

# International Jurisdictional Issues in the Arctic Ocean

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*Abstract* Awareness in the United States of the strategic value of the Arctic has been prevalent for many years. Appreciation of the Arctic's economic, political, and scientific value, as well as its juridical importance, is rapidly increasing. For several years, both the Soviet Union and Canada have had more ongoing commercial, scientific, and policy activities in the Arctic regions than the United States. Resource development, national security, and marine boundary issues promise to raise the level of awareness and importance of the Arctic regions to the United States over the next twenty years. The purpose of the article is to indicate the range and complexity of marine boundary jurisdiction issues in the Arctic.

## Introduction

The Arctic has received notable attention from the natural science community, industry, social scientists, and national governments over the past ten years. This paper discusses the unsettled jurisdictional issues in the Arctic region that are likely to become

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more significant over the next two decades. Although the Arctic is geographically remote, jurisdictional issues there have become increasingly problematic for several reasons.<sup>1</sup> Most important is an awareness of the vast natural resources in the region and the growing technological capability to exploit them commercially. Because that commercial interest is shared by several nations, jurisdictional boundaries are being more closely scrutinized and contested. The nations which directly border the Arctic Ocean are the United States, Canada, the Soviet Union, Iceland, Greenland/Denmark, and Norway.

The Arctic is multinational in character. For the most part, sovereignty has been recognized for all land areas that surround the Arctic Ocean. (There are exceptions. Wrangel Island, for instance, is claimed by the Soviet Union even though the United States has not officially given up its sovereign claim to the island.) Questions of access to the mineral resources of the seabed and continental shelf in several locations in the Arctic, however, have been raised with more regularity over the past ten years. Boundary issues are made more difficult by the problems, in some Arctic areas, of easily distinguishing between landfast and drifting ice in order to determine baselines delimiting a 3-mile or a 12-mile territorial sea and a 200-mile exclusive economic zone (EEZ). Lack of agreement over the method of delimiting the continental shelf boundary between adjacent states is also a problem. The new Law of the Sea Convention sets broad guidelines for delimitation of the continental shelf but does not set explicit binding criteria for doing so. Unlike Antarctica, the Arctic does not have a general treaty dealing with the region as a whole. The Spitzbergen Treaty of 1920, however, does offer a legal framework for a limited geographic area of the Arctic (the Svalbard Islands north of Norway).

The paper is organized into three parts. The first presents a brief overview of relevant provisions for marine boundaries found in the 1982 Law of the Sea Convention. The second describes and analyzes the geopolitical and legal controversies surrounding efforts to establish five important marine boundaries in the Arctic. This is accomplished by examining each boundary issue on a country-by-country basis. The last part of the paper

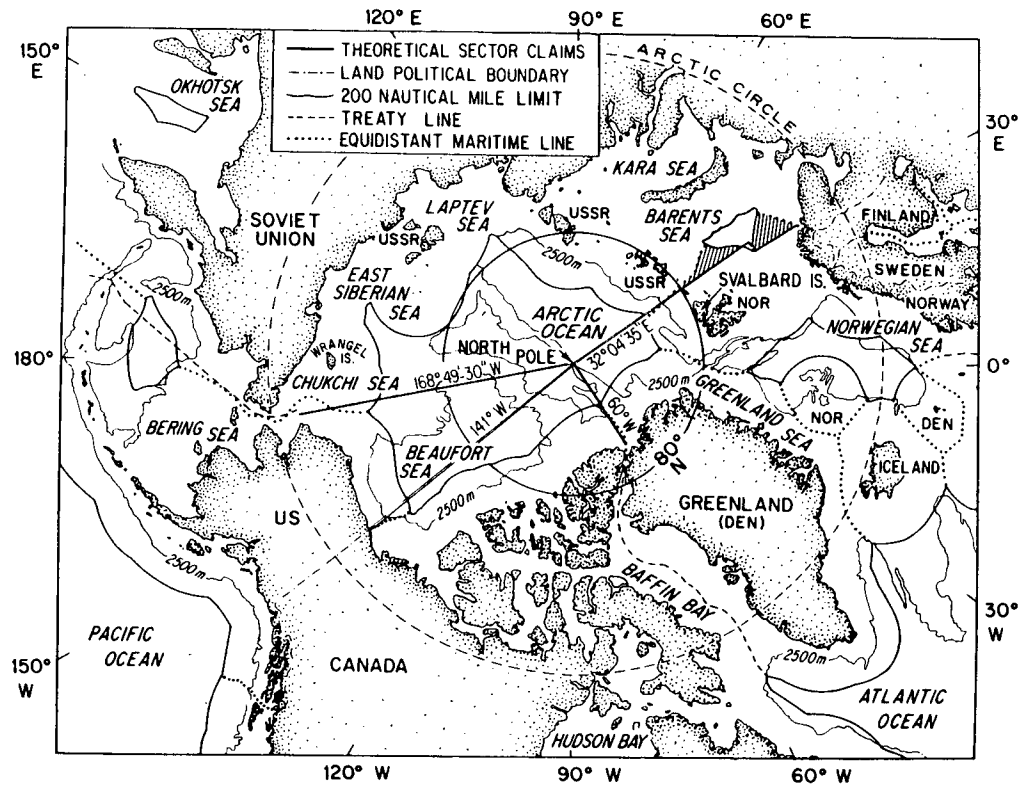
presents several conclusions about the political nature of the Arctic in light of the Law of the Sea Convention.

### **Marine Boundary Limits in the Arctic and the Law of the Sea Convention**

There are several criteria for determining national jurisdiction in the Arctic. Three boundary limits, as they pertain to national marine jurisdiction, are defined in the Convention on the Law of the Sea (LOS) and serve as a legal frame of reference for boundary delimitation: delimitation of the continental shelf (Article 76); the 12-mile territorial sea (Article 3); and the 200-mile exclusive economic zone (Article 57). In addition, the LOS Convention has provisions for ice-covered waters (Article 234), cooperation of states bordering on enclosed or semi-enclosed seas (Article 123), high seas (Article 87), navigation through international straits, pollution control, and freedom of marine scientific research—all of which have important legal and development implications. Legal issues are complicated by the presence of landfast ice which frequently obscures the distinction between sea and land. Such issues are sometimes made more complex by the presence of drift ice, which has raised the question of which Arctic waters should be legally considered as international high seas and which fall under national jurisdiction.

