

Thus, though foreign States enjoy important freedoms within a coastal State’s EEZ, they are nevertheless subject to greater limitations than on the high seas. Article 58 provides that all States enjoy the freedoms of navigation and overflight and the laying of submarine cables and pipelines contained in article 87. However, these freedoms are subject to the general limitation governing all freedoms of the high seas, namely that they must be exercised “with due regard for the interests of other States in their exercise of the freedom of the high seas”²⁰³. Secondly, the freedoms guaranteed by article 58 are also subject to the provisions of articles 88-115 concerning the high seas and other relevant rules of international law dealing with the EEZ. Finally, article 58(3) provides: “In exercising their rights and performing their duties under this Convention in the exclusive economic zone, States shall have due regard to the rights and duties of the coastal State and shall comply with the laws and

²⁰³ Art. 87(2) UNCLOS.

regulations adopted by the coastal State in accordance with the provisions of this Convention”.

Article 73 of UNCLOS confers a wide jurisdiction regarding the enforcement of a State’s laws and regulations in its EEZ:

The coastal State may, in the exercise of its sovereign rights to explore, exploit, conserve and manage the living resources in the exclusive economic zone, take such measures, including boarding, inspection, arrest and judicial proceedings, as may be necessary to ensure compliance with the laws and regulations adopted by it in conformity with this Convention.

However, paragraph 3 stipulates that penalties for violations of fisheries laws and regulations in the exclusive economic zone may not include imprisonment, in the absence of agreements to the contrary by the States concerned, or any other form of corporal punishment.

In addition to its right to protect and preserve the marine environment in its exclusive economic zone (art. 56(1)(b)(iii)), Canada is also entitled to enforce its jurisdiction under its *Arctic Waters Pollution Prevention Act*. As noted, Canada in this Act asserted its right to shield the Arctic waters against pollution for a distance of 100 miles offshore. The regulations adopted pursuant to the AWPPA therefore conferred upon the Canadian government extensive powers of standard-setting and enforcement. Though in 1970 and throughout the following decade, some doubt existed as to the international validity of the AWPPA Regulations [hereinafter “AWPPR”]²⁰⁴, they have now largely been accepted by the international community and have in fact been legitimized by the insertion in UNCLOS of the special “ice-covered areas” provision (art. 234)²⁰⁵. Once again, article 234 provides:

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

²⁰⁴ See for example the U.S. Government diplomatic note entitled “U.S. Opposes Unilateral Extension by Canada of High Seas Jurisdiction”, Press Release No. 121, 15 April 1970, reprinted in 62 Dep’t St. Bull., 11 May 1970, at 610 and 611.

²⁰⁵ D. PHARAND, *loc. cit.*, note 47, 336.

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.

As Pharand emphasizes, the powers conferred on the coastal State under article 234 extend not only to the establishment of standards but also to their enforcement, and furthermore, that those standards may be more stringent than otherwise permitted under international law²⁰⁶.

The Canadian pollution prevention zone, established by the AWPPR, covers all of the Northwest Passage, since it applies to the "arctic waters" as defined under section 3 of the AWPPA: " 'arctic waters' means the waters adjacent to the mainland and islands of the Canadian arctic within the area enclosed by the [60th] parallel of north latitude, the [141st] meridian of west longitude and a line ... of equidistance between the islands of the Canadian arctic and Greenland ..."²⁰⁷. Within this zone, as Pharand notes, Canada is empowered to impose stringent preventive measures against the deposit of waste, "either from marine transportation ... or from land-based and offshore resource development activities"²⁰⁸. Pursuant to article 11 of the AWPPA, Canada has established shipping safety control zones²⁰⁹. Article 12(1) then provides for regulations defining standards which must be met by ships wishing to navigate in those zones. These standards relate to such features as hull and fuel tank construction (art. 12(1)(a)(i)); the construction of navigational aids and equipment (ii and iii); the manning of the ship, including the number of personnel and their qualification (iv); and the quantity and nature of the cargo, supplies and equipment to be carried (v-viii).²¹⁰ The *Arctic Shipping Pollution Prevention Regulations* [hereinafter "ASPPR"] also specify in Schedule VIII what class of ship may navigate in a particular zone at any given time of the year. For example, only ships classified as Arctic class 10 are entitled to

²⁰⁶ *Id.*

²⁰⁷ Art. 2 *Arctic Waters Pollution Prevention Regulations*, C.R.C., c. 353-6 (1978).

²⁰⁸ D. PHARAND, *loc. cit.*, note 47, 336.

²⁰⁹ See the *Shipping Safety Control Zones Order*, C.R.C., c. 356.

²¹⁰ See Schedules V, VI and VII of the *Arctic Shipping Pollution Prevention Regulations*, C.R.C., c. 353 [hereinafter "ASPPR"].

navigate in Zone 1 throughout the year while Arctic class 8 vessels are restricted to a period from 1 July to 15 October²¹¹. Finally, article 26(1) of the ASPPR stipulates that no tanker may navigate within any of the zones without the aid of an experienced ice navigator while article 12 makes the obtaining of an arctic pollution prevention certificate mandatory.

Under the AWPPA, the Governor in Council may designate pollution prevention officers who are in turn given sweeping enforcement powers (art. 14). Pursuant to article 15(4), a pollution prevention officer may board any ship that is within a shipping safety control zone and conduct inspections to determine whether the ship complies with the standards set out in the regulations²¹². The pollution prevention officer can also order any ship that is in or near a shipping safety control zone to proceed outside the zone, to remain outside the zone or to anchor in a place selected by him²¹³. Where the officer is informed that a substantial quantity of waste has entered the Arctic waters or where there is a grave and imminent danger of a substantial deposit of waste, the officer may order all ships within a specified area to report their positions and may order them to take part in the clean-up of the waste or in any action to control or contain that waste²¹⁴.

Articles 18 to 22 of the AWPPA define a number of offences under the Act and set out the corresponding punishment. Persons and ships are liable under summary conviction to fines ranging from five thousand dollars to one hundred thousand dollars (art. 18(1)). More importantly, articles 23 to 27 provide for seizure and forfeiture. Article 23(1) provides in part that where a pollution prevention officer suspects on reasonable grounds that any provision of the Act or the regulations have been contravened by a ship, the officer may, with the consent of the Governor in Council, seize the ship and its cargo anywhere in the Arctic waters or elsewhere in the territorial sea or internal or inland waters of Canada. Of course, military and

²¹¹ Zone 1 includes M'Clure Strait, north of Banks Island at the western end of the Northwest Passage. For the technical description of Zone 1, refer to section 3 of the *Shipping Safety Control Zones Order*, C.R.C., c. 356.

²¹² Art. 15(4)(a) AWPPA.

²¹³ Art. 15(4)(b) AWPPA.

²¹⁴ Art. 15(4)(c) AWPPA.

government vessels would continue to benefit from the principle of sovereign immunity²¹⁵.

