

GAINING COMMAND & CONTROL
OF THE NORTHWEST PASSAGE

STRAIT TALK ON SOVEREIGNTY

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Introduction

The Arctic Ocean remains one of the last frontier regions on earth to be explored and exploited. However, due to global warming, technological advances and declining stocks of global resources, increasing interest and activity in the Arctic is underway.

This renewed interest in the Arctic has sparked a new vigor by Canada and the United States in promoting their State interests in the region. In particular the fabled Northwest Passage runs through Canadian territory known as the Arctic Archipelago which is adjacent to the northern mainland Canadian coastline. It also happens to be the most direct, albeit seldom navigable route for the United States to Alaska from its eastern population bases.

Canada has historically claimed the constituent lands and waters of the NWP as its sovereign territory, whereas the United States has consistently referred to the NWP as an international strait with which they claim an unfettered right of passage of the freedom of the seas.

Canada in contrast has reactively grasped for every sovereign justification it can, to armor its defense of arctic sovereignty with. Canada has cited its historic association through cession of its lands from the Indigenous people and the British Crown sovereign. Canada has also sighted the sector theory laying claim to all the waters and lands within its sector to the north pole, and has most strongly relied on the setting of straight baselines around its arctic archipelago and asserting that all constituent waters within the baselines are Canadian internal waters.

To ameliorate the American demands for an undeterred right of passage, Canada in response to American aggression has enacted environmental protectionist legislation for the arctic environment and entered into the 1988 Arctic Agreement with the U.S. who promised to notify Canada of any planned excursions by sea into the waters of the NWP

and in return Canada has promised to grant blessings to all such endeavors as they are announced.

The problem is one of 'command and control'. Namely who should control the NWP and access to the Arctic Ocean? The United States sees the Canadian position as encroaching on its freedom of transit (right of innocent passage¹) and as violating the law of the sea as set out in the Corfu Channel Case². Canada in contrast, believes on the basis of equity and the uniqueness of its archipelago that the waters of the NWP are internal to Canada, and that furthermore there is insufficient shipping traffic history to satisfy the 'functionality' test as set out in the Corfu Channel case. In response to the excursion of the Polar Sea³ through the NWP without prior Canadian approval, the Canadian government set out a course to embed its sovereignty in the region and looked to the Norwegian Fisheries case and the supporting archipelago principles for establishing extended straight baselines to include these island formations where the ecology is sensitive and vital needs are established. Furthermore, Canada has also influenced the

¹ United Nations Convention on the Law of the Sea (UNCLOS), (Montego Bay) 1982, Article 17.

² Corfu Channel Case (U.K. v. Albania) 1949 I.C.J. 4.

³ The Polar Sea is a US Coast Guard Heavy ice-breaker, which circumnavigated the Northwest Passage in the summer of 1985. Whatever the motive - a challenge to Canada's claim to the Passage or, as U. S. authorities maintained, a quick and inexpensive way to get the *Polar Sea* from Greenland to Alaska-the U.S. government was careful not to make a request for permission to make the crossing and thereby imply in any way recognition of Canada's claim to the strait. Instead, the United States made clear that the voyage was without prejudice to the legal position of the other side. (Excerpted from *Independence and Internationalism*, chapter 10, "A Northern Dimension for Canada's Foreign Policy", pp. 127-135, in *Canadian Arctic Resources Committee (CARC)*, Volume 14, No.6, "The Question of Sovereignty" at <http://www.carc.org/pubs/v14no4/6.htm>). Ottawa to save face, once again, made a point of granting permission; it even asked to place several "observers" on board the Polar Sea and Washington acceded to the request, strengthening Canada's argument that the transit was consensual and even promised to provide advance notice of any future transits by its Coastguard vessels. Yet the U.S. still made a point of publicly disputing the sovereignty claim. Following the voyage of the Polar Sea, Canada again modified its legal position. (Excerpted from *The Tyee*, "The Need to Defend Our Northwest Passage", Micheal Byers, January 30, 2006) "The voyage of the *Polar Sea* caused a rush of popular anxiety in Canada. Pressure built quickly, and on September 10, 1985, the government responded in a statement in the House of Commons by the Secretary of State for External Affairs. Mr. Clark announced a number of measures intended to strengthen Canada's claim, including notification that Canada was drawing straight baselines around the arctic archipelago to delineate its claim, the removal of the 1970 reservation to the jurisdiction of the International Court of Justice,* increased aerial surveillance, naval activities in Canada's eastern arctic waters, and construction of a class 8 polar icebreaker. Taken together these measures have the potential significantly to strengthen Canada's claim to sovereignty over the waters of the arctic archipelago." (Excerpted from *Independence and Internationalism*, chapter 10, "A Northern Dimension for Canada's Foreign Policy", pp. 127-135.)

UNCLOS⁴ which adopted Article 234 to allow for special state powers for ice-covered regions in order to protect the environment, health and safety of these adverse regions.

Statement of Claim

This paper is an exploration of the substantive merit of Canada's position on the Northwest Passage (NWP), that the waters of the Arctic Archipelago through which the NWP passes are its internal waters. In particular, is Canada justified in its claim and what legal premises support its position? And, furthermore in view of the conflicting claim of the United States of its right of innocent passage through an international strait what probable means of middle ground may be employed to amicably resolve this dispute between two of the worlds most neighborly nations.

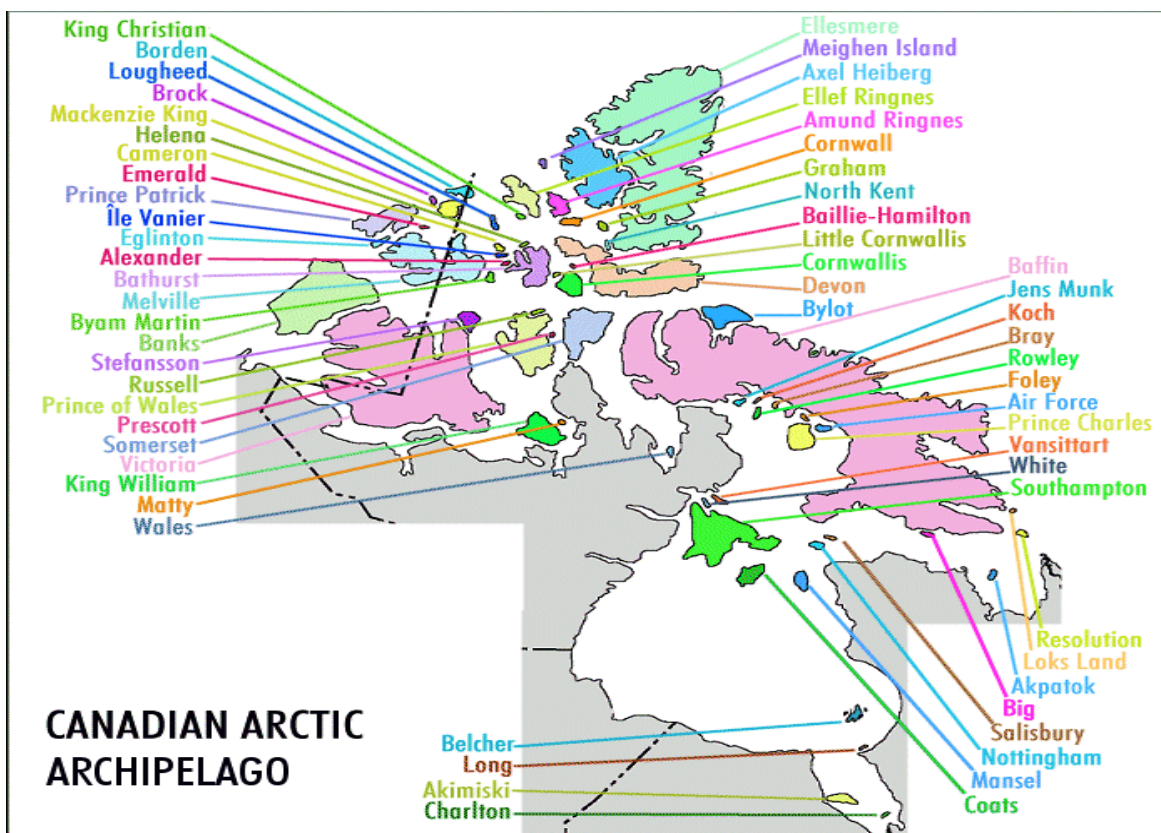
History of the NWP

The Northwest Passage (NWP) is an ice laded sea route linking the North Atlantic and North Pacific Oceans via the Canadian Arctic Archipelago. The archipelago also known as the Arctic Archipelago is a group of 36,563 islands and contains 94 islands greater than 130 square kilometers, including three of the worlds largest islands. With the exception of Greenland, the archipelago is the worlds largest high arctic land area and extends some 2400 kilometers longitudinally and 1900 kilometers from the mainland of Canada to its northern most point on Ellesmere Island. It is bounded on the south by the Hudson Bay and the Canadian mainland; on the east by Greenland, Baffin Bay and Davis Strait; on the north by the Arctic Ocean and on the west by the Beaufort Sea. The various islands of the archipelago are separated from each other and the continental mainland by a shallow myriad maze of narrow ice-blocked straits that are typically frozen throughout the year which at their northern ends open into the frozen Arctic Sea.⁵

⁴ United Nations Convention on the Law of the Sea (Montego Bay) 1982, Article 234 ice-covered areas.