Part VI (Articles 76–85) of the LOS Convention addresses the continental shelf. This is a particularly important part of the Convention because most of the known ocean resources of the world (and especially of the Arctic) are found within the legally defined limits of the continental shelf.

The first paragraph of Article 76 provides a legal definition of the limit of the continental shelf. That limit extends seaward to the edge of the continental margin or to a distance of 200 nautical miles, whichever is greater. The legal definition is thus expressed in terms of the continental margin and the 200-mile limit.<sup>2</sup> Paragraph 3 defines the continental margin as the subsea prolongation of a land mass and sets out its physical components. These are: the physical continental shelf, the slope, and (where present) the rise.



MAP 1. The Arctic.

Sources: Bathymetry based on "Prospective Maritime Jurisdictions in the Polar Regions," Woods Hole Oceanographic Institution, Technical Report, WHOI-83-1; *Polar Regions Atlas*, Central Intelligence Agency, May 1978.

Paragraph 5 provides limitations to the legal definition of the continental shelf which are of particular concern in the Arctic. It states that:

The fixed points comprising the line of the outer limits of the continental shelf on the seabed, drawn in accordance with paragraph 4 (a) (i) and (ii), either shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured or shall not exceed 100 nautical miles from the 2,500 meter isobath, which is a line connecting the depth of 2,500 meters.

Map 1 shows the location of the 2,500 meter isobath and the 200-mile Exclusive Economic Zone in the Arctic. The map illustrates that much of the Arctic Ocean is 2,500 meters or less in depth.

According to provisions in Article 76, the coastal state may apply the 2,500 meter isobath plus 100-mile formula to extend its jurisdiction beyond 350 miles on natural components of the margin, "such as its plateaux, rises, caps, banks, and spurs" (paragraph 6). Features such as the Chukchi Plateau situated to the north of Alaska and its component elevations cannot be considered a ridge limited by the 350-mile limitation because they are components to which the 2,500 meter plus 100-mile formula may be applied. (As defined in Article 76, the continental shelf under the Chukchi Sea extends several hundreds of miles in many places.)<sup>3</sup>

As more scientific information becomes available, the outer limit of the continental margin, where it extends beyond 200 nautical miles, may be found to extend further seaward than the line currently used on jurisdictional/bathymetric maps of the Arctic.<sup>4</sup> The Canadian government, for example, completed "The Canadian Expedition to Study the Alpha Ridge" (CESAR) in March 1983, in an attempt to obtain geologic and geomorphologic data on the structure of the Alpha Ridge.<sup>5</sup> If the ridge (which is a northwesterly extension of Ellesmere Island that runs to the Soviet Union), is legally defined as a submarine elevation that is a natural component of the continental margin, then Canada will be able to extend its legal continental shelf limit out to 350 miles, as per provisions in the LOS text, along the

ridge into the Arctic Ocean. (In part, paragraph 6 states that "on submarine ridges, the outer limit of the continental shelf shall not exceed 350 miles from the baselines from which the breadth of the territorial sea is measured.") The Soviet Union may also make a claim along the ridge from its side of the Arctic. If the Canadians and/or the Soviets are successful in making jurisdictional claims out to 350 miles along the Alpha Ridge, then Greenland (Denmark) might be inspired to make similar studies and claims along the Lomonosov Ridge which extends north of Greenland. According to provisions in the LOS text, countries have a ten-year period once the Convention enters into force to delimit their continental shelves for international consideration.

In the case of the United States, off Alaska, the natural prolongation of the continental shelf extends beyond 200 nautical miles. The area of the continental shelf beyond the 200-mile limit surrounding the Soviet Union in the Arctic is much greater than that off Alaska in terms of overall size and the average distance from the coastline; hence the Soviets have greater offshore resource potential in the Arctic than the United States. (See Map 1.) In areas north of the United States–Russia Convention line of 1867 both nations may eventually agree on an equitable approach for dividing the continental shelf on the Chukchi Plateau.<sup>6</sup>

Until, or if, the United States government signs and ratifies the LOS Convention, the United States will probably abide by the 1958 Geneva Convention on the Continental Shelf for defining jurisdictional limits to its continental shelf beyond 200 nautical miles. Provisions in the 1958 convention stipulate that a coastal state's exclusive rights to explore for and exploit the natural resources of the continental shelf extend to:

the seabed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea, to a depth of 200 meters or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation determined by production technology of the natural resources of the said areas.

In addition, provisions of President Reagan's 1983 EEZ Proclamation give the United States (as consistent with provisions in

the Law of the Sea Convention), economic jurisdiction over the seabed, subsoil, and superjacent waters out to 200 nautical miles even if the continental shelf does not extend that far.