Thus, even if Canada's claim to internal waters is dismissed by the international community, it still retains a wide jurisdiction over the Arctic waters under the territorial sea, contiguous zone and exclusive economic zone regimes of UNCLOS. In addition, under article 234, Canada is also entitled to enforce the stringent pollution prevention measures contained in its 1970 *Arctic Waters Pollution Prevention Act* and the regulations enacted in 1972 pursuant to the legislation. In fact, as we have seen, under the various regimes which might potentially apply to the Arctic waters, international law confers on Canada, as the coastal State, important powers and prerogatives.

Undoubtedly Canada's right to exert control over the archipelago's waterways is at its strongest if the 1986 baselines did enclose waters already considered Canadian internal waters. However, even if a right of innocent passage for foreign vessels is found to exist (art. 8(2) UNCLOS), Canada retains a very wide measure of control over foreign vessels navigating the Arctic waters. The American position, that the Northwest Passage is an international strait subject to the fairly recent right of transit passage, is certainly the least favourable to Canada in terms of its exerting control over the Arctic waters. However, even under this regime, which at present does not appear to apply, international law confers on Canada important rights and privileges which it must be in a position to effectively assert. In between these two more extreme positions, Canada, as a coastal State, benefits from a wide range of powers relating to pollution, conservation and navigation. The critical question remains – whatever the specific regime that may or may not apply – which, if any, of the rights that would devolve upon Canada, is it in a position to enforce?

III. Canada's Enforcement Capabilities

As mentioned earlier, when in 1985, the Federal government decided to enclose the Arctic waters within straight baselines, a number of concrete measures were promised in order to give effect

²¹⁵ The principle of sovereign immunity is acknowledged in article 12(2) AWPPA.

to Canada's new Arctic policy²¹⁶. The fate of these measures will be considered in our examination of Canada's enforcement capabilities in the Arctic.

The Canadian Armed Forces, the Coast Guard and the RCMP share defence and constabulary functions in the Canadian Arctic. Navy and Coast Guard "*effectifs*" are obviously of particular relevance in assessing Canada's ability to control the waters of the Arctic archipelago. Various public affairs personnel were contacted in gathering information for this article and in the aftermath of September 11th, it will be readily understood that many were reluctant to reveal or discuss precise military data. Nevertheless, a general picture can be drawn of Canada's current presence over, under and on the Arctic waters.

A. The Canadian Navy

According to the Navy's own website, constant ship, submarine and air patrols keep watch on Canada's shores.

*The Navy routinely conducts search and rescue missions and fisheries patrols, intercepts vessels trafficking in drugs and human cargo and monitors the ocean environment ... The Navy's warships are constantly at sea, on patrol. They are a visible expressions of our national sovereignty and help guard our fisheries, our natural resources and our seaward security.*²¹⁷

*The Canadian Fleet is made up of a balanced force of 16 helicopter-carrying destroyers and frigates, 12 coastal defence vessels and 2 supply ships. Four modern diesel-electric submarines will soon join the fleet.*²¹⁸

Though the Canadian fleet may appear a well balanced force, it is clearly quite a small force to patrol three oceans effectively, oceans which touch upon over 240,000 kilometres of coastline. In addition, none of the Navy's ships are ice-strengthened, making navigation practically impossible in tens of thousands of square miles of the Arctic Sea. Thus, to a very large extent, the Navy relies on its CP-140 Aurora long-range maritime patrol aircraft in order to fulfil its surveillance mandate in the Arctic.

²¹⁶ See Clark statement under section C, "The Polar Sea Crisis" above.

²¹⁷ Online: Department of National Defence [http://www.navy.forces.ca/fleet/fleet_cd_e.htm] (date accessed: 23 October 2001).

²¹⁸ Online: Department of National Defence [http://www.navy.forces.ca/index_e.htm] (date accessed: 23 October 2001).

The Navy owns 18 Aurora patrol aircraft, together with 3 CP-140A Arcturus²¹⁹. These aircraft can stay aloft for 14 hours and conduct surveillance missions on all three coasts. In her article “Defence and Policing in Arctic Canada” published in 1987, Critchley reported that there were an annual average of 16 to 17 northern patrol flights, each lasting three to four days²²⁰. As Critchley explains, these patrol flights, originating at Comox, B.C. or Greenwood, N.S., generally covered “the whole of Canada’s north over the year’s series” but monitored “the same specific locations for only a fraction of the flights”²²¹. Asked to confirm whether this information was still accurate in 2001, Captain Robitaille, a public affairs officer at 14th Wing, Greenwood indicated that the frequency of overflights in the Arctic was classified information²²².

Packed with electronic sensors, the Auroras are well-equipped for their main task which is anti-submarine surveillance²²³. However, their Arctic patrols are also in support of “pollution control, fisheries surveillance, wildlife protection and ice reconnaissance”²²⁴. They are excellent communication platforms and are staffed with communications experts. Their mission is to observe and to submit reports of any abnormal or threatening activity. For this purpose, they carry highly specialized photographic equipment. Navy personnel also emphasized that in addition to reconnaissance and surveillance, the Aurora patrols play an important part in asserting Canadian sovereignty in the North²²⁵. They are a tangible Canadian presence, signalling to the international community Canada’s determination to occupy and defend its northern spaces.

According to Captain Robitaille, the Auroras’ ability to fly at very low altitude greatly contributes to the success of their missions. However, as Critchley points out, since these patrols consist mainly

²¹⁹ Interview with Captain Isabelle Robitaille (23 October 2001).

²²⁰ W.H. CRITCHLEY, “Defence and Policing in Arctic Canada”, in F. GRIFFITHS (ed.), *Politics of the Northwest Passage*, Montreal, McGill-Queen’s University Press, 1987, 200, at 201.

²²¹ *Id.*

²²² Interview with Captain Isabelle Robitaille (23 October 2001).

²²³ Though capable of carrying torpedoes and SAR equipment, the Auroras are not so equipped when conducting surveillance missions.

²²⁴ Department of National Defence, *Defence 83*, Ottawa, Supply and Services, 1984, at 50.

²²⁵ Interview with Captain John Price (23 October 2001).

of visual observation, “limitations ... imposed by adverse weather conditions are increased in the high Arctic by the three-to-four-month period of 24-hour-a-day darkness from November to February”²²⁶. And it was very difficult to get a real sense of just how events would unfold if an Aurora team did spot and report a potential problem or hazard. According to personnel at DND HQ in Ottawa, situations would be resolved on a case-by-case basis²²⁷. The hypothetical case of a vessel approaching Canadian Arctic waters and which appeared to pose a substantial pollution risk was put to Captain Robitaille. In her view, this type of situation would probably be dealt with initially at the communications level. Contact would be established with the offending vessel and instructions conveyed. Pressed as to what would happen in the event of non-cooperation, Captain Robitaille agreed that a Canadian vessel might ultimately be called into the area. However, this conclusion was speculative – no such incident having yet confronted Canadian forces. One might also speculate that the Canadian vessel called to the scene would not be a Navy vessel, its fleet being ill-equipped to navigate the ice-infested waters of the Arctic.