⁵ Encyclopedia Wikipedia, http://en.wikipedia.org/wiki/Northwest_Passage

Exhibit 1



Source: Wikimedia

The NWP was alternatively known as the Strait of Anian⁶, which was a 16th century Spanish name for a passage that was believed to connect the Pacific Ocean and the Atlantic Ocean in the temperate regions of North America, as a much desired means of circumpolar shipping for commerce. Such a strait does not in fact exist but for centuries European explorers searched for such a route and at the same time explorers were also attempting to find an eastern bound passage north of Russia i.e. a Northeast Passage (NEP).⁷

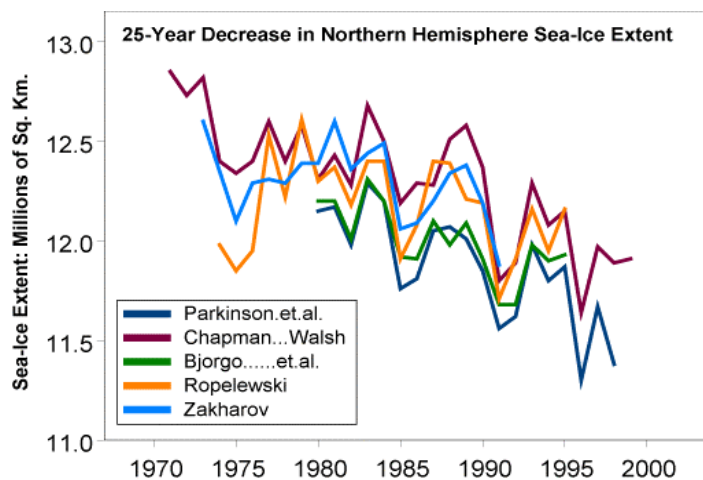
In recent years amidst global warming and rapid melting in the Arctic (Refer to Exhibit 2), many reports have taken to declaring the fabled NWP will soon be a viable option for circumpolar shipping, which will shave five thousand miles off circumpolar sea voyages

⁶ American University, *Canadian Sovereignty at the Northwest Passage*, ICE Case Studies Number 185, May 2006. <http://www.american.edu/ted/ice/northwest-passage.htm>

⁷ Encyclopedia Wikipedia, http://en.wikipedia.org/wiki/Northwest_Passage

that otherwise would have to go through the Panama Canal to circumnavigate the Americas. However, these predictions need to be met with cautious optimism according to John Falkingham, Chief of Ice Forecasting for the Canadian Ice Service. “Currently the Canadian Arctic’s shipping season, such as it is, lasts only about four to six weeks, and that’s not going to change anytime soon. We don’t expect the NWP to be free of ice for an extended period of the summer until much later in the century.”⁸ Peter Tyson in a report on the future of the NWP suggests that the summer shipping season will remain treacherous for even the most well equipped icebreaking vessels and that the alternative Russian NEP also commonly known as the Northern Sea Route is currently utilized and recognized as “a more straightforward path than the labyrinthine Canadian archipelago allows; rather than Canada’s thicket of islands, Russia’s route has just several straits for ships to pass through. And its summertime ice conditions are often better. The Northern Sea Route is already open up to eight weeks a year, with at least a million and half tons of shipping going through.”⁹

Exhibit 2



Source: U.S. National Oceanic & Atmospheric Administration

⁸ Tyson, Peter, *Future of the Passage*, <http://www.pbs.org/wgbh/nova/arctic/passage.html>

⁹ Ibid.

Similarly it is also increasingly suggested that a shipping route straight across the top of the northern hemisphere, via a direct route through the thinning ice of the North Pole¹⁰ which is now at times ice free during summer months, is believed by experts to be more likely to happen in this century than a route through the NWP (with its congestion of age old ice-choked islands).¹¹ As Bob Gorman (Enfotec) argues “since the oldest and thickest ice in the Arctic Ocean is that which is driven against the western flank of the Canadian Archipelago this will likely be the last multi-year ice to remain”¹² in the Arctic.

Exhibit 3

Future of the Passage



Despite the reported widespread thinning of Arctic ice, even the Swedish icebreaker *Oden* had trouble negotiating the Northwest Passage when it muscled through in mid-July 2005.

Source: PBS - NOVA Science Programming On Air and Online.

¹⁰ The term North Pole refers to the northern most point on Earth.

¹¹ Old ice from the Arctic Ocean drifts into the Queen Elizabeth Islands (QEI) (i.e. NWP – Canadian Archipelago) from the west, “blocking the narrow passages between islands. Ice concentrations in the QEI are extremely high resulting in limited and incomplete navigation and scientific study.” In: Wilson, K.J., Falkingham, J., Melling, H. and De Abreu, R., *Shipping in the Canadian Arctic: Other Possible Climate Change Scenarios*, Canadian Ice Service Meteorological Service of Canada and Fisheries and Oceans, Institute of Ocean Services.

With the summer seasonal melt and clearing of ice at the North Pole, it is now being asserted that the Arctic Polar Route (APR) straight over the North Pole, alternatively represents a more navigable and ice manageable Arctic shipping route, which would shorten circumpolar shipping by 8000 miles versus 5000 miles saved by NWP and NEP.¹³

Exhibit 4



Presumably, if both the NEP and APR currently and in the future represent more viable routes for circumpolar navigation then why do the marine industry and the governments of the United States and Canada seem so interested in the NWP? Essentially, as Bob Gorman notes “the marine industry is focused on the Arctic as a destination and not a short-cut between the Atlantic and the Pacific either now or in the next 10 to 20 years. Oil and gas activity is restricted to the on-shore MacKenzie Delta at the moment with plans

¹² Gorman Bob, in *Arctic Marine Transport Workshop*, 28-30 September 2004, Institute of the North, U.S. Arctic Research Commission, International Arctic Science Committee.

¹³ Tyson, Peter, *Future of the Passage*, <http://www.pbs.org/wgbh/nova/arctic/passage.html>

by the Aboriginal Pipeline Group to build a gas pipeline to the delta during the next 10 years. Once the pipeline is in place offshore oil and gas activity in the Beaufort Sea¹⁴ will likely pick-up once again.”¹⁵

While the NWP dispute between the United States and Canada is a global issue in the context that it will affect the trading activity of many countries, it is however essentially a bilateral issue between two neighboring Arctic nations, the United States (Alaska) and Canada.¹⁶ “Commercially, the importance of the passage lays in the future possibilities for its use. Until the present, navigation of the NWP has been extremely limited, consisting mainly of research and Arctic area community re-supply vessels. However, technological advances and global warming could make the NWP a viable international commercial sea route by the end of this century. In particular the existence of vast amounts of oil and gas on Alaska’s North Slope and the Beaufort Sea will likely provide an impetus for international commercial usage of the NWP.”¹⁷

International Strait – The United States’ Position on the NWP

As the worlds largest trading nation the United States has generally and consistently espoused the principle of the freedom of the seas.¹⁸ Whereas Canada, who’s territorial lands the frozen waterway zig zags through, has consistently claimed that the NWP is

¹⁴ “The 900-mile east-west water route runs from Baffin Island to the Beaufort Sea through a field of thousands of icebergs, and thence into the Pacific through the Bering Strait, which separates Siberia from Alaska.” <http://www.english.upenn.edu/projects/knarf/contexts/passage.html>

¹⁵ Gorman Bob, in *Arctic Marine Transport Workshop, 28-30 September 2004*, Institute of the North, U.S. Arctic Research Commission, International Arctic Science Committee.

¹⁶ American University, *Canadian Sovereignty at the Northwest Passage*, ICE Case Studies Number 185, May 2006. <http://www.american.edu/ted/ice/northwest-passage.htm>

¹⁷ Perrin, R.A. *Crashing Through The Ice: Legal Control Of The Northwest Passage: Who Shall Be ‘Emperor Of The North’*, in Tulane Maritime Law Journal, Fall 1988.

¹⁸ Dube, Rebecca *As Ice Melts, Debate Over Northwest Passage Heats Up*, in USA Today 4/4/2006. Quote: “The United States generally supports maximum freedom of the seas. U.S. officials worry about what sort of precedent the NWP will present to global hot spots, such as the Strait of Hormuz near Iran and the Strait of Malacca between Malaysia and Indonesia.” Note: The International Court of Justice’s decision in the Norwegian Fisheries Case establishing straight baselines along the outer shores of the Norwegian Fjords would refute this theory. FISHERIES CASE(United Kingdom v. Norway)International Court of Justice, Dec. 18, 1951, General List No. 5.

sovereign to Canada. Until recently the decades old dispute between the United States and Canada has been largely academic. But as global temperatures rise and polar ice caps melt, and oil and gas commodity prices rise, the energy import dependant United States and the Canadian Government have begun to more clearly envision the value and viability of the NWP as a control and access route to the abundant supply of under exploited natural resources of the Arctic. According to Robert Huebert, Associate Director of the Centre For Military and Strategic Studies at the University of Calgary, “the heart of the dispute is the transit of international shipping, and who gets to set the rules.” Canada considers the NWP as its internal waters and as its sovereign wishes to control and regulate emergent shipping traffic through this navigationally poor and environmentally risky zone located within its territorial lands.

Mississippi River Waterway – A Comparative View: An Internal Waterway or International Passage of Transnational Origin, With Passage between Two Major Gulfs?

As a useful comparative analysis of the U.S. position on the NWP, an analogy can be drawn with the Mississippi River¹⁹ which originates in Canada and is arguably part of a integrated waterway connected with the Great Lakes and St. Lawrence River international water way, that technical has the ability to provide a semi-navigable watercourse of passage from the Bay St. Lawrence and North Atlantic to the Gulf of Mexico – which could be developed for improved navigation.

Jus Cogens which is a Latin term representing fundamental international legal principles suggests that ‘good neighborliness’ is paramount for harmonious international relations and the principle is the very root of the U.S. position that the NWP is an international strait. Presumably then without invoking double standards and hypocrisy among nearest neighbors, the same theory would suggest that if the United States is justified in exclusive control and access to the Mississippi River as an internal waterway for their exclusive use rather than for mutual benefit with its Canadian neighbor, who arguably through historical ownership and usage shares and literally harbors intrinsic parts of the

¹⁹ Ibid.

waterway, then in lay mans words ‘what is good for the goose should also be good for the gander’. As such if the United States considers that the great Mississippi River is internal waters, despite its international dimensions of origin and shipping potential between two distinct and distant Gulfs, then so too on similar grounds it can be reasonably argued that the NWP is a Canadian internal waterway despite exogenous notions of freedom of the seas under the United Nations Convention of the Law of the Sea. In essence, if as a good neighbor Canada, Mexico and other nations who would stand to benefit from shorter shipping routes to internal American markets (or other proximate markets) accept or acquiesce with the notion that the Mississippi River is an internal U.S. waterway, then on the same principal the United States should cooperate with Canada in recognizing the uniqueness of the NWP and its sovereignty within the baselines of the Canadian Arctic Archipelago.

Global Interests in the NWP Dispute

Not entirely unlike the potential community of interest for Canada, Mexico and other nations’ freedom to use the Mississippi River system as discussed above, I see the NWP as a dispute where all countries involved (neighboring Arctic nations of Greenland, Denmark, Norway, Russia, Iceland and others) have significant economic and legal interests at stake. Furthermore, beyond trade development and efficiencies, and “besides the importance of hydrocarbon reserves in the Canadian Arctic (especially in the context of increasing political instability in the Middle East), the central proximity of the Canadian Arctic Archipelago to the (former) Soviet Union and the United States makes this an area of vital security and defense interests. Indeed the shortest distance between the two super powers is across the Arctic Circle.”²⁰

While the European Union, led by the influence of the United Kingdom, in recognizing its economic interest has supported²¹ the United States position that the NWP is an

²⁰ Kettunen, P.A. *The Status of the Northwest Passage Under International Law*, Detroit College of Law Review, Winter, 1990.

²¹ Huebert, Rob *Climate Change and Canadian Sovereignty in the Northwest Passage*

international strait²² (although the support is qualified in the context of environmental concerns), Russia (Former Soviet Union - FSU) has in contrast expressed its support for Canada's claim of complete control over the passage.²³ The FSU's position may have seemed surprising at the time in view of their strategic interest during the cold war in using the NWP for nuclear submarine defense, security and potential warfare. However, of a kindred sovereign character the NEP similarly links the Atlantic and Pacific, and is located in the Russian Arctic. The FSU have "claimed this passage through the Arctic by enacting legislation establishing 'straight baseline' boundaries around the waters, and classifying them as internal waters subject to complete Russian (FSU) control. Thus the Soviet Union has an interest in establishing complete legal sovereignty over the NEP through the Arctic waters which is almost identical²⁴ to Canada's interest in establishing sovereignty over the NWP through the Arctic."²⁵ This position by Russia seems broadly accepted as international commercial shipping through the NEP has been compliant with Russian statutory regulations and guidelines, which include both fees and supervision through the route.