### ***Ice-Covered Areas***

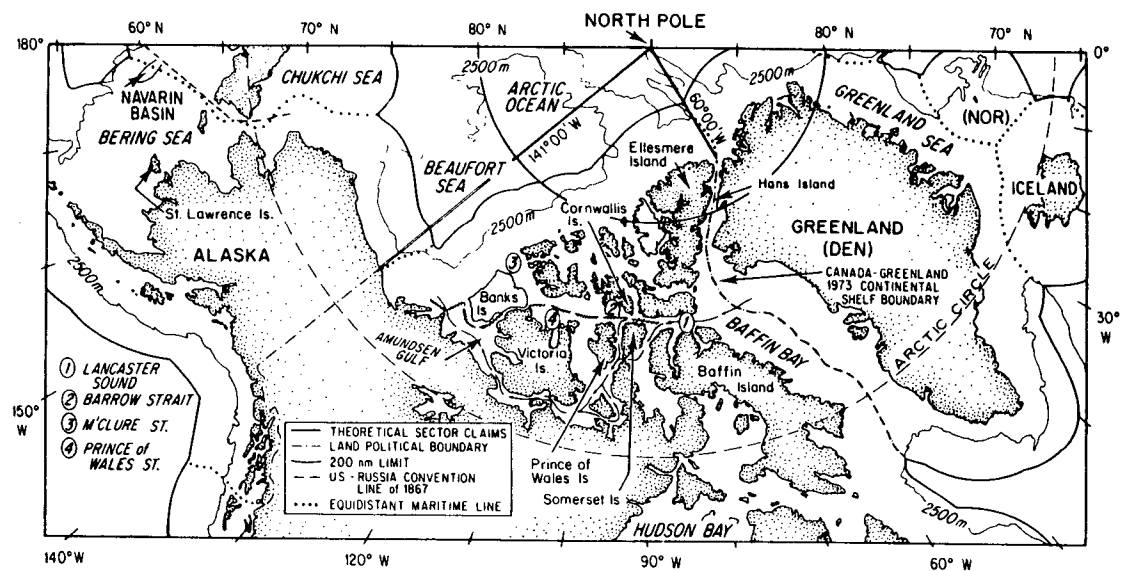
Article 234 of the Convention addresses ice-covered areas. It is an important provision for any analysis of marine boundary jurisdictions in polar regions—especially the Arctic. The article declares that:

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

Canada maintains that ships en route through the Northwest Passage (of its northern islands) must meet conditions set forth in Article 234 and/or similar national laws which give it special environmental controls over vessels in the Passage. With the expansion to a 12-mile territorial sea, two important straits in the Northwest Passage fall under the territorial control of Canada. (Map 2 shows the Northwest Passage and Canada's theoretical sector lines.) Canada has not asserted an archipelagic claim to its northern islands and passages. It has, rather, based its jurisdiction, in general principle, on "historic waters" aspects of the internationally accepted "internal waters" concept. Article 234 is discussed more fully later.

### **Jurisdictional Issues in the Arctic**

Although the U. N. Convention on the Law of the Sea may be accepted as the legal regime for marine boundaries in the Arctic,



NORTHWEST PASSAGE & CANADA'S THEORETICAL SECTOR LINES

--- route of the S.S. Manhattan (1969)  
 - - - other routes taken

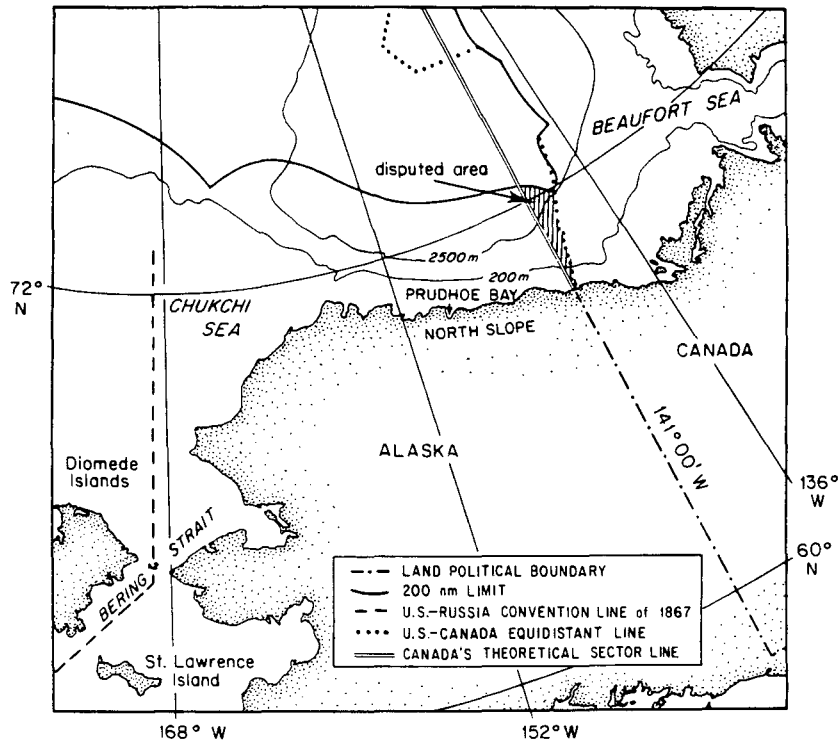
**MAP 2. The Northwest Passage and Canada's theoretical sector lines.**

Sources: Bathymetry based on "Prospective Maritime Jurisdictions in the Polar Regions," Woods Hole Oceanographic Institution, Technical Report, WHOI-83-1; *Polar Regions Atlas*, Central Intelligence Agency, May 1978; *Arctic Ocean*, National Geographic Society, 1976.

claims by nations in the region indicate that the Convention will face several challenges in its attempts to promote uniformity and clarity in the definition of national and international rights in the Arctic Ocean. Furthermore, as long as the United States does not participate within the Convention framework, the Law of the Sea (LOS) Convention will have less than total regime status in the Arctic for resolving marine boundary disputes.

Several cases of political and legal uncertainty exist about the offshore extent of coastal state jurisdiction over the Arctic seabed and superjacent waters. Large hydrocarbon resources have already been located in some of those areas and the potential for additional commercial finds is high. Juridical disputes between several adjacent Arctic nations have arisen on the delimitation of continental boundaries and the scope of coastal state rights to regulate shipping and other ocean activities beyond territorial waters. The situation is made more difficult in the Svalbard area by lack of agreement over access to the mineral resources of the continental shelf.