Another key component in the Navy’s arsenal is the group of Victoria-class submarines. Their importance was underlined by the Special Joint Committee on Canada’s Defence Policy in the mid-90s²²⁸ and the Committee’s recommendations were integrated into the Department of National Defence’s 1994 White Paper²²⁹:

²²⁶ W.H. CRITCHLEY, *loc. cit.*, note 220, 201. She defines “high Arctic” as “those areas of Canada’s north that lie north of the mainland”.

²²⁷ Interview with public affairs personnel at Department of National Defence headquarters in Ottawa (31 October 2001).

²²⁸ In February 1994, a Special Joint Committee of the Senate and House of Commons was established to consult Canadians on all aspects of Canada’s defence policy: “The Special Joint Committee on Canada’s Defence Policy travelled across the country listening to the views of ordinary citizens, defence experts, disarmament advocates and non-governmental organizations. It sought the advice of our allies and saw at first hand the tasks performed by our forces in Canada, in support of NORAD and NATO, and on peacekeeping and humanitarian operations abroad.” Online: Department of National Defence [http://www.forces.ca/site/Minister/eng/94wpaper/intro_e.html] (date accessed: 14 March 2004).

²²⁹ “Introduction”, 1994 White Paper on Defence. Online: Department of National Defence [http://www.forces.ca/site/Minister/eng/94wpaper/white_paper_94_e.html] (date accessed: 14 March 2004).

*The Special Joint Committee on Canada's Defence Policy found that submarines can conduct underwater and surface surveillance of large portions of Canada's maritime areas of responsibility, require relatively small crews, can be operated for roughly a third of the cost of a modern frigate, and work well with other elements of the Canadian Forces.*²³⁰

It was recommended that if it should prove possible to acquire three to six modern diesel-electric submarines within the existing capital budget, then such an initiative should be seriously considered. The White Paper announced the Federal government's intention to explore purchasing four, recently constructed, conventional submarines from the United Kingdom.

As of Friday, 19 October 2001, the Canadian Navy had taken delivery of 2 diesel-electric submarines²³¹. Described as "super-quiet", the Victoria-class submarines, with their stealth capabilities, are expected to help monitor and maintain our coastal security and provide valuable training to the Canadian, United States and other allied surface fleets²³².

The Special Joint Committee's recommendation and the 1994 Defence White Paper were, it goes without saying, not the first time Canada's defence establishment had contemplated the addition of submarines to the Canadian fleet. Joe Clark had indicated in his 1985 Arctic statement that the Canadian government would urgently consider "other means of exercising more effective control over our Arctic waters"²³³. In what Howson has described as its most dramatic move, the Federal government announced in June of 1987 that it would spend \$10 billion over twenty years to purchase up to 12 nuclear-powered submarines from the United Kingdom in order to enforce its claim to the Northwest Passage²³⁴. These were to be allocated primarily to the Northeast Pacific and the North Atlantic

²³⁰ "Canadian Defence Personnel", under the section "Operational Maritime Forces", in Chapter 7 "Implementing Defence Policy", 1994 White Paper on Defence. Online: Department of National Defence [http://www.forces.ca/site/Minister/eng/94wpaper/seven_e.html] (date accessed: 14 March 2004).

²³¹ Interview with Mike Bonin (23 October 2001).

²³² Online: Department of National Defence [http://www.navy.forces.gc.ca/mspa_fleet/vic_moreinfo_e.asp] (date accessed: 14 March 2004).

²³³ *House of Commons Debates*, 10 September 1985, at 6464.

²³⁴ N.C. HOWSON, *loc. cit.*, note 20, 344.

but at least one was to be allocated specifically to the Arctic waters and for good reason.

There have long been unconfirmed sightings and rumours of Russian submarine activity in the Northwest Passage²³⁵. Indeed, in his 1985 statement regarding Canada's new Arctic policy, Clark referred to the Soviet deployment of submarines under the Arctic ice pack and warned that the implications for Canada were clear²³⁶. For years, Canadian governments have also suspected that American nuclear submarines navigate the Arctic channels without informing Ottawa²³⁷. As a *New York Times* article reported, when a British submarine and two American vessels set up a rendez-vous at the North Pole in June of 1987, "Canadian officials were left to speculate whether their courses had led them through waters claimed by Canada"²³⁸. In July of 1987, Perrin Beatty, then Minister of National Defence, commented to reporters: "The point is, if there's a foreign submarine down there right now, we don't know about it. When we have our own submarines, we'll be in a better position to find out"²³⁹. Thus in addition to making Canada a member of the tiny club of nations which compete in this most modern form of undersea warfare²⁴⁰, the nuclear submarines would patrol disputed passages in a bid to assert Canadian control.

However, due to financial constraints and to resistance from some American quarters, the Mulroney government's plans to monitor the Arctic waters with nuclear submarines were ultimately "scuppered". From the beginning, opposition Liberals and New

²³⁵ J. SALLOT, "Unknown in Arctic worries Ottawa", *The Globe and Mail*, 29 July 1985, A1; M. FISHER, "Soviet Sub Rumours Surface in Wake of Polar Sea Trip", *The Globe and Mail*, 12 August 1985, A5. See also: W.K. LYON, "The Navigation of Arctic Polar Submarines", (1984) 37 *J. of Navigation* 155.

²³⁶ *House of Commons Debates*, 10 September 1985, at 6463: "Soviet submarines are being deployed under the Arctic ice pack and the United States Navy has, in turn, identified a need to gain Arctic operational experience to counter new Soviet deployments. The implications for Canada are clear". See also: T.L. McDORMAN, *loc. cit.*, note 2, 638.

²³⁷ Although Canada and the U.S. are formally allied, information on the movements of American submarines is divulged only on a need-to-know basis.

²³⁸ J.F. BURNS, "In the Arctic Tundra, Thunder of Ottawa's Military Build-up", *The New York Times*, 6 July 1987, 1(1).

²³⁹ *Id.*

²⁴⁰ Russia, the United States, Britain and France all own nuclear-powered submarines.

Democrats condemned the submarine program as an expensive folly²⁴¹. Critics considered that the probable cost of the nuclear subs was being understated and worried that as a result, the Navy's patrol frigate programme would likely be jeopardized²⁴². Diesel-powered submarines rather than the more expensive nuclear ones, it was argued, "would free up funds for a more balanced navy"²⁴³. Even Canada's NATO partners, especially the United States, worried that the purchase of the costly submarines would have an adverse effect on other Canadian military outlays²⁴⁴. In addition, the Canadian government was reminded that under the terms of a 1958 Anglo-U.S. agreement, nuclear-submarine technology, originally given to the Royal Navy by the U.S. Navy, could not be transferred to a third country without American consent²⁴⁵. Indeed, even while it battled with opposition parties over the financial implications of the programme, Burns reports that the Mulroney government also had to contend with resistance from powerful figures in both the Pentagon and Congress, including Adm. K.R. McKee, director of nuclear propulsion for the U.S. Navy²⁴⁶. It was suggested that among other concerns, American officials were reluctant to

²⁴¹ The cost of the submarines was estimated at 6 billion dollars. Burns reports that "[o]utside the Government, defence experts argued that the submarines could end up costing \$10 billion—more than one year's military outlays": J.F. BURNS, "Canada May Drop Nuclear Sub Plan", *The New York Times*, 27 November 1987, A21.