The United States as the sole remaining world super power has to approach this dispute delicately as it has in contemporary years garnered a reputation internationally for taking what is in its' best interest e.g. oil fields in Iraq and the Middle East. According to Bob Huebert, the best solution to the dispute would be to "negotiate a joint management scheme for the Beaufort Sea without saying necessarily that one side was right and the other wrong."²⁶

²² Presumably every nation that wants to potentially use the NWP for international shipping and prospective resource access and/or exploration will skew their expressed interpretation and application of international law to promote their own national and/or regional domestic needs and economic growth.

²³ Perrin, R.A. *Crashing Through The Ice: Legal Control Of The Northwest Passage: Who Shall Be 'Emperor Of The North'*, in Tulane Maritime Law Journal, Fall 1988.

²⁴ The NEP is comprised of only a few straits and a small number of scattered islands over an otherwise open northern Russian Arctic coastline and sea, versus the extensive ice laden island waterway archipelago network of the Canadian Arctic.

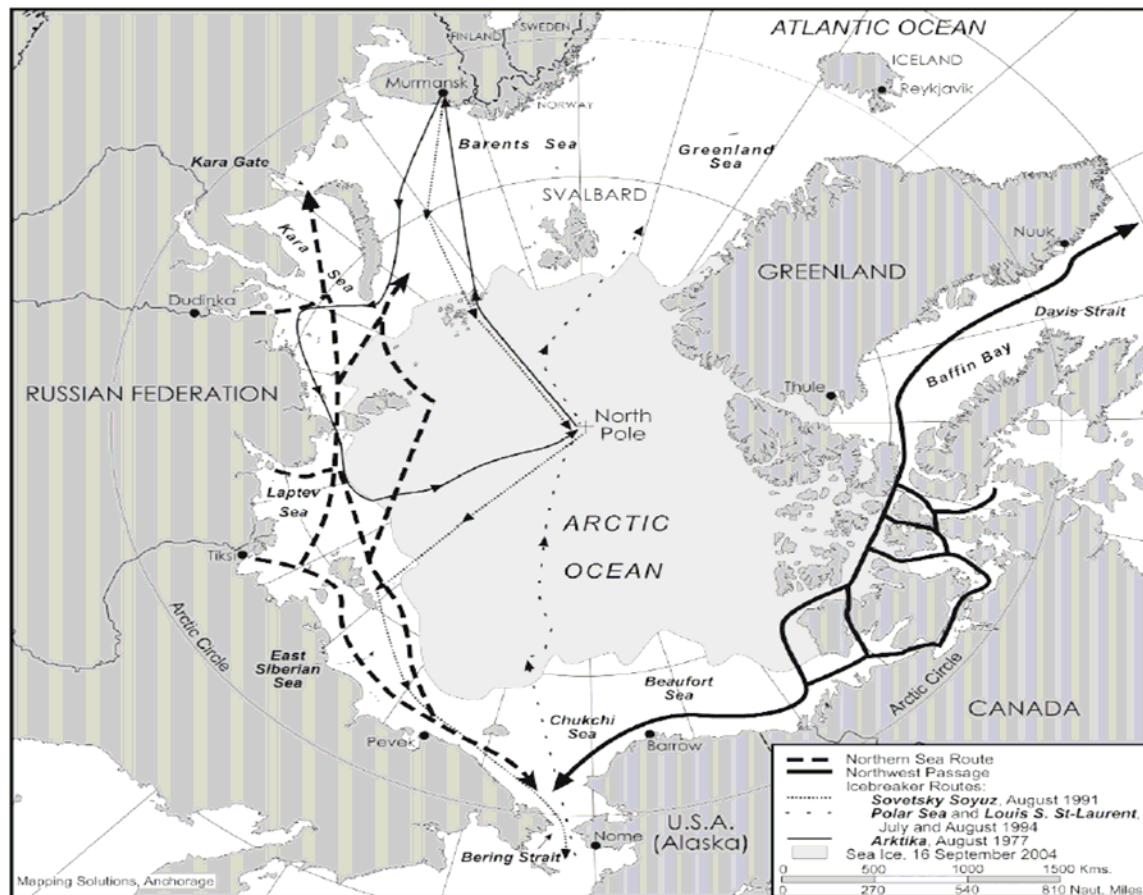
²⁵ Perrin, R.A. *Crashing Through The Ice: Legal Control Of The Northwest Passage: Who Shall Be 'Emperor Of The North'*, in Tulane Maritime Law Journal, Fall 1988.

²⁶ Washington Times. http://www.washingtontimes.com/specialreport/20050612-123835-3711r_page2.htm

Due to the high need for North American security measures in the wake of 9/11 and the Bush led war on terror across the world, it is obviously beneficial socio-politically, environmentally and fiscally efficient for Canada to patrol and supervises the NWP. Effectively this also would ensure that the ecologically fragile arctic waterway will not be open to all and any global users. Whereas the United States can without an inherent right of innocent passage or freedom of seas transit, confidently rely on the 1988 Arctic Agreement signed by both nations and the North American Free Trade Agreement to ensure its continued use and access of the NWP route through Canadian territory.

Exhibit 5

Arctic Ocean Marine Routes



This map is a general portrayal of the major Arctic marine routes shown from the perspective of Bering Strait looking northward. The official Northern Sea Route encompasses all routes across the Russian Arctic coastal seas from Kara Gate (at the southern tip of Novaya Zemlya) to Bering Strait. The Northwest Passage is the name given to the marine routes between the Atlantic and Pacific oceans along the northern coast of North America that span the straits and sounds of the Canadian Arctic Archipelago. Three historic polar voyages in the Central Arctic Ocean are indicated: the first surface ship voyage to the North Pole by the Soviet nuclear icebreaker *Arktika* in August 1977; the tourist voyage of the Soviet nuclear icebreaker *Sovetsky Soyuz* across the Arctic Ocean in August 1991; and, the historic scientific (Arctic) transect by the polar icebreakers *Polar Sea* (U.S.) and *Louis S. St-Laurent* (Canada) during July and August 1994. Shown is the ice edge for 16 September 2004 (near the minimum extent of Arctic sea ice for 2004) as determined by satellite passive microwave sensors. Noted are ice-free coastal seas along the entire Russian Arctic and a large, ice-free area that extends 300 nautical miles north of the Alaskan coast. The ice edge is also shown to have retreated to a position north of Svalbard.

Furthermore under Part X of the United Nations Convention on the Law of the Sea (UNCLOS),²⁷ in recommending U.S. acquiescence that NWP is Canadian internal waters the United States would exclusively qualify as a neighboring land-locked state with a right of “traffic in transit” as a transit state under UNCLOS Article 124 (1) (b) e.g. “having a sea coast, situated between a land-locked State and the sea, through whose territory traffic in transit passes” whereby Alaska is effectively land-locked from convenient and effective land based access to the continental U.S. and stands to benefit from transit passes through the Canadian Arctic coastline.

Practically, the legal consequences of water course classification differ significantly according to whether the NWP is deemed an international strait as the United States claims, a territorial seas strait, or internal waters as Canada claims. “If it is considered an international seas strait, then the more liberal right of ‘transit passage’ would exist for foreign vessels transiting through the waters of the Passage, as envisaged by the 1982 Convention on the Law of the Sea. Nevertheless, even if the transit passage regime lacked prerequisites to enable it to be considered binding under international law, the legal regime of non-suspensive innocent passage would exist, as enunciated in the 1958 Geneva Convention. However, if the NWP is considered to be merely a territorial seas strait, which is not used for international navigation, then the narrower right of suspensive-innocent passage would apply to foreign vessels transiting through its waters, as enunciated in both the 1958 and the 1982 conventions (significantly, this right does not allow a foreign vessel to travel in a submerged state), although the later convention appears to limit the situations where a littoral state may suspend such innocent passage.”²⁸

Ultimately, the distinction between an international strait, territorial seas and internal waters is an important one, as the classification triggers the interpretation of the applicable laws of the sea as set out in UNCLOS. “Internal waters are viewed as part of a

²⁷ ‘Right of Access of Land-Locked States To and From The Sea and Freedom of Transit’

state's land domain and are thus subject to the complete sovereignty of the coastal state. In the territorial waters of a coastal state (waters seaward of the baseline), foreign states have the right of innocent passage. Under both multilateral maritime conventions, when waters not previously considered to be internal are subsequently enclosed by baselines, the same right of innocent passage exists for foreign states. If the waters are classified as an international strait, a coastal state's powers are restricted to an even greater degree. The right of passage through an international strait is not suspendable by the coastal state. The rights of passage through international straits also include the right of overflight by aircraft, and the right of submarines to traverse in a submerged mode."²⁹

In arguing the NWP is an international strait the U.S. has relied primarily on the criteria established in the Corfu Channel case. The test applied for determining if a body of water is considered in law an international strait consists of two elements: (a) a geographic test and (b) a functional (or 'use') test.³⁰ In the first instance the NWP clearly meets the geographic test; it is indeed a body of water joining two oceans or two areas of high seas³¹. Similarly applying this definition literally to the Mississippi River it could also arguably be identified as a body or course of navigable water that joins two areas of high seas (as a conduit watercourse of the Great Lakes/St. Lawrence river system emanating at the Gulf of St. Lawrence in the North Atlantic, with a nexus to the Gulf of Mexico). Regardless of the potential for international transit between the Gulf of St. Lawrence and Gulf of Mexico, the United States understandably prefers to recognize the Mississippi as internal waters for its sovereign control and security purposes. And whereas the navigability of Mississippi River in its full length from the Great Lakes to the Gulf of Mexico is impractically questionable, it as such fails the functionality test. Likewise the NWP does not meet the functionality test due to adverse navigability and as the shipping traffic historically has been minimal (and almost exclusively Canadian or with Canadian permission and supervision), with no one established route among uncertain branch

²⁸ Kettunen, P.A. *The Status of the Northwest Passage Under International Law*, Detroit College of Law Review, Winter, 1990.

²⁹ Perrin, R. A. *Crashing Through The Ice: Legal Control Of The Northwest Passage: Who Shall Be 'Emperor Of The North'*, in Tulane Maritime Law Journal, Fall 1988.

³⁰ McRae, Donald M. *Arctic Sovereignty: Loss by Dereliction?*

³¹ Law of the Sea Convention, 1982. Articles 37 and 45.

routes being clearly established and the traffic being subject to seasonality and advanced ice breaking technology.³² Refer to Exhibits 12 and 13. As such from a functional perspective the NWP does not have an established international usage nor does its natural geography of a diverse network of shallow and ice laden passages and adverse weather lend to ready navigability, and on that basis it is not an international strait, because there is no established viable use as an international strait.