Although five nations border the Arctic, there are only two international land boundaries that touch the coast of the Arctic Ocean (U.S.–Canada and U.S.S.R.–Norway). Even though neither of the land-based boundaries is in dispute, potential and actual controversy marks the effort to establish five significant marine boundaries in the Arctic. These are: (1) The U.S.–Canadian disagreement on where to draw their common ocean boundary in the Beaufort Sea. This issue has increased in importance following the exploratory activity of Canadian oil companies in the disputed area over the past five years. (2) The way in which the line will be drawn to demarcate the U.S.–Russia Convention Line of 1867 in the Bering and Chukchi Seas. (3) Disputes concerning Canadian jurisdiction over the Northwest Passage. (4) Norway's claim to exclusive control over the resources of Svalbard's continental shelf. (5) A Norwegian–Soviet continental shelf boundary dispute in the Barents Sea. Each of these boundary jurisdiction issues is discussed below on a country-by-country basis.



MAP 3. The Beaufort Sea.

Sources: *Hypothetical Limits of the U.S. Continental Margin in the Arctic*, U.S. Arctic Oil and Gas, National Petroleum Council, December 1981; *Polar Regions Atlas*, Central Intelligence Agency, May 1978.

### *The United States*

The United States (as well as Denmark and Norway) has consistently proclaimed the applicability of traditional ocean law in the Arctic mainly because its own purposes were served. It has not invoked, and has refused to recognize, sector theory approaches (such as those advanced by Canada and the Soviet Union) in the Arctic. The United States has engaged in, supported, and given tacit approval to air and sea navigation and scientific activity in the region in accordance with free seas principles.

*The Beaufort Sea Dispute with Canada*

Canada has long held that the line of the 141st meridian of west longitude established in 1825 forms both a land border and a seaward extension of that border. It comes as no surprise, therefore, that Canada has granted continental shelf oil and gas exploration permits up to that line. (Canada has granted similar permits on Georges Bank in the Atlantic, primarily to maintain a legal claim to the area.) The United States, on the other hand, asserts that the marine boundary departs from the meridian and runs in a northeasterly direction along a median or equidistant line between the United States and Canadian coasts. Both nations have agreed that publication of their respective coordinates are without prejudice to negotiations toward a mutually acceptable settlement of this and other outstanding marine boundaries between the two nations (i.e., between British Columbia and the state of Washington in the North Pacific, the seaward boundary of Dixon Entrance between British Columbia and Alaska, and the Georges Bank area in the Atlantic).

The marine boundary dispute between the United States and Canada in the Beaufort Sea remains to be settled. Given the potentially high economic stakes, namely, offshore hydrocarbon resources, in the disputed area (6,180 square nautical miles<sup>7</sup>), it is unlikely that settlement will be easy. (See Map 3.)

*United States–Russia Convention of 1867<sup>8</sup>*

Another potential marine boundary dispute in the Arctic might be raised in the future if a commercial hydrocarbon deposit is located in an area that geologically and juridically straddles the United States–Russia Convention line. The Navarin Basin is one of the lease-sale regions (scheduled for lease in March 1984) that extends into both United States and Soviet portions of the Bering Strait. Other lease-sale areas in the Bering Sea that could potentially raise international juridical issues because they may be located within overlapping claims of the Soviet Union and the United States, are the Norton Basin (lease-sale dates: Novem-

ber 1982, October 1985, March 1986), and the Barrow Arch area (February 1985, February 1987).

The United States Department of the Interior has made clear, on Bering Sea area tract maps issued in 1982, that it regards the 1867 Convention Line as the limit of its continental shelf. Just as oil and gas fields have been discovered in the North Sea straddling the boundary line between the United Kingdom and Norway, petroleum and other mineral deposits in the Bering Sea may cross the boundary line between the United States and the Soviet Union. Concepts for apportionment of common deposits in the North Sea area may prove useful in providing juridical precedents in the Bering Sea.<sup>9</sup>

The United States has determined that the purposes of the 1867 Convention would be served if the line were used to delineate sovereign rights and jurisdiction over the seabed and subsoil as well as the water column. In January 1977 the U.S. administration stated that in exercising its fisheries jurisdiction, the United States intends to act with full regard for treaties between the two countries and to respect the line set forth in the 1867 Convention. The Soviets replied that they also intend to adhere to the same Convention line in exercising their fisheries jurisdiction in the Bering and Chukchi Seas, as well as the Arctic Ocean—assuming that the line will not be used by a state for fisheries purposes in areas more than 200 nautical miles from its coast or islands.<sup>10</sup>

Although both countries agree that the 1867 boundary line delimits continental shelf areas, there has been some disagreement on how to actually draw the line. The Soviets favor using rhumb lines, a traditional technique used at the time the Treaty was signed, in which a line on a map is shown as crossing all meridians at the same angle. The United States believes that the more modern great circle method of calculation be used to determine the location of the line. An area of more than 15,000 square miles in a promising petroleum area would be at issue depending on the methods used to determine the line.

In May of 1983, a ten-member team from the U.S. State Department met in Moscow for "very closely held" negotiations with Soviet officials on natural resources, fisheries, and the way

in which the Convention line should be drawn. Under the great circle approach, the Navarin Basin sale area, totaling approximately 30.3 million acres, would remain largely intact. Using a rhumb line, a portion of the northwest edge of the Navarin Basin would be cut back because it would be in Soviet waters. According to the State Department, the Soviets do not appear to be planning to drill for oil in the boundary area under discussion.<sup>11</sup> The issue of what method to use in actually drawing a line to delimit a marine boundary could have importance in a large number of boundary issues throughout the world.<sup>12</sup>

The northern extent of the 1867 Convention presents a different problem. Although the location of the line in the Bering Strait entails an "opposite coast" situation, the northern extent of the line involves more complex questions of adjacent states and lateral boundaries. A 1965 Department of State *International Boundary Study* noted that:

the original Convention language stated that the line "proceeds thence due north, without limitation, into the same Frozen Ocean." Since the United States does not support so-called "sector claims" in the polar regions, the northernmost point for the separation of the Convention line was agreed to be 72° 00' North.<sup>13</sup>

The United States position on the northern extent of the line could change, prompted by the potential of commercially significant oil finds in the area. For example, if a straight projection of the line (i.e., recognition of the theoretical Soviet sector line) was made rather than an equidistance formulation (as provided under the 1867 Convention), the United States would benefit by obtaining more seabed areas in which to exploit potential resources at some future time. The northern extent of the line has not thus far been officially discussed in a substantive way by the two nations.