²⁴² Editorial, "Rearming Canada", *The Globe and Mail*, 6 June 1987, D6.

²⁴³ *Id.* See also: J.F. BURNS, *loc. cit.*, note 241, A21.

²⁴⁴ J.F. BURNS, "Canada Considers 10 Nuclear Subs to Patrol Arctic", *The New York Times*, 3 May 1987, 1(1).

²⁴⁵ P. KORING, "Canada's Purchase of U.K. Subs Will Require Approval by U.S.", *The Globe and Mail*, 7 October 1987, B4. See: Art. 7, *Agreement between the Government of the United States of America and the Government of the United Kingdom of Great Britain and Northern Ireland for Cooperation on the Uses of Atomic Energy for Mutual Defense Purposes*, 326 U.N.T.S. 3.

²⁴⁶ J.F. BURNS, *loc. cit.*, note 241, A21. See also the statement by Senator John W. Warner, Republican of Virginia, a State where nuclear submarines are constructed: "My own private discussions among our senior military reveals a skepticism which will be explored extensively". He added that he planned to call hearings on the issue. P. SHABECOFF, "Reagan, Rejecting Navy's Advice, Promises Canada Sub Technology", *The New York Times*, 28 April 1988, A1.

assist Canada in a project that could have adverse implications for the United States Navy²⁴⁷.

But the Canadian government continued to maintain that the purchase of a fleet of nuclear-powered submarines represented Canada's best option in responding to long-term strategic needs. In an interview with *The Globe and Mail* in June 1987, Beatty argued that ice-capable submarines would provide a new three-ocean capability²⁴⁸. In the Arctic, nuclear submarines would provide extended under-ice operations of a kind that conventionally powered submarines of the diesel-electric variety, which must surface frequently to re-charge their batteries, can not sustain²⁴⁹. Only nuclear-powered submarines can navigate year-round in the Arctic waters. In addition, according to an article published in *The Globe and Mail*, nuclear-propelled submarines are operationally three times as fast as diesel-electric submarines because of their ability to sustain submerged speed and unlimited endurance²⁵⁰. This, as Beatty pointed out, allows nuclear submarines to shift their operating area far more rapidly than diesel-electric submarines or for that matter, surface warships, so that they can readily contribute to sea control when and where needed²⁵¹.

*For Canadian maritime roles, an ability to operate at sustained high speed is crucial. With three oceans to patrol along the world's longest coastline, the strategic importance of being able to position a small submarine fleet rapidly is an undisputed advantage in peace or war.*²⁵²

However, critics were not convinced and continued to argue that the purchase of nuclear-attack submarines was ill-advised and

²⁴⁷ J.F. BURNS, *loc. cit.*, note 241, A21. In addition, Shabecoff reports: "Senior United States Navy officials have expressed opposition to a Canadian-British submarine deal. They have voiced concerns that the United States could be blamed for a nuclear accident aboard a submarine with an inexperienced Canadian crew. They also have expressed the belief that Canada's limited defense budget should be spent elsewhere": P. SHABECOFF, *loc. cit.*, note 246, A1.

²⁴⁸ P. BEATTY, "Why Canada Needs Nuclear Subs", *The Globe and Mail*, 6 June 1987, D1.

²⁴⁹ "The other major disadvantage faced by a diesel-electric submarine is that it must expose its mast to recharge its batteries, about once a day". *Id.*

²⁵⁰ *Id.*

²⁵¹ "Diesel-electric submarines are capable of high submerged speeds only for very short periods – an hour to an hour and a half". *Id.*

²⁵² *Id.*

would ultimately be harmful to Canadian security. According to members of the Canadian Centre for Arms Control and Disarmament, “the problem with submarines as enforcers of sovereignty is that there isn’t much they can do beyond detecting an intruder and then trying to destroy it”²⁵³. Furthermore, Rauf and Hayward contended that trying to assert sovereignty with nuclear submarines that are seldom, if ever seen, was like “being represented diplomatically by the Invisible Man”²⁵⁴. Opponents of the plan also argued that acquiring nuclear-powered submarines was less likely to solve Canada’s problems than to draw it into the superpowers’ escalating military competition in the North, while damaging its arms control interests²⁵⁵. It was also pointed out that “the demands of exercising effective control not only of the vast Arctic expanse but of the Atlantic and Pacific approaches to Canadian territory [were] overwhelming”²⁵⁶. In fact, according to Rauf and Hayward, a fleet of 20 submarines would not give Canada the effective control Defence Minister Perrin Beatty claimed ten could deliver²⁵⁷.

Critics further insisted that navigation difficulties and lack of experience meant that foreign submarines, determined to navigate through Canada’s Arctic waters, were forced to confine themselves to two main channels²⁵⁸. Therefore, being able to monitor the few “choke-points” or narrow passages leading from the Atlantic into the Labrador Sea and thence into the Arctic was “more to the point than being able to conduct anti-submarine warfare under the ice”²⁵⁹. These “choke points” in the Northwest Passage and the Davis Strait could be monitored by undersea sensors supported by

²⁵³ T. RAUF and D. HAYWARD, “Canadian Public Should Torpedo Nuclear Sub Idea”, *The Globe and Mail*, 14 May 1987, A7. According to Perrin Beatty however, “[i]n peacetime, a submarine can detect and track intruders and advertise its presence, if desired. The use of active sonar is a clear indication to an intruder that he has been detected, and is the underwater equivalent of a ‘shot across the bow’ ”: P. BEATTY, *loc. cit.*, note 248, D1

²⁵⁴ T. RAUF and D. HAYWARD, *loc. cit.*, note 253, A7.

²⁵⁵ N.D.P. defence critic Derek Blackburn, as reported in J. SALLOT, “Needed for the Arctic, defence paper says Subs viewed as ‘ultimate force’ ”, *The Globe and Mail*, 6 June 1987, A1.

²⁵⁶ T. RAUF and D. HAYWARD, *loc. cit.*, note 253, A7.

²⁵⁷ *Id.*

²⁵⁸ *Id.*

²⁵⁹ *Id.*

diesel-electric submarines, increased air patrols and surface ships for just half the price of nuclear submarines²⁶⁰.