Clearly, whether we are hypothetically speaking of the Mississippi River or of the NWP and their navigational potential to serve as international waterways, the fact that a body of water could potentially be used for navigation does not necessarily constitute it an international waterway.³³

The voyage of the Polar Sea is the only known transit of the NWP undertaken without consent of the Canadian government, and the U.S. government made it clear to the Canadian Government that in taking the expeditious short cut through the NWP that it did not regard the voyage as establishing a precedent that would challenge the Canadian claim of sovereignty over the NWP waters.³⁴ In response, the Canadian government formally sanctioned the Polar Sea's voyage. Moreover, the subsequent 1988 Arctic Cooperation Agreement signed between the United States and Canada "suggests there will be no more Polar Sea voyages – that is, no more American navy icebreakers transiting the NWP without Canadian consent. So, even if the Polar Sea was a precedent, it is no more than an isolated, single instance. Thus, the conclusion remains: The NWP is not a strait that is 'used for international navigation' and hence cannot constitute in law an international strait."³⁵

Whereas Alaska is not a land locked state and has a coastline on the Pacific Ocean, Bering Sea and Beaufort Sea, there are however numerous non-coastal U.S. States that

³² Professor Pharand in 1984 pointed out that in an 80-year history there had been only 11 foreign transits of the NWP, all "with Canada's consent or acquiescence, either expressed or implied." *Northwest Passage: Arctic Straits*, 102(1984) in McRae, Donald M. *Arctic Sovereignty: Loss by Dereliction?*

³³ McRae, Donald M. *Arctic Sovereignty: Loss by Dereliction?*

³⁴ Ibid.

³⁵ Ibid.

have only land-locked based access to their fellow State of Alaska. For instance, Vermont which is a long distance from both the Alaskan highway and pipeline will greatly benefit from an Atlantic seaboard access via its neighboring New England states, to the North Atlantic and the NWP for expedient commercial shipment of trade goods between Alaska and the New England region. Similarly New York and the South Eastern U.S. seaboard would also greatly benefit from efficient access to the prospective energy and mineral resources that are present and prospective in Alaska, the Beaufort Sea and the broader Arctic region in general.

Generally, it would be in the best interest of the U.S. for the sake of good relations with Canada, Canadian sovereignty, North American sovereignty, security, environmental and trade purposes to establish a co-operative strategic Arctic framework which would effectively provide the U.S. with exclusive transit access for shipping and a right of innocent passage, but would exclude other nations doing so without express permission, because they would be unable to qualify as either a riparian or affected land-locked state status. Furthermore under UNCLOS Part VIII & IX “the terms and modalities for exercising freedom of transit shall be agreed between the land-locked State/s and transit State/s concerned through bilateral, subregional or regional agreements. And transit States, in the exercise of their sovereignty over their territory, shall have the right to take all measures necessary to ensure that the rights and facilities provided for in this Part for land-locked States shall in no way infringe their legitimate interests.”³⁶ This essentially means that the U.S. and Canada are obliged to arrive at a bilateral agreement providing a right of transit to the U.S. through the NWP and; which by its nature and application does not infringe on Canada’ sovereign interests in the NWP.

The Canadian Position on the NWP – Internal Canadian Waters

The position of the Canadian Government with respect to the NWP is oxymoronically both firm and soft. In the first instance Canada has consistently claimed sovereignty over the NWP and in contemporary years has taken to strategically referring to the waters as

³⁶ Guruswamy, et al., *Supplement of Basic Documents to International Environmental Law and World Order* (2nd ed., West paperback 1999) p.776-778.

Canadian internal waters, and in 1986 after having signed the 1982 UNCLOS in a reaction to challenges by the US to its sovereignty over the NWP declared straight baselines premised on the outer shores of its arctic archipelago, to which the U.S. protested.³⁷

In contrast while Canada has at least been firmly consistent in defense of their claim to sovereignty of the NWP it has in fact by its own conciliatory nature arguably eroded the Canadian projection of sovereignty which it has diligently and purposively endeavored to cultivate in the international community by declaring that while Canada considers the waters of the NWP internal they at the same time support international shipping through the passage provided Canadian regulations are followed.³⁸ Albeit gracious diplomacy, the implicit legal intent is an offer to accommodate the U.S. right of transit through the NWP on Canada's terms with the belief that the U.S. really does not want an international channel, which would be an additional threat to their security and would erode their comparative shipping advantage in the area.

"Canada's claim to sovereignty over the waters of the Arctic Archipelago"³⁹ stands or falls on whether the drawing of straight baselines enclosing the waters as internal waters can be justified in law and on whether the waters of the NWP constitute an international strait. The argument supporting the use of "straight baselines" in the context of the Arctic Archipelago derives from the decision of the International Court of Justice (ICJ) in the 1951 *Fisheries Case*.⁴⁰ Professor Donald Pharand maintains that "the preponderant view of legal authorities is that the waters of the Canadian Arctic Archipelago are properly enclosed by straight baselines and are the internal waters of Canada. 'The Canadian

³⁷ The weakness of the Canadian argument lies in the timing of its declaration. "Canada implemented straight baselines around the Arctic on January 1, 1986. However, in 1982, it had signed UNCLOS, in which article 8(2) states that a State cannot close an international strait by declaring straight baselines. Although the likely Canadian counter argument to this is that the NWP fails the Corfu Channel test for functionality as there has been no established historical use of the passage as an international strait prior to establishing the baselines. Furthermore, reference can be made to the Norwegian Fisheries case where similar baselines declared by Norway around their coastal archipelago was recognized by the ICJ.

³⁸ Huebert, Rob *Climate Change and Canadian Sovereignty in the Northwest Passage*

³⁹ The Archipelago concept in international law was established under part IV (Articles 46-54) of UNCLOS 1982.

⁴⁰ *Fisheries Case* (United Kingdom v. Norway) [1951] I.C.J. Rep. 116

Arctic is nothing more the Norwegian *skjaergaard* writ large.” Professor Donald McRae also points out that the geographic nexus between the Canadian mainland and its arctic archipelago and among the archipelago islands themselves, coupled with the use of the frozen waters by Canadian Inuit for land premised passage and their dependence on the whole of the archipelago (interrelationship between the land, ice and water of the area for indigenous people)⁴¹, and the uncertainty of “the highly irregular and indented nature of the coastline and islands lead to a classic case for departure from the low-water line rule.”⁴²

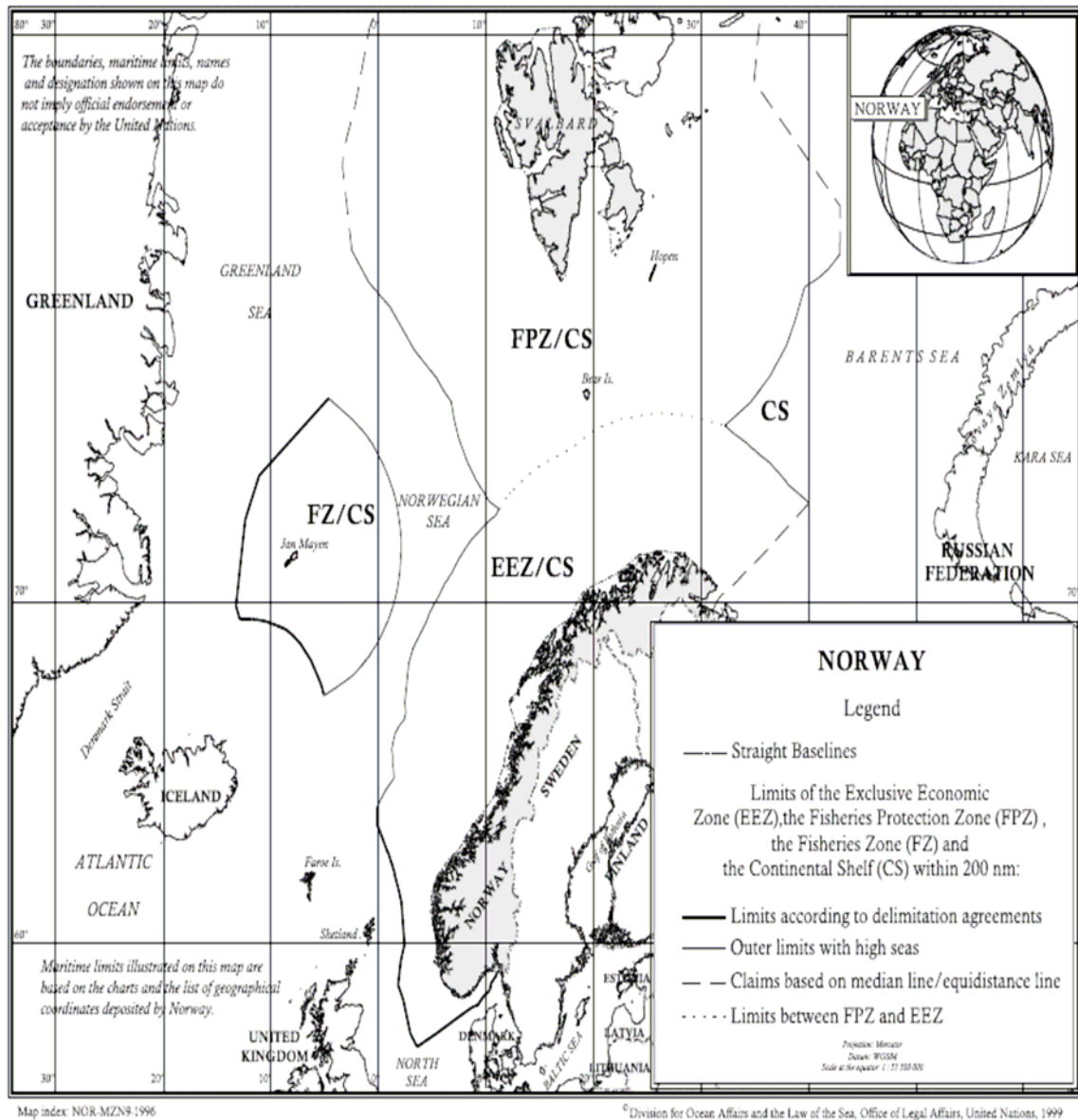
In the 1951 *Fisheries Case* the issue before the ICJ was the west coast of Norway, where the coastline similar to the Canadian Arctic coastline, is cut into by fjords and a series of many small coastal islands (known as “skjaergaard”). In the ICJ’s decision, instead of following the rule of low-water line which would follow the mainland coastline, straight baselines were allowed to be drawn seaward from the mainland to the island coasts and from island coast to island coast, effecting a linkage of baselines drawn along the outer shores of the coastal islands linked on each end to the mainland and enclosing within significant areas of water between the islands and between the islands and mainland. Effectively by the ICJ allowing these baselines to be drawn along the outer shores of the skjaergaard, it provided in law that the waters behind them would be ‘internal waters’.⁴³ Refer to Exhibit 6 below:

⁴¹ As the result of a 1951 decision by the International Court of Justice, straight baselines became a legally accepted means for determining the extent of coastal state control along fragmented coastlines, or “coastal archipelagos”. Canada has also invoked its prior argument of historic internal waters in support of its straight baselines claim, arguing that its title to the waters within the baselines-which by definition are internal waters-was consolidated by historic usage. “The historic usage argument was reinforced in 1993 by the Nunavut Land Claims Agreement, whereby the Canadian government and Inuit affirmed that “Canada’s sovereignty over the waters of the Arctic archipelago is supported by Inuit use and occupancy.