### *Canada*

Since 1907 Canadian officials have asserted certain rights for Canada within a specific Arctic area-cum-sector. The area is

defined by lines which extend from 60° W to 141° W with its apex at 90° N. This "sector" has appeared on Canadian maps of the North from 1904 to the present. A formal sector claim to sovereignty over Arctic ice and waters beyond the 12-mile territorial sea, however, has never been made. The sector principle has, though, frequently appeared in official dialogue on the extent of Canada's claims in the Arctic.<sup>14</sup> This principle has been considered by the government of Canada as a possible basis for dividing the continental shelf it shares with Denmark off the west coast of Greenland and with the United States in the Beaufort Sea.<sup>15</sup> (See Map 2.)

Canadians believe the characteristics of Arctic waters and ice give their northern regions a distinctive status that implies special responsibilities and rights. This logic was applied to the waters of the Canadian Arctic archipelago—a region that the government in Ottawa refers to as Canadian. A statement in 1958 by the Canadian Minister of Northern Affairs claimed the sector, including marine areas, as "national terrain."<sup>16</sup> The statement was later quoted by Prime Minister Trudeau. Official positions since 1958 have generally been more restrained. The sector theory has not, however, been abandoned.

The northeastern border of Canada extends from the Labrador Sea through Davis Strait, Baffin Bay, and Nares Strait. The Nares Strait is an international boundary between Canadian and Danish territory. Except for Hans Island, which straddles the boundary line, no section of this portion of Canada's boundary is disputed. The remainder of the northeastern portion is also well established, based on conventions of international law (including the LOS Convention) that concern the territorial sea and high seas.

Hans Island is a small uninhabited island lying between Greenland and Ellesmere Island in the Nares Strait at 80° 49' N. Because the island straddles the median line between Greenland and Ellesmere Island, Canada and Denmark decided to draw the continental shelf boundary up to a low water mark at the south end of the island and resume the boundary again from the low water mark at the north end. The island, which is less than 1 mile in length, appears as a gap in the geographical coordinates listed

in the Canada/Denmark Maritime Boundary Delimitation Agreement signed in 1973.<sup>17</sup> (See Map 2.)

It is possible that the agreement to disagree over the juridical status of Hans Island between Canada and Denmark may be a model for the resolution of boundary issues between the United States and Canada in the Beaufort Sea. The establishment of a joint development zone in the disputed area of the Beaufort Sea may prove workable. The disputed area is, however, larger than Hans Island and contains considerable hydrocarbon resources. It is unlikely that Canada would readily accept an equidistance approach in the settlement of the Beaufort Sea dispute because such an approach would significantly compromise Canada's theoretical sector principle in other areas of the Arctic. On the other hand, Canada may find it worthwhile to take this approach in return for United States acceptance of its jurisdictional and legal claims in the Northwest Passage.

Canada's northern border extends from the Alaska-Yukon boundary to the northern entrance of Nares Strait, an area frequently referred to as the Northwest Passage. The status of waters in this area of Canada is subject to internal differences of opinion, and dispute with the United States. Internal differences have been caused by officials selectively choosing among a number of alternatives for asserting jurisdictional control of the waters in question for specific cases. The choices have included: a defense zone, a pollution protection zone, a twelve-mile territorial sea, and historic internal waters rights. A degree of confusion has also been caused by Canada's ambiguous position regarding the sector principle and by the uncertain application of international laws which apply to a region that features a combination of a sparsely-populated archipelago and an oceanic fringe area that is (thus far) rarely used for seagoing activity of any kind.

The sector principle has been used to define the area within which Canada makes a sovereignty claim to all land and the continental shelf, but does not claim waters within the sector.<sup>18</sup> Canadian sovereignty has been uncontested with respect to the land (i.e., the archipelago) within the claimed sector since 1930 when Norway recognized Canadian sovereignty over the Sver-

drup Islands. According to a noted Canadian commentator, there are "clear precedents in international law for sovereignty in largely uninhabited lands (where the level of the state activity is low and intermittent) which indicate that there is no basis for disputing Canadian sovereignty over the archipelago."<sup>19</sup> The Canadian government maintains a position which neither claims nor disclaims the sector—hence the internal confusion. Canada took two unilateral initiatives prior to UNCLOS III in 1973, with regard to establishing maritime boundaries. They are outlined below.

The Arctic Waters Pollution Prevention Act (AWPPA) was passed in 1970 but not proclaimed until 1972. The Act asserts Canada's right to shield the Arctic waters north of the 60th parallel against vessel pollution for a distance of 100 miles offshore. The Act, according to the Canadian government, made it clear that these waters are open for passage of all international shipping but that passage could be prevented if ships do not meet certain construction and manning requirements specified in the legislation. The AWPPA was prompted by the first passage of the Humble (Exxon) Corporation's S.S. *Manhattan* through the Northwest Passage to Prudhoe Bay in 1969. Official Canadian announcements have made clear that the Act is not an assertion of sovereignty, but is instead an extension of a limited form of jurisdiction required to preserve the Arctic's vulnerable environment. The lateral boundaries of the Act (141° W and 60° W) coincide with the lateral boundaries of Canada's Arctic "sector." Although the Canadian government may have been using a functional jurisdiction claim as "an oblique . . . method of asserting Canadian sovereignty over these waters . . . in such a manner so as not to provoke official denials from other nations," the United States government protested the enactment of the Act.<sup>20</sup>

Canada was successful in introducing a provision into the Law of the Sea Convention (Article 234) which closely parallels the publicly stated purpose of the AWPPA. Although the United States has not signed the LOS Convention, primarily because of "fatally flawed" provisions in Part XI on deep seabed mining, it has not specifically faulted Article 234. The United States may, therefore, eventually accept the Article as customary international law. Compared with Article 234, provisions in the AWPPA

are much more detailed and complete and thus provide Canada with legislative power to control and protect the Northwest Passage. Even so, Article 234 should provide Canada with sufficient international legal authority to protect its northern waters.