Therefore, when the \$10 billion acquisition of the British-designed nuclear submarines was scuttled by the April 1989 federal budget, advocates of a more balanced Canadian navy rejoiced. It was generally accepted that increased air and surface patrols, as well as sonar devices, would prove a more effective way of asserting Canadian control over the Arctic waters. Already, in 1986, the Federal government had announced an increase from 16 to 20 percent in the number of Canadian "show the flag" overflights in the Arctic²⁶¹. Unfortunately, when questioned recently, public affairs personnel were unable to comment upon the current number of "sovereignty" flights performed in the Arctic by the Canadian Air Force²⁶². Of course, given the altitude and speed at which fighter aircraft fly, they do not in any event play a significant surveillance role in the Arctic. Similarly, with no recent data being made available for electronic reconnaissance flights by the Auroras, it will be recalled that in 1987, when this was a significant political issue following the *Polar Sea* controversy, there was only an average of 16 to 17 such flights per year²⁶³.

And while surface ships were intended to play a key role in the Arctic, few new vessels have been built or acquired by the Canadian Navy in recent years and certainly no vessels with Arctic capabilities have been added to the fleet. In 1963, there were 45 warships and 10 minesweepers in the Canadian fleet; today, there are only 16 helicopter-carrying destroyers and frigates, 12 coastal defence vessels and 2 supply ships²⁶⁴. And Canada's NATO and peacekeeping commitments mean that many Navy vessels are involved in overseas operations. And of course, none of the Navy's ships are ice strengthened for Arctic navigation, which effectively restricts their

²⁶⁰ Liberal defence critic Douglas Frith, as reported in J. SALLOT, *loc. cit.*, note 255, A1. See also: T. RAUF and D. HAYWARD, *loc. cit.*, note 253, A7.

²⁶¹ Canadian Press dispatch, for release 16-17 July 1986. See also: J.F. BURNS, *loc. cit.*, note 238, 1(1).

²⁶² Interview with Paul Villeneuve and François Giroux (20 February 2002).

²⁶³ W.H. CRITCHLEY, *loc. cit.*, note 220, 201.

²⁶⁴ Online: Department of National Defence [http://www.navy.forces.ca/index_e.htm] (date accessed: 23 October 2001).

area of operation to Hudson Bay and Hudson Strait, and even then, only during the summer months²⁶⁵.

On the other hand, there does appear to have been considerable investment in sonar research since the *Polar Sea* incident. The Defence Research Establishment Atlantic (DREA) mandate is “to conduct Research and Development in undersea warfare and naval platform technology”²⁶⁶. Within undersea warfare, DREA is the leading Canadian centre in surveillance acoustics and sonar technology. According to the DREA, in order to support its claim of sovereignty over the Arctic waters, Canada needs to be able to monitor and control access to its territory²⁶⁷.

DREA’s Naval Sonar Section website provides a clear and concise summary of the challenges facing Canada in monitoring submarine activity in the Arctic:

*It is becoming increasingly difficult for sonars to find submarines hiding in an ocean filled with background noise sources, interferers, and false echoes. Submarine design continually improves, leading to vessels that radiate less noise and reflect weaker echoes. Detecting submarines is [thus] becoming a challenge for current naval sonars, both passive and active.*²⁶⁸

According to the same source, these developments together with improvements in submarine weapon systems, therefore compel defence forces to acquire new sonars capable of longer-range detections and quick, accurate localizations: “To extract the maximum possible information from the acoustic signals, future sonars will have more sensors, more powerful processing, and better displays”²⁶⁹.

One of DREA’s key research and development initiatives has been the AN/SQSP510 medium-frequency active sonar. Ranked

²⁶⁵ *Shipping Safety Control Zones Order*, C.R.C., c. 356, online: Department of Justice [<http://laws.justice.gc.ca/en/a-12/c.r.c.-c.356/17625.html>] (date accessed: 17 March 2004).

²⁶⁶ Defence Research Establishment Atlantic [hereinafter “DREA”] website at [http://www.drea.dnd.ca/about/about_e.shtml] (date accessed: 17 March 2004).

²⁶⁷ “Surveillance Acoustics”, online: DREA [http://www.drea.dnd.ca/programs/index_e.html] (date accessed: 1 November 2001).

²⁶⁸ “Naval Sonar Section”, online: DREA [http://www.drea.dnd.ca/programs/index_e.html] (date accessed: 1 November 2001).

²⁶⁹ *Id.*

among the finest of its type in the world today, it was developed through the combined efforts of DREA's sonar section, naval engineers from NDHQ, and Computing Devices Canada of Ottawa²⁷⁰. According to DREA's Research & Development Initiatives website, its "advanced digital processor, software and displays perform exceptionally well, and it can be programmed for special operations such as detecting submarines in shallow water, avoiding mines and defending against torpedoes"²⁷¹. It is also stated that the 510 sonar will be installed aboard Canada's patrol frigates and refitted 280-class helicopter destroyers though no time frame is indicated²⁷².

The aim of DREA's Surveillance Acoustics (SA) Group is to "investigate the feasibility of using passive and active sonar systems for surveillance of Canada's ocean approaches, including both the open ocean, and the Arctic Basin and the channels of the Canadian Arctic Archipelago"²⁷³. This study, according to information supplied by the SA Group on its website, involves investigating

the unique acoustic characteristics (ambient noise, propagation conditions, sea-floor and ice-cover interactions) of Canadian waters, as well as the development of appropriate surveillance systems, processing methods and deployments techniques.

Under its Open-Ocean Surveillance project, the Surveillance Acoustics Group is also investigating "performance of acoustic surveillance arrays for detecting and localizing submarine and surface vessels in the coastal waters of Canada and its approaches"²⁷⁴.

Under the heading "Arctic Surveillance" on the SA Group's website, it is reported that over the last three decades, significant progress has been made in developing experimental techniques suitable for Arctic acoustic work and a brief summary of key developments is provided. Until the early 1980's, research activities were mainly focussed on the channels of the Canadian Arctic Archipelago, and the results provided the basis "for a capital acquisition project to

²⁷⁰ "R & D Initiatives", online: DREA [http://www.drdc-rddc.dnd.ca/highlights/drea_e.html] (date accessed: 1 November 2001).

²⁷¹ *Id.*

²⁷² *Id.*

²⁷³ "Surveillance Acoustics", *supra*, note 267.

²⁷⁴ *Id.*

install surveillance systems in three main 'choke points' ²⁷⁵. Subsequently, the focus of the research shifted to the Arctic Basin in order to investigate various options for the surveillance of the approaches to the principal transit routes through the Archipelago. This work culminated in Project SPINNAKER, a joint CAN/US enterprise "to install a large, environmental acoustic array at the edge of the continental shelf north of Ellesmere Island"²⁷⁶. However, since completion of this Project, Arctic operations have been scaled back. In the near future, the SA Group will be conducting "small-scale experiments working from shore-fast ice near existing Arctic settlements where support is available"²⁷⁷.