⁴² McRae, Donald *Arctic Sovereignty: Loss by Dereliction?*

⁴³ Ibid.

Exhibit 6



As noted in footnote 35 a paradox results when straight baselines are applied enclosing waters as inland waters where an existing strait used for international navigation exists.

“In such straits, vessels have a right of passage equivalent to the right of innocent passage in the territorial sea or, where the regime of “transit passage” applies, a right even greater than that of innocent passage. Although the extent of use necessary to constitute a strait as “international” is a matter of controversy, there must be some evidence that foreign shipping does in fact use the route for navigation”⁴⁴

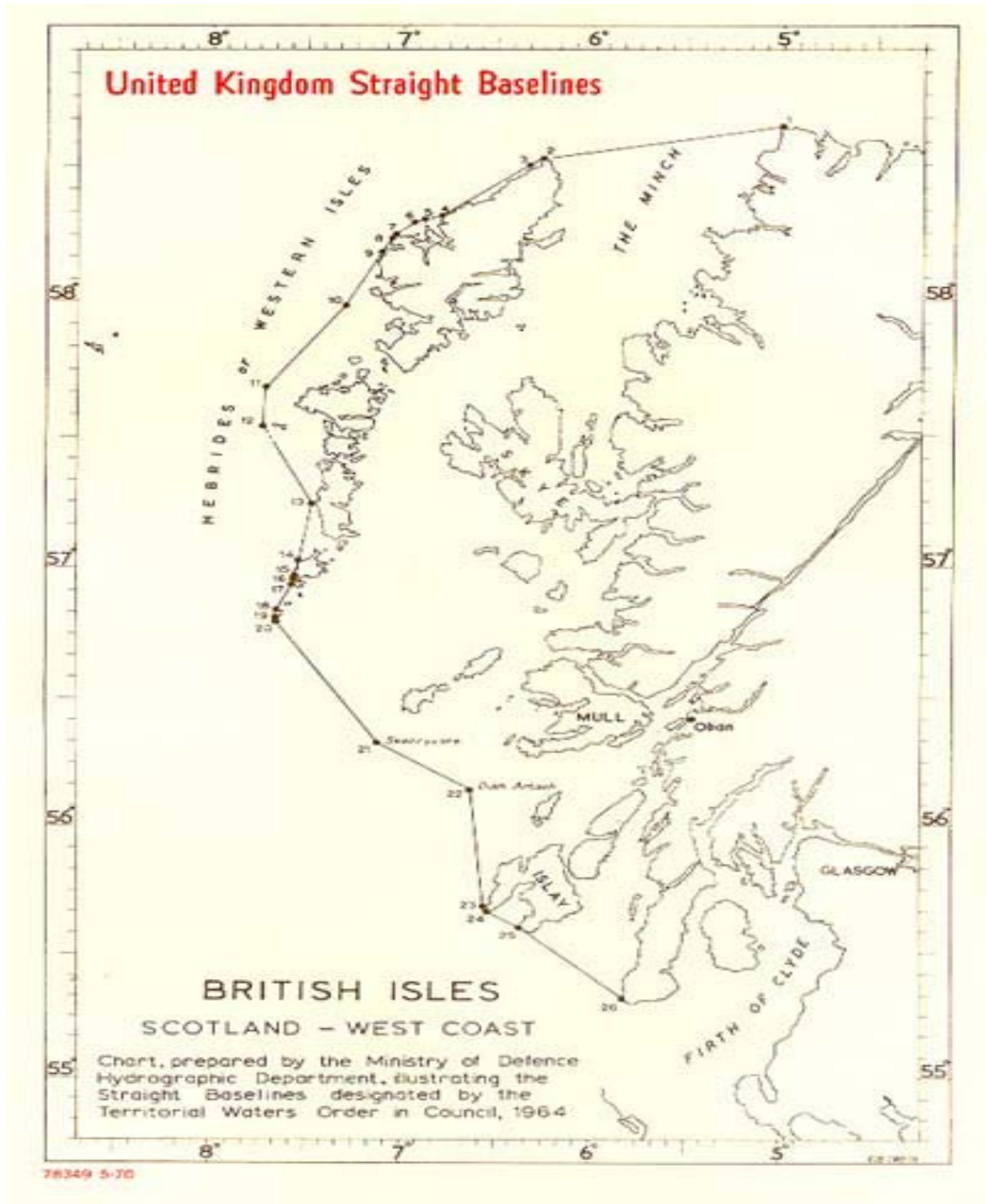
Inherently Canada’s claim of sovereignty over the waters of the NWP is supported by the fact there is no established history of international shipping through the NWP and as a result it fails the functionality test of an ‘international strait’ which by default infers that Canada’s application of straight baselines in 1986 will adhere to international legal scrutiny as there is no grounds to recognize a pre-existing international shipping use of the waterway.

Further, in support of Canada’s straight baseline application to the outer shores of its arctic archipelago in addition to citing the Norwegian Fisheries case it is useful to note that there are an abundance of other nations who have similarly applied straight baselines out from their mainland coastline and along their coastal islands, effectively enclosing adjoining seas behind the baselines. For instance in Exhibit 7 below note the extension of straight baselines by the United Kingdom to outer coastlines of the Outer and Inner Hebrides of the Western Isles⁴⁵ which effectively enclosed the Hebridean Sea and the Sea of Minch within national boundaries, albeit a navigational short cut historically used by many maritime nations for circumnavigating the British Isles.

⁴⁴ Ibid.

⁴⁵ a series of Celtic Islands once ironically part of Great Britain’s ‘Clearances’.

Exhibit 7



Two other legal premises for Canada's claim of sovereignty over the waters of the Canadian Arctic Archipelago are historic title and the 'sector theory'.⁴⁶ Basically Canada has not aggressively asserted its historic title argument implicit in its sovereignty claim to the NWP as the United States does not seem to have issues with Canada's land based claims to the Arctic Archipelago. However U.S. dissention arises from Canada's claim to sovereignty of the associated waterway. Furthermore, I suspect that historical claims⁴⁷ often prove difficult to argue when it comes to proving that other states have recognized or acquiesced in any claim to historic title by Canada to all the waters of its Arctic Archipelago. Although the time immemorial presence of the Inuit people, indigenous to Canada, on these lands and ice fields is a strong inherent supporting historical element to Canada's (or its Inuit peoples') claim to the waters of the NWP.

An earlier tenet which Canada has also employed in its claim of sovereignty over its adjoining arctic and polar region is the sector theory. "According to the sector theory, polar states are entitled to exercise sovereignty between their mainland territory and the North Pole in an area bounded by the lines of longitude running from their east and west coasts to the Pole. This theory is associated with the famous resolution asserting Canadian sovereignty up to the North Pole introduced into the Canadian Senate in 1907 by Senator Poirier."⁴⁸ See Exhibit 8 below.

Canada may also founds its claim for sovereignty on the principle of acquired title (cession from a sovereign), equity with respect to Canada's distinct interest in using the

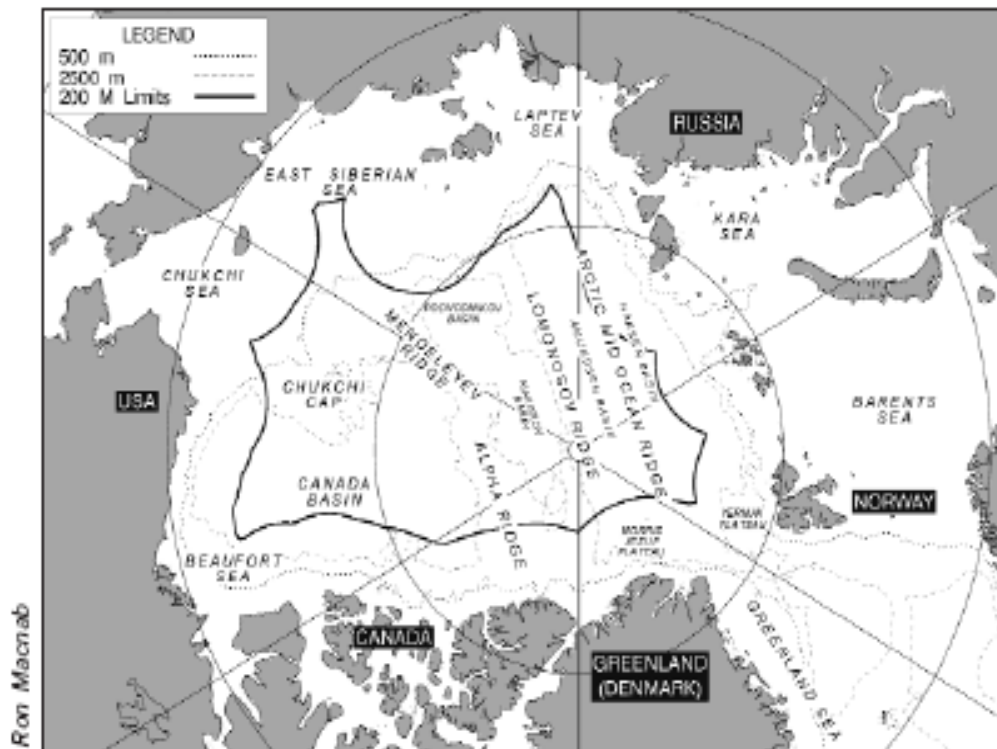
⁴⁶ McRae, Donald *Arctic Sovereignty: Loss by Dereliction?*

⁴⁷ The historic consolidation argument is also supported by judgments of international courts. In 1975, in a dispute between Spain and Morocco over the Western Sahara, the International Court of Justice held that the historic presence of nomadic peoples can help to establish sovereignty. And in 1933, in a dispute between Norway and Denmark over Eastern Greenland, the predecessor to the International Court of Justice, the Permanent Court of International Justice, held that the degree of presence necessary to establish title over territory is lower in inhospitable regions than in more temperate climes." (Excerpted from *Independence and Internationalism*, chapter 10, "A Northern Dimension for Canada's Foreign Policy", pp. 127-135.)

⁴⁸ Ibid.

NWP for national security & protection of the environment and Inuit people & culture, and finally as in the Norwegian and Iceland Fisheries⁴⁹ cases Canada may assert that the archipelago waters are vital for traditional Inuit community for hunting and fishing to sustain their needs the Inuit and Northern peoples of Canada.⁵⁰

Exhibit 8



Map showing the coastal Arctic states, their joint Exclusive Economic Zones (EEZs), and the natural prolongations of their land territories.