Also in 1970, the Canadian government reiterated its position that the Northwest Passage is neither an international strait nor a part of the high seas. For the United States, this means that its commercial and military ships may face more legal restrictions and impediments to maritime navigation through the Northwest Passage (See Map 2.) Canada extended its territorial sea from three to twelve miles in 1970, and thus brought within Canadian sovereignty two segments of the Northwest Passage—the Barrow and the Prince of Wales Straits. Consequently, Canada claims that it has jurisdictional control over passage rights whether or not other nations concede the Northwest Passage as internal waters of Canada. The Barrow Strait separates Cornwallis Island from Prince of Wales and Somerset Islands. The basis for the Canadian position that this strait is within its territorial sea is that 12-mile jurisdictional limits drawn from a group of small islands in the strait overlap.<sup>21</sup> Furthermore, Canada maintains that because the strait lacks a history of commercial navigation it does not meet the standard legal definition of an international strait.<sup>22</sup> (See Part III, "Straits Used for International Navigation," of the LOS Convention.) Because the United States maintains that the Northwest Passage is an international strait,<sup>23</sup> juridical and political controversy is likely to increase (unless a bilateral agreement is worked out), as transportation through the Passage becomes more of a reality.

According to a noted Canadian legal authority, even if the waters of the Northwest Passage were regarded as an international strait, the provisions of Article 234 would override the rules relating to international straits.<sup>24</sup> Canadian scholars have correctly pointed out that a broad interpretation of Article 234 provides Arctic coastal states with a large degree of freedom in controlling ice-covered waters. For instance, states can legislate and enforce legislation concerned with the prevention, reduction, and control of marine pollution without reference to the usual rules applicable to the jurisdiction of coastal states within the exclusive economic zone. Under a broad interpretation,

therefore, it would be irrelevant whether the waters concerned constituted an international strait. A narrow interpretation confines the legislative and enforcement authority of the coastal state to those matters that are rendered necessary by the conditions referred to in the Article. Examples are severe climatic conditions, the presence of ice creating obstructions, and exceptional hazards to navigation. If marine pollution does not result from these conditions, the normal rules applicable to the economic zone would apply including where appropriate those applicable to international straits.<sup>25</sup> Whether a broad or narrow interpretation of Article 234 is used, neither gives the coastal state authority to enact measures or exercise powers of enforcement that it could not enact or exercise within its territorial sea.

If U.S. oil companies do not need access through the Northwest Passage to market their oil and gas, the issue will, perhaps, be moot. As long as the United States and Canada continue to share a mutual defense strategy for the Arctic region, it is likely that passage of their naval ships and submarines through the Northwest Passage will be worked out on a bilateral basis or possibly within the NATO (North Atlantic Treaty Organization) framework. Consequently, United States nonparticipation in the LOS Convention, vis-à-vis dispute settlement over the status of the Passage as an international strait, does not appear to be a major diplomatic problem for at least the next decade. Even if the Canadians pushed their claim solely within the parameters of the LOS Convention and the United States remained adamant about its position, nonparticipation in the Convention by the United States would still be unlikely to be a significant stumbling block in most bilateral negotiations.

In terms of overall environmental protection of Canadian Arctic waters, the AWPPA and Canada's related jurisdictional and environmental control of the Northwest Passage could serve the interests of both the United States and Canada. For the next twenty to thirty years it is likely that U.S. oil companies will not be interested in transporting hydrocarbons to market via the Northwest Passage. Instead, oil and gas will be transported either by ship in United States waters through the Bering Strait or overland in Alaska and/or Canada. While the jurisdictional issues surrounding the Northwest Passage and the Canadian ar-

chipelago remain potentially disruptive, in practical terms both nations should be able to have a large number of their interests met. Because the government of Canada has long endorsed "innocent passage" through the archipelago, United States concerns should be somewhat eased. At a minimum, the innocent passage formula will provide the Canadian government with some capability of preventing (if necessary) foreign ships from entering the Northwest Passage, while permitting United States ships access according to internationally agreed criteria.

### *The Soviet Union*

Soviet claims in the Arctic have been expansive yet seldom official. They have been contradictory at times and frequently ambiguous. Officially, the Soviet Union claims sovereignty over a huge sector that includes both land and islands. According to the Decree of the Presidium of the Central Executive Committee (April 15, 1926), the borders of the sector are 32° 04' 35" East and 168° 49' 30" West with an apex at the North Pole. The claim excludes lands recognized as foreign within the sector.<sup>26</sup> The exclusion refers to the Svalbard Archipelago (a Norwegian territory).

Another jurisdictional issue that has not received much attention, but that could become problematic, concerns Wrangel Island. The island is claimed by both the United States and the Soviet Union. At one time or another Wrangel Island has attracted interest from the Soviet Union, the United States, the United Kingdom, and Canada. It is located 85 miles off the northeast coast of Siberia and 270 miles northwest of Cape Lisburne, Alaska. Encompassing 2,000 square miles, the island straddles the 180th meridian and the 71st parallel.