A new radar system being developed by Ottawa defence scientists may also help in defending Canadian interests in the Arctic. The system, called the high-frequency surface wave radar, is described as unique in a February 2001 *Ottawa Citizen* article as it can track ships and aircraft at much greater distances than regular surveillance systems, potentially giving Canadian authorities a clearer picture of what is going on in Canada's Arctic²⁷⁸. As Pugliese explains, while regular radars are restricted to objects in their line of sight on the horizon, this system "transmits high-frequency waves that follow the curvature of the Earth to detect and track objects hundreds of kilometres over the horizon"²⁷⁹. Because the high-frequency surface wave radar uses the ocean as a conducting surface to increase its range, scientists are hopeful that the warming trend in the Arctic will expose greater expanses of water which the radar will then be able to use as a conductor²⁸⁰. Scientist Hing Chan at Defence Research Establishment Ottawa has stated that "the system could be well-suited for Arctic surveillance, but more work has to be done"²⁸¹.

Unfortunately, we were unable to confirm whether any such sonar systems have in fact been strategically deployed in the Northwest

²⁷⁵ *Id.*

²⁷⁶ *Id.*

²⁷⁷ *Id.*

²⁷⁸ D. PUGLIESE, "Radar can track Arctic intruders", *The Ottawa Citizen*, 6 February 2001, A3.

²⁷⁹ *Id.*

²⁸⁰ *Id.*

²⁸¹ *Id.*

Passage²⁸². DND personnel advised that such information was not disclosed in order “to keep our enemies guessing”. But in light of the intensive research being conducted in this field, it is quite likely that key passages of the Arctic waters are currently being monitored by sonar devices. Certainly Canada needs an effective sonar or radar surveillance system. It is not only a question of defending sovereignty – potential for nuclear accidents on board foreign submarines is very real as demonstrated by the sinking of the Russian submarine *Kirsk*. But, as Beatty warned in his 1987 interview with *The Globe and Mail*, underwater listening devices alone provide only a partial solution. It is analogous he said, “to building air surveillance radars but not acquiring interceptor aircraft”²⁸³. To deter intrusions and to control activities in the Arctic effectively, Canada must not only be able to detect but also to take appropriate action. For this, at the moment, Canada would seem to be depending on two conventional submarines, as far as the navy is concerned.

B. The Canadian Coast Guard

The regulation of marine transportation in Arctic waters is set out in comprehensive fashion in the *Arctic Shipping Pollution Prevention Regulations* (ASPPR), made under the *Arctic Waters Pollution Prevention Act* of 1970. The ASPPR divide Canada’s Arctic archipelago into 16 shipping control zones²⁸⁴. As Nossal explains in his extremely thorough review of Canada’s icebreaking capability, each control zone was established taking into consideration the severity of ice conditions in a particular area on a year-round basis (zone 1 being the severest, zone 16 the least severe).²⁸⁵ Schedules VI and VII of the ASPPR outline the mechanical and hull specifications for nine “Arctic classes” of vessels which are ranked according to their power and strength – 1, 1A, 2, 3, 4, 6, 7, 8 and 10. Schedule VIII indicates what class of ship may enter a particular zone at what times of the year. For example, an Arctic class 10 vessel, the most powerful icebreaker described in the ASPPR, can navigate all 16 zones year round while at the other extreme, an Arctic class 1 vessel is

²⁸² Interview with Mike Constandine (5 November 2001).

²⁸³ P. BEATTY, *loc. cit.*, note 248, D1.

²⁸⁴ See: Schedule 1, *Shipping Safety Control Zones Order*, C.R.C., c. 356, enacted pursuant to the ASPPR.

²⁸⁵ K.R. NOSSAL, “Polar Icebreakers: The Politics of Inertia”, in F. GRIFFITHS (ed.), *op. cit.*, note 220, at 226.

denied entry to zones 1 to 5 at all times and its access to zones 6 to 16 is limited to various periods between June and November.

According to Nossal, “Arctic class” is often used “as a shorthand method of describing the polar icebreaking *capabilities* of a vessel”²⁸⁶.

For example, “Arctic class 10” is usually defined as the capability to maintain continuous headway of approximately 3 knots through fast ice ten feet thick without having to stop, back up, and ram the ice.

However, Nossal emphasizes that the ASPPR outline not a vessel’s actual icebreaking capabilities, but simply the structural prerequisites of vessels wishing to navigate in particular areas of the archipelago; whether a ship can in fact navigate those zones which it is entitled to enter is another matter altogether²⁸⁷. Too often, according to the same expert, reference to a vessel’s Arctic class creates the expectation that it has the *ability* to navigate when and where it has a *right* to do so²⁸⁸.

Thus Nossal declares that by the proclamation of the *Arctic Waters Pollution Prevention Act*, “the Arctic mobility of Canada’s icebreaker fleet became restricted by law as well as by nature”²⁸⁹. Indeed in 1972, as in 1985 at the time of the voyage of the *Polar Sea*, and still in 2002, the most powerful Canadian icebreaker in the fleet is the *Louis S. St. Laurent*. Drawing 9.5 m, displacing 14,500 tonnes, developing 17,900 kw in shaft power²⁹⁰ and capable of reaching a maximum speed of 20 knots²⁹¹, this vessel is rated as “between 3 and 4” according to the Coast Guard. The *Terry Fox*, recently purchased from Domtar, is rated an “Arctic class 4” but is a much smaller ship than the *Louis S. St. Laurent*²⁹². These ratings restrict the Coast Guard’s heavy icebreakers’ access to the more

²⁸⁶ *Id.*

²⁸⁷ *Id.* at 227.

²⁸⁸ *Id.* at 226 and 227.

²⁸⁹ *Id.* at 227.

²⁹⁰ Statistics provided in *id.*

²⁹¹ *Louis St-Laurent* statistics: length 119.63m; breadth 24.38m; draft 9.91m; net tonnage 5370 tons. Online: Canadian Coast Guard (CCG) [http://www.ccg-gcc.ca/vessels-navires/details_e.asp?id=A-1] (date accessed: 16 March 2004).

²⁹² *Terry Fox* statistics: length 88m; breadth 17.82m; draft 8.3m; net tonnage 1955 tons. Online: Canadian Coast Guard, [http://www.ccg-gcc.ca/vessels-navires/details_e.asp?id=A-2] (date accessed: 16 March 2004)

severe zones (1-5) to a short period, roughly from mid-July to mid-November. For example in zone 2, which includes Route 1 through the Prince of Wales Strait, access by class 3 vessels is restricted to between 20 August to 30 September and class 4 vessels can only navigate the zone between 15 August to 15 October. However, the *Louis S. St-Laurent* and *Terry Fox* can navigate in zones 6-16 for six to ten months of the year²⁹³. According to Nossal, the other large vessels in the Coast Guard's icebreaking fleet, the *Des Groseillers*, *Henry Larsen* and *Pierre Radisson*, have been designated Arctic class 2-3 and therefore "their movements in Arctic waters are even further restricted"²⁹⁴.

In the wake of the *Polar Sea* incident, the Mulroney government acknowledged that to assert sovereignty over the Arctic waters was one thing, but to enforce it quite another. Therefore in his official statement of 10 September 1985 in the House of Commons, Joe Clark announced the construction of a Polar Class 8 icebreaker. According to Pharand, a strong supporter of this Government initiative, a class 8 icebreaker "capable of breaking ice eight feet thick at a continuous speed of three knots", would ensure a meaningful Canadian presence throughout the year in all the Arctic control zones, except for zone 1 which includes Route 2 through M'Clure Strait²⁹⁵.