“The fact of the existence of the coastal state is the backbone of all legal regimes in the law of the sea where the state exercises some degree of legal power based on its territory”⁵¹ This notion provides the basis “for delineation of different legal regimes for

⁴⁹ Fisheries Jurisdiction Case (U.K. v. Iceland), I.C.J., 1974. “found that the Icelandic Regulations of 1972 constituting a unilateral extension of the exclusive fishing rights of Iceland to 50 nautical miles from the baselines are not opposable to the United Kingdom.”

⁵⁰ Perrin, R.A. *Crashing Through the Ice: Legal Control of the Northwest Passage*, Tulane Maritime Law Journal, Fall 1988.

⁵¹ Guruswamy, et al., *International Environmental Law and World Order: A Problem-Oriented Cousebook* (2nd ed., West hardback 1999) p. 415.

the marine and submarine areas, with their respective disparate statutes. While the coastal state possesses a certain degree of legal power over the marine and submarine areas situated relatively close to its coast (the internal waters, the territorial sea, the contiguous zone, the exclusive economic zone and continental shelf), such legal power is not recognized by the law of the sea rules for marine and submarine areas situated relatively distant from its coast (the high seas, the seabed outside the limits of national jurisdiction).”⁵²

Exhibit 9



Canadian ice breaking carrier *M/V Arctic* (owned by Fednav Limited) in the Northwest Passage.

Furthermore, under the ‘Restatement (Third) of the Foreign Relations Law of the United States, as adopted by the American Law Institute, Section 603 (State Responsibility for Marine Pollution) and based on Articles 194, 207-12, 217 and 220 of the United Nations Convention on the Law of the Sea it is recognized that “A coastal state also has the right to adopt and enforce nondiscriminatory laws and regulations for the prevention, reduction, and control of marine pollution from vessels in ice-covered areas within the limits of its exclusive economic zone, where particularly severe climatic conditions and the presence of ice for most of the year create obstructions or exceptional hazards to

⁵² Ibid.

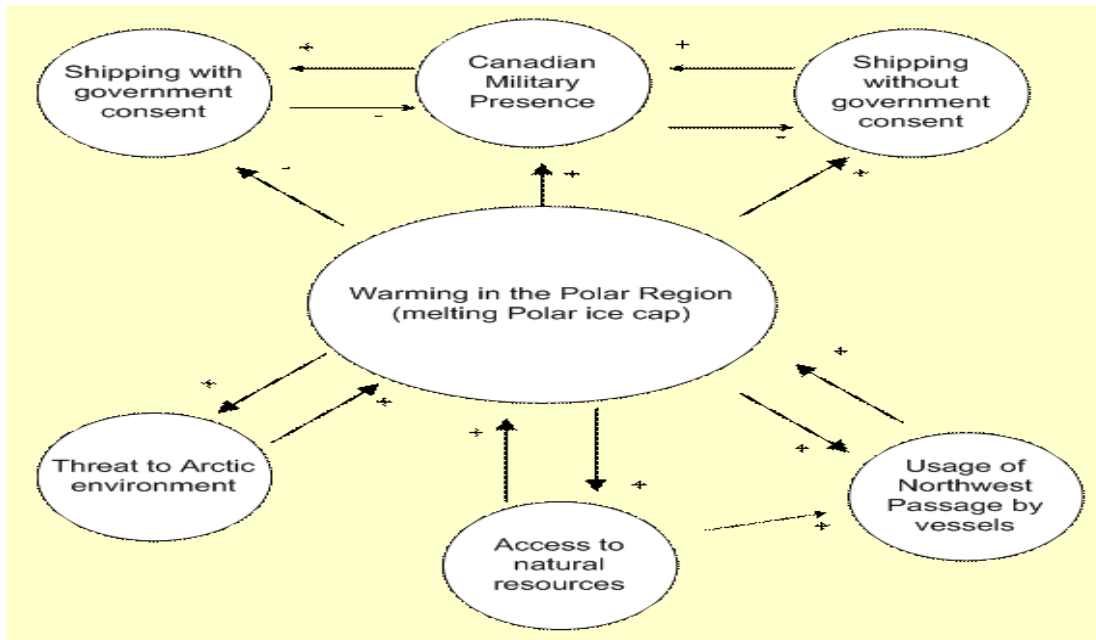
navigation, and where pollution of the marine environment could cause harm to, or irreversible disturbances of the ecological balance. The coastal state is obliged to base such laws and regulations on the best scientific evidence and to have due regard to navigation. Article 234.”⁵³

As well Guruswamy provides under Article 220 (2) and also in reference to Articles 19(2)(h), 21(1)(f) and 27 “Where there are clear grounds for believing that a foreign ship, while passing through the territorial sea of the coastal state, violated laws and regulations of that state adopted in accordance with applicable international rules and standards, the coastal state may, subject to certain procedural safeguards (see Article 226), undertake physical inspection of the vessel in the territorial sea in order to ascertain the facts relating to the violation. Where evidence so warrants, the coastal state may institute proceedings against the ship, in accordance with its laws, and may detain the ship pending such proceedings.”⁵⁴

Alicia Zorzetto in her American University, Ice Case Study Number 185, May 2006 report on *Canadian Sovereignty at the Northwest Passage* provides in her conflict environment scan that “the conflict should not be considered a “yield” or “stalemate” because it is unique. This issue may be in the midst of being amicably resolved. Therefore, it is too early in this situation to determine an outcome.” For a synoptic overview of the dynamics of the US-Canada NWP dispute note per Exhibit 10 below that the problem identification in the NWP conflict is described as having its core origin rooted with ‘Warming in the Polar Region’.

⁵³ Guruswamy, et al., *Supplement of Basic Documents to International Environmental Law and World Order* (2nd ed., West paperback 1999) p.145.

Exhibit 10
US/Canada NWP Conflict Environment



Which interestingly enough shows that global warming and environmental changes can have extensive geo-political effects, such as changing water and ice dynamics placing new pressures on demands for new international shipping routes, sovereignty claims, environmental concerns and resource control.

⁵⁴ Ibid.

Exhibit 11



Three [Polar bears](#) approach the [starboard](#) bow of the USS *Honolulu* submarine while surfaced 280 miles from the [North Pole](#).

Conclusion

The NWP is a strategic route from the Atlantic Ocean to the Pacific Ocean through a myriad of northern Canadian arctic archipelago islands. The NWP was not traditionally a commercially viable trading route due to shallow waters and, in particular, ice blockades. Global warming has now altered this reality! Because of climate change, the Canadian government is experiencing new challenges from multiple national governments, especially the United States, concerning the feasibility of international transit through the NWP.

The Canadian perspective is that they have full sovereignty encompassing the islands/waterways and thereby will assert complete control over all activity in that specific region. However, many countries perceive the NWP to be an international waterway between the Atlantic and Pacific Oceans. In response, the Canadian

government has continually stated that it does support international shipping through the NWP, as long as Canadian awareness and regulations, within the guidelines of international law, are followed.

International law under the United Nations requires that disputing nations seek in the first instance to cooperatively resolve their differences and in fact the United Nations International Court of Justice has no general jurisdiction to hear applications from complainant states submitted unilaterally, with few exceptions. Furthermore, “states often do not want to risk losing a case when the stakes are high or be troubled with litigation in minor matters.”⁵⁵

Given the changing environment and the obvious elevating interest in the NWP a more vigorous search for resolution palatable for both the United States and Canada is required. Primary to the U.S. claim is the fundamental law of the sea espousing ‘freedom of the sea’ and the right of innocent passage through international waters, and territorial seas. Primary to the Canadian claim is its desire to prevent diminution of sovereignty over its arctic. In customary international law the U.S. claim is supported by the Corfu Channel case and the Canadian claim of internal waters founded on the use of straight baselines extended to the outside shores of its archipelago is founded on the I.C.J.’s decision in the Norwegian Fisheries Case and use straight baseline use by numerous other States with coastal archipelago’s such as the United Kingdom’s extension of baselines to the outer shores of the Outer Hebrides of its Western Isles off the Sea of Minch.

The arguments in favor and contra for both the U.S. and Canadian positions are numerous and the law is inconclusive and although the author favors the Canadian legal argument, he recognizes that in the end even if Canada were to have the NWP recognized as its internal waterway there would still remain a very basic obligation of good neighborliness to allow passage on a non-discriminatory basis when and where navigation could be executed with due care and sensitivity for the region. Alternatively if a hard line were to be drawn it could be readily noted that the alternative NEP and Polar Route are

⁵⁵ Ibid p. 202.

logistically viable routes and more favorable routes that can be used, and consistent with the concept of equity where the practice is one of what a reasonable prudent person would do, then exclusionary provisions are indeed acceptable where the situation merits and alternative options are comparatively more favorable.

I believe that the most contentious issue that Canada has with the U.S. position is that although the U.S. has declared they recognize Canada's ownership of the maze of islands through which the NWP flows, as a sovereign nation they feel violated when the US does not feel compelled to seek consent, or at least to give notice that they will be passing through Canadian territory. It has been readily seen through out history that one person's liberties can be another's intrusions. As 'self' and 'mutually' respecting nations Canada and the United States must begin to earnestly work together toward building a strategic approach to resolving the NWP dispute which synergistically may be broadened to include a framework for a joint plan dealing with not only passage to and through the NWP, but as well the ongoing management and protection needs for the area.

Exhibit 12

Marine Traffic in the Canadian Arctic June – November 2004

Canadian Government Vessels	8	
Commercial Traffic		
Canadian Vessel Voyages	62	
Foreign Vessel Voyages	18	(14 to Churchill)
Foreign Cruise Ships	7	
Foreign Research Vessels	2	
Foreign Pleasure Craft	5	
Total = 94		
Northwest Passage Transits		
Canadian Coast Guard	2	
Canadian Commercial Vessels	0	
Foreign Cargo Vessels	0	
Foreign Cruise Ships	1	
Foreign Pleasure Craft	2	
Total = 5		
Σ	Total Voyages = 107	

Note: Listing prepared from responses to the Canadian Coast Guard voluntary reporting system.

Source: Canadian Coast Guard

Exhibit 13

Transits of the Northwest Passage

Seven routes have been used for transits of the Northwest Passage between the Atlantic Ocean (Labrador Sea) and Pacific Ocean (Bering Sea) or in the opposite direction. Several minor variations have also been used (for example through Pond Inlet and Navy Board Inlet, Jones Sound, etc). These routes are:

Route 1: Labrador Sea, Davis Strait, Lancaster Sound, Barrow Strait, Viscount Melville Sound, McClure Strait, Beaufort Sea, Chukchi Sea, Bering Strait, Bering Sea.

The shortest and deepest, but most difficult way owing to the severe ice of McClure Strait; the route could be used by submarines because of its depth.