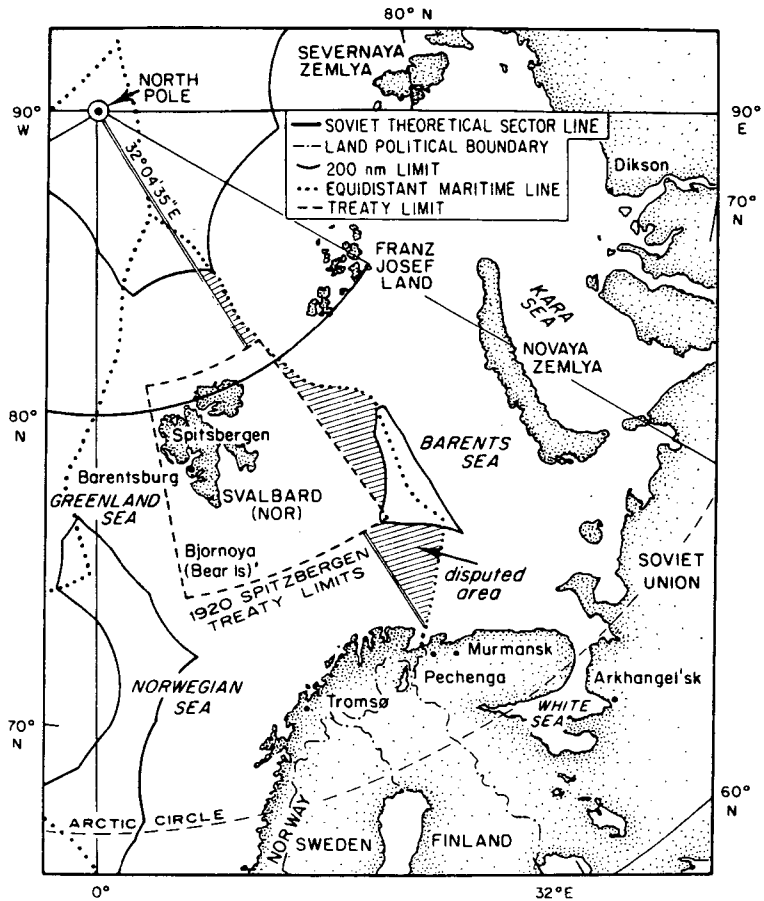
Although Captain Calvin Hooper landed on, and claimed, Wrangel Island for the United States in 1881, British, Canadian, and ultimately Soviet claims were also made from 1849 to 1924. The U.S. Department of State has clarified in recent correspondence that it is unaware of American actions subsequent to 1881 which evidence such actual, effective, and continuous functions of a state that are required to preserve and perfect a claim of sovereignty. Mere discovery, unsupported by effective occupa-

tion over time, is insufficient to acquire sovereignty over a "terra nullius," according to legal experts.<sup>27</sup>

Even though the United States in the early 1920s noted that it had not relinquished its claim over the island, the government has not pursued any diplomatic activity to advance a claim of sovereignty over the island against the British, or after 1924, against the Soviets. However, the United States has never formally recognized Soviet ownership of Wrangel Island, including claims based on a theoretical sector line. Despite the lack of formal recognition, the United States has long adopted the practice of dealing with authorities in de facto control of territory. Although this policy is sometimes adjusted to meet specific political needs, it has been adopted in connection with Wrangel Island. The State Department does not consider that scientific cooperative activities with the Soviet Union with respect to Wrangel Island necessarily import any recognition of legal status. The State Department does not envision any circumstances under which the United States would have occasion to modify this practice, or to revive an American claim to Wrangel.<sup>28</sup> Although the status of the island is somewhat unclear, there appears to be a de facto and a limited de jure acceptance, by the U.S. government, of Soviet control over the island.

Wrangel Island is located within the unofficial Soviet "sector." Soviet writers have differed on the extent of their sector claims, thus creating ambiguity about the Soviet Union's use of that concept, but not about their sovereignty over the island. Some writers have interpreted the "sector" principle as referring to maritime areas within, and airspace above, the area claimed, a position that has not been officially repudiated.<sup>29</sup>

In 1926, Moscow issued a decree claiming all lands and islands within a "triangular" area or sector at the coordinates given above. In 1928 and 1950, the Soviet press advanced a claim to the open polar seas within the sector. Although the Soviet government has not followed up these latter assertions with formal decrees, some Soviet writers (with official awareness), like some Canadians, claim that the Arctic Ocean has unique characteristics of both land and sea which require special legal adaptations. According to the U.S. government and most other nations, the



MAP 4. The Barents Sea.

Source: *Polar Regions Atlas*, Central Intelligence Agency, May 1978.

sector principle is not based on international legal precedents and has not been litigated in international courts of law; therefore, the sector theory offers only limited, if any, guidelines for determining jurisdiction in the Arctic.<sup>30</sup>

*The Barents Sea Dispute*

Norway has a jurisdictional problem with the Soviets concerning the unsettled continental shelf and fishing zone boundary with

the Soviet Union in the Barents Sea. (See Map 4.) The dispute involves 132,000 square kilometers of continental shelf—a figure determined by calculating the dimension of the area between the sector line and an equidistant/median boundary. At stake are fishery rights and potential commercial hydrocarbon and other mineral deposits on the disputed area of the continental shelf. The previous Norwegian Labor Government may have compromised its position on the issue when it concluded a temporary “gray zone” agreement to regulate fishing activities in the Barents Sea until a final continental shelf agreement could be reached.<sup>31</sup> The agreement established joint control of fishing in an area west of the median line and partially east of the sector line. The current government of Norway believes the Soviets have less incentive now for negotiating their claims. The current government, however, has not sought to reject or renegotiate the “gray zone” agreement which is subject to renewal on an annual basis. According to Norwegian officials, implementation of the agreement appears to have worked well.<sup>32</sup> Although the United States has not taken an official position on this jurisdictional dispute, it seems clear, that for military and (potential) economic reasons, the Norwegian position would be more favorably received in Washington, D.C.

The sector claim formed the basis of the Soviet position in negotiations over the line between the Norwegian and Soviet 200-mile exclusive economic zone and division of the continental shelf in the Barents Sea. The Soviet position is that the continental shelf in the Barents Sea represents one of the “special circumstances” contemplated by Article 6 of the 1958 Geneva Convention on the Continental Shelf, in which it would be unjust to apply the equidistance principle.<sup>33</sup> The special circumstances claimed by the Soviets for the location of the sector line are not related to the more common justification of “unusual coastal configuration,” but to the nation’s special strategic needs and greater population concentrations in the Barents Sea area. Although they might argue their case using the equitable principles concept, which is now a major consideration in international law, the Soviets favor use of the sector line. Norway endorses an equidistant/median line to be measured equally from adjacent land areas. Either way, the Norwegian position appears to be the

stronger in this particular case as the sector principle has not been formally proclaimed by the Soviets, nor is it accepted as part of international law.