*The Class 8 icebreaker would perform such tasks as escorting cargo ships, enforcing pollution prevention laws and regulations, pursuing oceanographic research, conducting hydrographic surveys, providing logistics support to remote stations, participating in defence-related exercises, and responding to calls for search and rescue.*²⁹⁶

Pharand pressed the government to ensure that the icebreaker was designed so as to permit the installation of weapons systems on

²⁹³ K.R. NOSSAL, *loc. cit.*, note 285, 227.

²⁹⁴ *Id.*, 228.

²⁹⁵ D. PHARAND, *loc. cit.* note 66, 333 and 334. For a more detailed description of the Polar 8, see: L.W. BRIGHAM, "A World-Class Icebreaker: The Canadian Polar-8", (1986) 112 *Proceedings, U.S. Naval Institute* 150-152; T.C. PULLEN, "Why We Need the Polar 8", (April/May 1987) *Canadian Geographic* 84-86.

²⁹⁶ D. PHARAND, *loc. cit.*, note 66, 334.

board and thus ensure a quasi-military Canadian presence in the archipelago²⁹⁷. Writing at the time, in 1987, Pharand warned that

[a] single icebreaker will not be sufficient for adequate surveillance and control of year-round shipping, but it will probably suffice until such shipping begins. This will not likely occur, in any major way, for another decade or so.²⁹⁸

However, and despite the fact that it was acknowledged that more than one heavy icebreaker would be needed for any effective control of shipping activities in the Canadian Arctic, the Polar 8 purchase was cancelled in 1989, just four years after the *Polar Sea* incident²⁹⁹. Fifteen years later, when the threat of incursion is becoming all the greater, no new plans for acquiring stronger icebreakers appear to be under discussion. As professor Huebert rightly asserts, there are no signs that the Canadian federal government is taking the Arctic melt or its implications seriously. "There's got to be a crisis before we get interested"³⁰⁰. And yet, as O'Connell emphasizes,

[t]he element of enforcement or ability to enforce is significant in jurisdictional claims since where claims are enforced or can be enforced they tend to be recognized and are more quickly consolidated as part of international law.³⁰¹

The situation in the Northeast Passage does appear to lend support to O'Connell's conclusion. When in 1967, two years before the Manhattan crisis, the United States attempted to send two of its icebreakers through the Volkitsky Straits of the Northeast Passage, the U.S.S.R. refused to allow passage on the basis that the straits were Soviet territorial waters³⁰². United States compliance had everything to do with the fact that the Soviet Union was in a position to enforce its claim. The Soviet fleet then, as indeed the present Russian fleet, included the world's most powerful icebreakers, capable

²⁹⁷ *Id.*

²⁹⁸ *Id.* Roman characters added.

²⁹⁹ A. MITCHELL, *loc. cit.*, note 8, A15.

³⁰⁰ *Id.*

³⁰¹ D.P. O'CONNELL, *op. cit.*, note 84, at 643.

³⁰² J.B. MCKINNON, *loc. cit.*, note 24, 809. As McKinnon explains, the Soviet Union maintained that warships did not have a right of passage through the territorial sea of a foreign State. *Id.*

of navigating in the high Arctic waters on a year-round basis³⁰³. It is certainly significant that while the United States has taken every available opportunity to forward its claim that the Northwest Passage is an international strait, it has not insisted on the same right of navigation through the Russian controlled Northeast Passage. Referring to a *Globe and Mail* report published shortly after the *Polar Sea* controversy, Rothwell writes:

*In reference to the United States approach to freedom of navigation through the Northeast Passage, at that time controlled by the USSR, one Canadian national newspaper noted that the active assertion of freedom of navigation through the Northwest Passage, but not through the Northeast Passage, was a "predatory policy", one based on respect for a rival superpower and contempt for a feckless friend.*³⁰⁴

Therefore to recap, the Canadian Coast Guard's icebreaking fleet is currently made up of two "heavy" icebreakers rated between Arctic class 3-4: the *Louis S. St. Laurent* (1969) and the *Terry Fox* (1983). The "medium" icebreakers, the *Des Groseillers*, *Henry Larsen* and *Pierre Radisson*, are only rated Arctic class 2-3 and are therefore denied entry to large parts of the Arctic archipelago at any time of the year. Lawrence Swift, communications officer for the Canadian Coast Guard, insists however that these vessels are able to cope with the current volume of traffic in the Arctic³⁰⁵. While Canada does not own any vessel which can navigate the M'Clure Strait in January, neither are there any foreign vessels foolhardy enough to attempt a crossing at that time of the year. Basically, Canadian Coast Guard vessels are present when foreign vessels are interested in navigating the Northwest Passage.

Through its icebreaking programme, the Canadian Coast Guard also "supports economic activities by assisting commercial vessels to voyage efficiently and safely through or around ice covered waters"³⁰⁶. The staff and fleet of the icebreaking programme operate out of four regions (Newfoundland Region, Laurentian Region, Maritimes Region, Central & Arctic Region) to deliver a variety of services: route assist-

³⁰³ *Id.*, 792.

³⁰⁴ D.R. ROTHWELL, *loc. cit.*, note 1, 343 and 344, citing "Editorial – All in the Family", *The Globe and Mail*, 8 August 1985, 6.

³⁰⁵ Interview with Lawrence Swift (31 October 2001).

³⁰⁶ "Icebreaking Program", online: Canadian Coast Guard [http://www.ccg-gcc.gc.ca/ice-gla/overview_e.html] (date accessed: 5 November 2001).

ance, ice routing and information services, harbour breakouts and flood control³⁰⁷. In the Arctic, the CCG organizes convoys and escorts ships through ice-covered waters, frees vessels trapped in ice and keeps shipping channels open. It also surveys ice conditions, provides ice information and routing advice to ships in need. These services are of critical importance and are particularly attractive to foreign commercial vessels wishing to navigate the Northwest Passage.

Canada currently has in place a voluntary vessel traffic system (NORDREG)³⁰⁸ in the Arctic, intended to provide information and assistance to Arctic ship operators. Because of the Canadian Coast Guard's expertise, most foreign vessels wishing to navigate the Arctic archipelago, voluntarily register with the CCG and request pilotage. However, if it is true that at the present time, most vessels declare themselves to Canada before they go through the Northwest Passage, CCG personnel themselves acknowledged that not all foreign ships do so³⁰⁹. To take one memorable example, in August 1999, a Chinese government research vessel showed up unannounced at Tuktoyaktuk for reasons neither the military nor the RCMP have so far figured out³¹⁰. According to a spokesperson for the CCG, it was an RCMP officer on land who spotted the ship and surprised, phoned in the information to the Canadian Coast Guard³¹¹. Had it not sailed near an inhabited community where it could and was

³⁰⁷ *Id.*

³⁰⁸ Arctic Canada Traffic Zone (NORDREG) includes those waters of Ungava Bay, Hudson Bay and James Bay south of the parallel of 60 north latitude and the waters to which the Arctic Waters Pollution Prevention Act apply. NORDREG objectives are:

(1) To enhance the safe and efficient movement of maritime transportation in Arctic Waters by establishing an interface between the Canadian Coast Guard and maritime transportation; (2) To prevent pollution of Arctic Waters by establishing a method of screening vessels in Arctic Waters to ensure their compliance with regulations made pursuant to the Arctic Waters Pollution Act and Part XV of the Canada Shipping Act; (3) To strengthen Canadian sovereignty in Arctic Waters. Participation is voluntary; however, mariners are encouraged to participate fully to receive the maximum benefit.