Route 2: Labrador Sea, Davis Strait, Lancaster Sound, Barrow Strait, Viscount Melville Sound, Prince of Wales Strait, Amundsen Gulf, Beaufort Sea, Chukchi Sea, Bering Strait, Bering Sea.

An easier variant of route 1 which may avoid severe ice in McClure Strait; suitable for deep draft vessels.

Route 3: Labrador Sea, Davis Strait, Lancaster Sound, Barrow Strait, Peel Sound, Franklin Strait, Victoria Strait, Coronation Gulf, Amundsen Gulf, Beaufort Sea, Chukchi Sea, Bering Strait, Bering Sea.

This is route used by most vessels of draft less than 10 m.

Route 4: Labrador Sea, Davis Strait, Lancaster Sound, Barrow Strait, Peel Sound, Rae Strait, Simpson Strait, Coronation Gulf, Amundsen Gulf, Beaufort Sea, Chukchi Sea, Bering Strait, Bering Sea.

A variant of route 3 for small vessels if ice from McClintock Channel has blocked Victoria Strait; Simpson Strait is only 6.4 m deep and has difficult currents.

Route 5: Labrador Sea, Davis Strait, Lancaster Sound, Prince Regent Inlet, Bellot Strait, Franklin Strait, Victoria Strait, Coronation Gulf, Amundsen Gulf, Beaufort Sea, Chukchi Sea, Bering Strait, Bering Sea.

This route is dependent on ice conditions in Bellot Strait which has difficult currents; mainly used by eastbound vessels.

Route 6: Labrador Sea, Davis Strait, Lancaster Sound, Prince Regent Inlet, Bellot Strait, Rae Strait, Simpson Strait, Coronation Gulf, Amundsen Gulf, Beaufort Sea, Chukchi Sea, Bering Strait, Bering Sea.

A variant of route 5 for small vessels if ice from McClintock Channel has blocked Victoria Strait, Simpson Strait is only 6.4 m deep, difficult currents run in Bellot and Simpson Straits.

Route 7: Labrador Sea, Hudson Strait, Foxe Basin, Fury and Hecla Strait, Bellot Strait, Franklin Strait, Victoria Strait, Coronation Gulf, Amundsen Gulf, Beaufort Sea, Chukchi Sea, Bering Strait, Bering Sea.

A difficult route owing to severe ice usually at the west of Fury and Hecla Strait and the currents of Bellot Strait.
Transits of the Northwest Passage (continued)

Until the 2004-05, winter 99 complete transits of the Northwest Passage (Atlantic to Pacific waters or vice versa) have been made. Including these are 175 partial transits recorded through waters of the Canadian Arctic Archipelago. An analysis of these routes shows:

Complete transits of the Northwest Passage

Route 1	west	1	east	0	total	1
Route 2	west	7	east	3	total	10
Route 3	west	16	east	29	total	45
Route 4	west	6	east	5	total	11
Route 5	west	4	east	10	total	14
Route 6	west	3	east	10	total	13
Route 7	west	0	east	2	total	2
All Routes	west	37	east	62	total	99

Partial transits through the Canadian Arctic Archipelagos

Route 1	west	2	east	1	total	3
Route 2	west	10	east	6	total	16
Route 3	west	50	east	58	total	108
Route 4	west	6	east	6	total	12
Route 5	west	5	east	12	total	17
Route 6	west	3	east	10	total	13
Route 7	west	1	east	2	total	3
All Routes	west	77	east	98	total	175

Source: Robert Headland,
Scott Polar Research Institute, United Kingdom

Transits of the Northwest Passage

The following 99 voyages, by 67 vessels, carrying 17 different flags, have made complete transits of the Northwest Passage to September 2004. These transits proceed to or from the Atlantic Ocean (Labrador Sea) in or out of the eastern approaches of the Canadian Arctic archipelago (Lancaster Sound or Foxe Basin), then the western approaches (McClure Strait or Amundsen Gulf), across the Beaufort Sea and Chukchi Sea of the Arctic Ocean, from or to the Pacific Ocean (Bering Sea). The seven routes which have been used are indicated, with any significant variations listed. Some voyages are discontinuous because the complement left the vessel during a winter. Details of submarine transits are not included because only two of them (USS Seadragon in 1960 and USS Skate in 1962) have been reported and they do not navigate through ice.

The sources for these data include a compilation Thomas Pullen and Charles Swithinbank published 1991 (Cambridge: *Polar Record*, 27 [163]; 365-36 subsequent information from Brian McDonald (Canadian Coast Guard) who maintained and expanded the compilation (completing it for a Centenary Edition in 200 details provided by Captains Patrick Toomey (CCG) a Lawson Brigham (USCG), some personal observations acquired during voyages aboard *Kapitan Khlebnikov* a *Kapitan Dranitsyn*, and many published works.

	Year	Vessel	Registry	Master	Route
1	1903-06	<i>Gjøa</i> (21 m auxiliary sloop)	Norway Wintered twice in Gjøa Haven and once off King Point	Roald E. G. Amundsen	West 4
2	1940-42	<i>St Roch</i> ¹ (29.7 m RCMP aux. schooner)	Canada ¹ Wintered at Walker Bay and Pasley Bay, traversed Pond Inlet	Henry Asbjørn Larsen ¹	East 6
3	1944	<i>St Roch</i> ² (RCMP auxiliary schooner)	Canada ² Return voyage, first transit in one season, traversed Pond Inlet	Henry Asbjørn Larsen ²	West 2
4	1954	HMCS <i>Labrador</i> (icebreaker)	Canada ³ First continuous circumnavigation of North America	Owen Connor S. Robertson	West 2
5	1957	USCGC <i>Storis</i> (icebreaker)	United States ¹	Harold L. Wood	East 6
6	1957	USCGC <i>Bramble</i> (buoy tender)	United States ²	H. H. Carter	East 6
7	1957	USCGC <i>Spar</i> (buoy tender)	United States ³ USCGC <i>Storis</i> escorted convoy with <i>Bramble</i> and <i>Spar</i>	C. V. Crewing	East 6
8	1967	CCGS <i>John A. McDonald</i>	Canada ⁴ Dispatched to assist USCGC <i>Northwind</i> beset 900 km N off Point Barrow with damaged propeller, circumnavigated North America	Paul M. Fournier	West 3
9	1969	USCGC <i>Staten Island</i> (icebreaker)	United States ⁴ Escorted oil tanker <i>Manhattan</i> on return voyage from Point Barrow	Eugene F. Walsh	East 3
10	1970	CSS <i>Baffin</i> (research icebreaker)	Canada ⁵	P. Brick	East 2
11	1970	CSS <i>Hudson</i> ¹ (research icebreaker)	Canada ⁶ First circumnavigation of the Americas	David W. Butler	East 2
12	1975	<i>Pandora II</i> (hydrographic research vessel)	Canada ⁷	R. Dickinson	East 7
13	1975	<i>Theta</i> (research vessel)	Canada ⁸ Traveled in company	K. Maro	East 7
14	1975	CSS <i>Skidgate</i> (buoy tender)	Canada ⁹	Peter Kallis	East 6

Transits of the Northwest Passage

	Year	Vessel	Registry	Master	Route
15	1976	CCGS <i>J. E. Bernier</i> ¹ (icebreaker)	Canada ¹⁰	Paul Pelland	East 3
16	1977	<i>Williwaw</i> (13 m sloop)	Netherlands Single-handed after Gjøa Haven, continued to circumnavigate the Americas	Willy de Roos	West 4
17	1978	CCGS <i>Pierre Radisson</i> (icebreaker)	Canada ¹¹	Patrick M. R. Toomey	East 2
18	1976-79	<i>J. E. Bernier II</i> (10 m ketch)	Canada ¹² Wintered in Holsteinburg, Resolute, and Tuktoyaktuk	Réal Bouvier	West 4
19	1979	<i>Canmar Kigoriak</i> (icebreaker)	Canada ¹³	C. Cunningham	West 2
20	1979	CCGS <i>Louis S. St Laurent</i> (icebreaker)	Canada ¹⁴ Circumnavigated North America	George Burdock	West 2
21	1980	CCGS <i>J. E. Bernier</i> ² (icebreaker)	Canada ¹⁵	E. Chasse	East 4
22	1980	<i>Pandora II</i> (hydrographic survey vessel)	Canada ¹⁶	R. A. Jones	East 4
23	1981	CSS <i>Hudson</i> ² (research icebreaker)	Canada ¹⁷	F. Mauger	East 3
24	1979-82	<i>Mermaid</i> (15 sloop)	Japan First single-handed transit, wintered in Resolute and Tuktoyaktuk	Kenichi Horie	West 6
25	1983	<i>Arctic Shiko</i> (tug)	Canada ¹⁸	S. Dool	East 3
26	1983	<i>Polar Circle</i> (research vessel)	Canada ¹⁹	J. A. Strand	East 4
27	1983-88	<i>Belvedere</i> (18 m yacht)	United States ⁵ Reached Tuktoyaktuk 1983, conducted whaling research to 1987, completed transit in 1988, traversed Pond Inlet	John Bockstoe	East 6
28	1983-90	<i>Ikaluk</i> ¹ (icebreaker)	Canada ²⁰ Reached Beaufort Sea in 1983, where worked to 1990 when completed transit	R. Cormier ¹	East 3
29	1984	<i>Lindblad Explorer</i> ¹ (ice strengthened ship)	Sweden First passenger ¹ transit	Hasse Nilsson	West 4
30	1982-85	<i>Vagabond III</i> (23.1 m yacht)	France ¹ Wintered in Arctic Bay, Gjøa Haven, and Tuktoyaktuk, eastbound voyage made in 1986-88	W. Jacobsen ¹	West 6
31	1985	USCGC <i>Polar Sea</i> ¹ (icebreaker)	United States ⁶ Accompanied by CCGS <i>John A. McDonald</i> for part of voyage	John T. Howell	West 2
32	1985	<i>World Discoverer</i> (ice-strengthened ship)	Singapore Carried passengers ² , traversed Pond Inlet	Heinz Aye ¹	East 4
33	1976-88	<i>Canmar Explorer II</i> (drilling ship)	Canada ²¹ Reached Beaufort Sea for oil drilling program from 1976 until completed transit	Ronald Colby	West 3
34	1986-88	<i>Vagabond II</i> ² (23.1 m yacht)	France ² Wintered twice in Gjøa Haven, westbound voyage made in 1982-85	W. Jacobsen ²	East 6
35	1986-89	<i>Mabel E. Holland</i> (12.8 m lifeboat)	Britain ¹ Single-handed voyage, discontinuous transit, wintered at Fort Ross twice and at Inuvik	David Scott Cowper	West 6
36	1988	CCGS <i>Henry A. Larsen</i> (icebreaker)	Canada ²²	Stephen Gomes	East 3
37	1988	<i>Society Explorer</i> ² (ice-strengthened ship)	Bahamas ¹ Carried passengers ³ , traversed Pond Inlet [formerly <i>Lindblad Explorer</i>]	Heinz Aye ²	East 3
38	1988	CCGS <i>Martha L. Black</i> (icebreaker)	Canada ²³	Robert Mellis	East 3