Online: Canadian Coast Guard [http://www.ccg-gcc.gc.ca/cen-arc/mcts-sctm/mcts-services/vtrarctic_e.htm] (date accessed: 17 March 2004).

³⁰⁹ Comments by A. Maillet, superintendent of the CCG icebreaking program in the central and Arctic region, as reported in A. MITCHELL, *loc. cit.*, note 8, A14.

³¹⁰ As reported in *id.*, A15.

³¹¹ Interview with Lawrence Swift (31 October 2001).

spotted, it is doubtful whether either the CCG or the Canadian navy would have been at all aware of its presence. It must be said that Canada does not appear at the present to be set up for monitoring undeclared traffic through the passage. This has obvious implications for the environmental protection of the region.

As McDorman reports, the 1984 Beaufort Sea Environmental Assessment and Review Panel report recommended that "to enhance marine environmental protection in the Arctic", NORDREG should become mandatory³¹². The Review Panel also noted that to ensure effective Canadian control of vessels navigating the Arctic waters, new institutional mechanisms would have to be put into place³¹³. As a mandatory reporting system, NORDREG would require vessels to request clearance to proceed in advance of entering Arctic waters. McDorman explains that such a mandatory system is already in operation on Canada's East Coast. Called ECAREG³¹⁴, this vessel traffic system was implemented without protest from the United States which has since taken a great interest in the system³¹⁵. According to the same expert, ship safety, not questions of legal jurisdiction, would be the justification for the implementation of such a mandatory vessel reporting and management system in the Arctic³¹⁶. However, under the provisions of UNCLOS, coastal States are at present only entitled to establish passive vessel traffic separation schemes in consultation with the International Maritime Organization (IMO) (art. 22).

The question of whether NORDREG should become mandatory was under review by the Canadian Parliament prior to the *Polar Sear*

³¹² T.L. McDORMAN, *loc. cit.*, note 2, 644. See conclusion (i), Environmental Assessment Panel, *Beaufort Sea hydrocarbon production and transportation: final report of the Environmental Assessment Panel, July 1984*, Hull, Quebec, Federal Environmental Assessment Review Office, 1984.

³¹³ *Id.*

³¹⁴ Eastern Canada Traffic Zone (ECAREG) comprises all Canadian waters South of 60° North and the St. Lawrence River East of 66° West.

³¹⁵ T.L. McDORMAN, *loc. cit.*, note 2, 644. See also: E. GOLD, "Vessel Traffic Regulation: The Interface of Maritime Law Safety and Operational Freedom", (1983) 14 *Journal of Maritime Law and Commerce* 1.

³¹⁶ T.L. McDORMAN, *loc. cit.*, note 2, 644.

controversy³¹⁷ and Captain Swift of the Canadian Coast Guard confirms that it is still being considered³¹⁸. According to McDorman,

*the realities of ship safety and proper management, particularly in a harsh environment like the Arctic where Canadians have the best information on ice conditions, weather and other important navigational aids, will leave the United States with little grounds for complaint, while at the same time improving Canada's legal position.*³¹⁹

It should be noted that any CCG vessel travelling in the Arctic has on board a pollution prevention officer designated by the Clerk of the Privy Council and empowered to enforce the AWPPA (art. 14-17). In the event of an infraction by a vessel, such officers have the authority to act in order to prevent or respond to environmental harm. Most often, domestic operators, anxious to retain their certificate of competency as well as secure their own safety, will comply with any orders or directives from the pollution prevention officer on board. In the case of a foreign operator, cooperation is still the most likely scenario as they are also anxious to secure the help of the CCG in the often unfriendly northern waters. When pressed, Captain Swift indicated that in the absence of such cooperation, the situation might have to be monitored by Canadian vessels, if any were close at hand³²⁰.

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Canada has been procrastinating on its policy regarding its Arctic waters for at least the last twenty years. For reasons of budgetary restraint in times of economic downturn or for other reasons, political and diplomatic, the Canadian Arctic waters have been largely ignored. And unfortunately, the debate has been sidetracked into discussions as to what specific regime will eventually apply to those waters under international law. And the truth is that irrespective of the outcome of the legal debate, Canada, as we have noted, will retain important rights and responsibilities.

³¹⁷ *Id.*

³¹⁸ Interview with Lawrence Swift (31 October 2001).

³¹⁹ T.L. McDORMAN, *loc. cit.*, note 2, 644.

³²⁰ Interview with Lawrence Swift (31 October 2001).

As the Northwest Passage becomes an increasingly viable and therefore attractive shipping route, there is a diminishing likelihood that the international community will acquiesce in Canada's claim that the Arctic waters are internal waters over which Canada has complete control. At the other extreme, even if the Northwest Passage were to be declared an international strait, Canada would still retain considerable powers and prerogatives. For one thing, Canada would be entitled to enforce the regulatory scheme created under the AWPPA. And if, as Professor Franklyn Griffiths argues, Canada's role in the Arctic is simply that of steward, ideas of nationalism being outdated in an increasingly globalized world, nevertheless Canada must have the means to act as a responsible steward of the Arctic's fragile environment and vulnerable populations³²¹.

The time has therefore come to decide whether Canada is going to choose to equip itself with the means to exercise these rights or simply abdicate its responsibilities. For the situation, as a result of global warming, is menacing. To date, foreign compliance has been largely determined by the need for the security provided by the ice-breaking services of the Canadian Coast Guard. As the ice disappears, chances are that traffic will increase at the same time as the need for Canadian services diminishes. There is therefore a growing risk of pollution, without mentioning the possibility of a catastrophic oil spill or nuclear accident. In addition, according to retired Colonel Leblanc, speaking at a recent conference on sovereignty and security in the Arctic, it is only a matter of time before organized criminals and terrorists start using the Arctic as a back door into Canada³²². And in the 21st century, the unpolluted waters of the North as well as its oil deposits could be important to Canadians living in the south. Without the resources to deal with such eventualities, what does Canada intend to do? Calling upon the Americans for assistance at the same time as it insists upon Canadian Arctic sovereignty?

³²¹ K. JAIMET, "Canada's 'unguarded back door'", *The Ottawa Citizen*, 26 January 2002, A3.

³²² *Id.*