Transits of the Northwest Passage

	Year	Vessel	Registry	Master	Route
39	1988	USCGC <i>Polar Star</i> ¹ (icebreaker)	United States ⁷ Accompanied by CCGS <i>Sir John Franklin</i> to Demarcation Point	Paul A. Taylor	East 3
40	1988-89	<i>Northanger</i> (15 m ketch)	Britain ² Wintered in Inuvik	Richard Thomas	West 4
41	1989	USCGC <i>Polar Star</i> ² (icebreaker)	United States ⁸ Accompanied by CCGS <i>Sir John Franklin</i> to Demarcation Point	Robert Hammond	West 3
42	1990	USCGC <i>Polar Sea</i> ² (icebreaker)	United States ⁹ Accompanied by CCGS <i>Pierre Radisson</i> to Demarcation Point	Joseph J. McClelland	West 3
43	1990	<i>Terry Fox</i> (icebreaker)	Canada ²⁴	P. Kimmerley	East 3
44	1991	<i>Canmar Tugger</i> (tug)	Canada ²⁵	L. Lorengeek	East 3
45	1992	<i>Frontier Spirit</i> ¹ (ice-strengthened ship)	Bahamas ² Carried passengers ⁴ , traversed Pond Inlet	Heinz Aye ³	West 3
46	1992	<i>Ikaluk</i> ¹ (icebreaker)	Canada ²⁶	R. Cormier ²	West 3
47	1992	<i>Kapitan Khlebnikov</i> ¹ (icebreaker)	Russia ¹ Carried passengers ⁵	Piotr Golikov ¹	East 3
48	1993	<i>Kapitan Khlebnikov</i> ² (icebreaker)	Russia ² Carried passengers ⁶	Piotr Golikov ²	East 3
49	1993	<i>Frontier Spirit</i> ² (ice-strengthened ship)	Bahamas ³ Carried passengers ⁷	Heinz Aye ⁴	West 3
50	1993	<i>Dagmar Aaen</i> ¹ (27 m yacht)	Germany	Arved Fuchs	West 5
51	1994	<i>Kapitan Khlebnikov</i> ³ (icebreaker)	Russia ³	Piotr Golikov ³	East 3
52	1994	<i>Kapitan Khlebnikov</i> ⁴ (icebreaker)	Russia ⁴ Return voyage, carried passengers ^{8 & 9}	Piotr Golikov ⁴	West 2
53	1994	<i>Hanseatic</i> ¹ (ice-strengthened ship)	Bahamas ⁴ Carried passengers ¹⁰	Hartwig van Harling ¹	West 3
54	1994	<i>Itasca</i> (converted tug)	Britain ³	Allan Jouning	East 4
55	1995	<i>Kapitan Khlebnikov</i> ⁵ (icebreaker)	Russia ⁵ Carried passengers ¹¹	Viktor Vasiliev ¹	East 5
56	1995	CCGS <i>Arctic Ivik</i> ¹ (icebreaker)	Canada ²⁷	Norman Thomas	East 5
57	1995	CCGS <i>Arctic Ivik</i> ² (icebreaker)	Canada ²⁸ Return voyage to and from Kap York	Robert Mellis	West 5
58	1995	<i>Canmar Ikaluk</i> ² (icebreaker) [formerly Ikaluk]	Canada ²⁹	D. Connolly	East 3
59	1995	<i>Dove III</i> (8.2 m yacht)	Canada ³⁰ The smallest vessel to have completed the transit	Winston Bushnell	East 3
60	1995	<i>Canmar Miscaroo</i> (icebreaker)	Canada ³¹	D. W. Harris	East 3
61	1995	<i>Hrvatska Cigra</i> [Croatian Tern] (19.8 m yacht)	Croatia	Mladen Sutej	West 5
62	1996	<i>Kapitan Dranitsyn</i> ¹ (icebreaker)	Russia ⁶ Carried passengers ¹²	Oleg Agafonov	East 5

Transits of the Northwest Passage

	Year	Vessel	Registry	Master	Route
63	1996	CCGS <i>Sir Wilfrid Laurier</i> (icebreaker)	Canada ³² Escorted by CCGS <i>Louis S. St Laurent</i> for part of voyage, traversed Pond Inlet	Norman Thomas	East 5
64	1996	<i>Hanseatic</i> ² (ice-strengthened ship)	Bahamas ⁵ Carried passengers ¹³ until grounded in Simpson Strait, escorted by CCGS <i>Henry A. Larsen</i> to Victoria Strait, traversed Pond Inlet	Hartwig van Harling ²	West 3
65	1996	<i>Canmar Supplier II</i> (cargo vessel)	Canada ³³	P. Dunderdale	East 3
66	1996	<i>Arctic Circle</i> (tug)	Canada ³⁴	J. McCormick	East 3
67	1997	<i>Hanseatic</i> ³ (ice-strengthened ship)	Bahamas ⁶ Carried passengers ¹⁴ , escorted to Victoria Strait by CCGS <i>Henry A. Larsen</i> , traversed Pond Inlet	Heinz Aye ⁵	West 3
68	1997	<i>Kapitan Khlebnikov</i> ⁶ (icebreaker)	Russia ⁷ Carried passengers ¹⁵	Viktor Vasiliev ²	East 3
69	1997	<i>Alex Gordon</i> (tug)	Canada ³⁵ Escorted by CCGS <i>Sir Wilfred Laurier</i> to Franklin Strait and then CCGS <i>Pierre Radisson</i>	Paul Misata	East 5
70	1997	<i>Supplier</i> (tug)	Bahamas ⁷ Escorted by CCGS <i>Terry Fox</i> to Victoria Strait	Allan Guenter	East 5
71	1998	<i>Kapitan Khlebnikov</i> ⁷ (icebreaker)	Russia ⁸ Carried passengers ¹⁶	Piotr Golikov ⁵	East 3
72	1998	<i>Hanseatic</i> ² (ice-strengthened ship)	Bahamas ⁸ Carried passengers ¹⁷ , escorted to Victoria Strait by CCGS <i>Sir John Franklin</i> , traversed Pond Inlet	Heinz Aye ⁶	East 3
73	1999	<i>Admiral Makarov</i> (icebreaker, dock in tow)	Russia ⁹	Vadim Akholodenko	East 3
74	1999	<i>Irbis</i> (tug, dock in tow)	Russia ¹⁰ Travelled in convoy each towing a component of a steel floating dock, Korea to Caribbean	Aleksandr Aleksenko	East 3
75	1999	<i>Kapitan Dranitsyn</i> ² (icebreaker)	Russia ¹¹ Carried passengers ¹⁸ , circumnavigated the Arctic	Viktor Terekhov ¹	West 3
76	2000	USCGC <i>Healy</i> ¹ (icebreaker)	United States ¹⁰	Jeffery M. Garrett	West 3
77	2000	<i>Hanseatic</i> ⁴ (ice-strengthened ship)	Bahamas ⁹ Carried passengers ¹⁹ , traversed Pond Inlet	Thilo Natke	West 3
78	2000	<i>Kapitan Dranitsyn</i> ³ (icebreaker)	Russia ¹² Carried passengers ²⁰ , circumnavigated the Arctic	Viktor Terekhov ²	West 3
79	2000	<i>Nadon</i> [St Roch II] (17.7 m RCMP catamaran)	Canada ³⁶ Voyage to commemorate St Roch 1940-42 transit	Kenneth Burton	East 6
80	2000	<i>Simon Fraser</i> (icebreaker, formerly CCGS)	Canada ³⁷ Escorted Nadon	Robert Mellis	East 6
81	2000	<i>Evohe</i> (25 m yacht)	New Zealand	Stephen Kafka	East 6
82	2001	<i>Kapitan Khlebnikov</i> ⁸ (icebreaker)	Russia ¹³	Viktor Vasiliev ³	East 3
83	2001	<i>Kapitan Khlebnikov</i> ⁹ (icebreaker)	Russia ¹⁴ Return voyage, carried passengers ²¹ & ²²	Viktor Vasiliev ⁴	West 1
84	2001	<i>Turmoil</i> (46 m yacht)	Cayman Islands	Philip Walsh	West 4

Transits of the Northwest Passage

	Year	Vessel	Registry	Master	Route
85	2001	<i>Northabout</i> (14.9m yacht)	Ireland (Eira)	Patick Barry	West 3
86	2001-02	<i>Le Nuage</i> (12.8 m yacht)	France ³	Michèle Demai	East 3
			Complement of mother and daughter, wintered in Cambridge Bay		
87	2002	<i>Kapitan Khlebnikov</i> ¹⁰ (icebreaker)	Russia ¹⁵	Piotr Golikov ⁶	East 3
			Carried passengers ²³		
88	2002	<i>Sedna IV</i> (51 m yacht)	Canada ³⁸	Stéphan Guy	West 5
89	2002	<i>Apostol Andrey</i> (16.2 m yacht)	Russia ¹⁶	Nikolay Litau	East 5
			Assisted by CCGS <i>Louis S. St Laurent</i> through Prince Regent Inlet, voyage previously made a transit of Northeast Passage		
90	2002	<i>Arctic Kalvik</i> (icebreaker tug)	Barbados	Sanjeev Kumar	East 3
91	2002	<i>Hanseatic</i> ⁶ (ice-strengthened ship)	Bahamas ¹⁰	Thilo Natke	West 3
			Carried passengers ²⁴ , traversed Pond Inlet		
92	2003	<i>Kapitan Khlebnikov</i> ¹¹ (icebreaker)	Russia ¹⁷	Viktor Vasiliev ⁵	East 5
93	2003	<i>Bremen</i> ³ (ice-strengthened ship)	Bahamas ¹¹	Daniel Fogner	West 3
			Carried passengers ^{25 & 26} , <i>Bremen</i> [formerly <i>Frontier Spirit</i>] traversed Pond Inlet		
94	2003	<i>Norwegian Blue</i> (12.9 m yacht)	Britain ⁴	Andrew Wood	East 5
95	2003	<i>Vagabond II</i> ³ (23.1 m yacht)	France ⁴	Eric Brossier	East 5
			Both traversed Pond Inlet		
96	2003	<i>USCGC Healy</i> ² (icebreaker)	United States ¹¹	Daniel Oliver	West 3
97	2003-04	<i>Polar Bound</i> (14.6 m motorboat)	Britain ⁵	David Scott Cowper ²	West 5
			Wintered in Cambridge Bay, assisted by CCGS <i>Louis S. St Laurent</i> for part of voyage, traversed Pond Inlet		
98	2003-04	<i>Dagmar Aaen</i> ² (27 m yacht)	Germany ²	Arved Fuchs ²	West 5
			Wintered in Cambridge Bay, traversed Pond Inlet, previously made a transit of the Northeast Passage		
99	2004	<i>Kapitan Khlebnikov</i> ¹² (icebreaker)	Russia ¹⁸	Pavel Ankudinov	East 5
			Carried passengers ²⁷		

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