#### *The Northern Sea Route*

The Soviet Union has been able to control the Northern Sea Route (Northeast Passage) by claiming a 12-mile territorial sea. This action has put two major straits of the Passage under territorial jurisdiction according to Article 3 of the Law of the Sea Convention. The 12-mile territorial sea boundary and the difficulty of negotiating ice passage without Soviet support in the Barents Sea/Svalbard Archipelago have effectively nationalized the route. United States icebreakers operating in the Soviet "sector" have been closely followed by Soviet warships and reconnaissance flights. In some instances the icebreakers have not been allowed access through certain areas. In 1967, permission was denied for the passage of the U.S. Coast Guard icebreakers *Edisto* and *Eastwind* through Vilkitski Strait, connecting the Kara and Laptev Seas.<sup>34</sup> By asserting control of the Northeast Passage the Soviets have created a significant national security zone along their northern border. In order to maximize military movements through straits and to gain access to worldwide commercial fisheries, the Soviet Union has generally not favored restrictive maritime boundaries. The Soviets have, however, stood firmly behind narrow ocean jurisdictional lines when it has favored their national interests—as in the Arctic. Because American oil companies have little commercial interest in the Northern Sea Route, the primary United States concern in that part of the Arctic Ocean is access for possible scientific cruises and military surveillance of Soviet submarines.

#### *Norway*

Norway's boundary jurisdiction issues are integrally tied to the 1920 Treaty Concerning Spitzbergen.<sup>35</sup> This treaty, known as the Svalbard Treaty, is in force between Norway and thirty-nine other nations.<sup>36</sup> The Svalbard Treaty gives Norway full and absolute sovereignty over the archipelago in exchange for signatory

rights to equal access and entry to the waters around the islands and industrial activity subject to Norwegian regulation. These rights include guaranteed access to carry out marine, industrial, mining, and commercial operations on an equal legal basis with Norway.<sup>37</sup> In addition, the Treaty allows all signatories rights to fish and hunt in the islands and in the 4-mile territorial sea around them.<sup>38</sup> (See Map 4.)

Although all signatories to the Treaty have the right to maintain permanent settlements in the islands, only Norway and the Soviet Union have done so. In 1944 Norway's sovereignty over the archipelago was questioned when the Soviet government unsuccessfully sought a joint Norwegian-Soviet administration and total cession of Bear Island (Bjørnøya) to the Soviet Union.<sup>39</sup> Soviet control of Bear Island would lead to better control over potential NATO access to important Soviet military bases on the Kola Peninsula.

According to the Norwegian government, Svalbard does not have a separate or distinct continental shelf since the shelf around the archipelago is part of the broad mainland Norwegian continental margin. Consequently, Norway interprets the 1920 Treaty as limiting the other signatories' mineral exploitation rights to the land area and territorial waters, allowing Norway sole rights over the shelf resources beyond the 4-mile limit. Nations such as the Soviet Union may, therefore, be eager to expand the islands' territorial sea limits to 12 miles in order to expand the area of potential resource exploitation available to them. Norway, on the other hand, is anxious to maintain the territorial sea boundary at the Treaty's 4-mile distance. The United States, like several other signatories to the Svalbard Treaty, has refused to concede that the shelf (with its potential hydrocarbon deposits) around the Archipelago belongs solely to Norway.<sup>40</sup> The Svalbard Treaty does not include specific provisions relating to the continental shelf outside territorial waters, which is not surprising given that commercial exploitation of the continental shelf was not thought possible and was thus not a concern in 1920. The physical extension of Norway's shelf could reach 600 miles from the mainland in several places and would be three times greater than the country's land area. The LOS

Convention does not offer easy resolution of the various disputes between Norway and certain other signatories to the Svalbard Treaty.<sup>41</sup>

### *Denmark*

Denmark is considered an Arctic state because of its possession of Greenland. There are no active territorial disputes between Denmark/Greenland and other Arctic nations. The continental shelf boundary with Canada was established in 1973 and presents no real dispute—other than the unusual status of Hans Island, as already discussed in the section on Canada. Greenland, now enjoying home rule, might become a more dynamic Arctic nation if it breaks ties with Denmark. It is possible that Greenland might take a more active role in forums such as the Inuit Circumpolar Conference in order to promote its interests throughout the Arctic region.

### **Conclusions**

The commercial development of offshore hydrocarbons in the Arctic promises to increase political and legal pressures in several disputed marine boundary areas. Consequently, disputes over marine boundaries in the Arctic could disrupt future peaceful relations between Arctic rim nations.

Although the proposed Law of the Sea Convention offers a framework for the settlement of marine boundary disputes, it is limited to nations which ratify the Convention. However, because the Convention codifies several existing international legal concepts pertaining to marine boundary disputes (concepts currently applied by the International Court of Justice, in bilateral treaties, in limited titles and rights cases, and by arbitration), customary international law that forms the foundation for the provisions of boundary dispute settlements can still be utilized by nations not participating in the Convention.<sup>42</sup>

President Reagan's Proclamation declaring a 200-mile EEZ, and the associated Presidential Ocean Policy Statement of March 1983, indicate that although the United States is not a

party to the proposed LOS Convention, it will, where such action is deemed to be in the national interest, abide by provisions in the Law of the Sea Convention when they are consistent with international ocean law that the United States is a party to or accepts as customary international law. Even with universal acceptance of the LOS Convention it is unlikely that most marine boundary issues in the polar regions would be neatly resolved by provisions in the Convention. Indeed, in some instances the only way to achieve the intent of the LOS Convention will be through bilateral or multilateral negotiation.

Given the goals of the United States in the Arctic, it is unlikely, for the foreseeable future, that its position will be made worse by not signing and ratifying the Convention. Although the United States could be left out of negotiated settlements within the specific LOS framework, there does not appear to be any great negotiating or legal disadvantage because of nonparticipation. More immediate boundary delimitation problems in the Beaufort Sea and Northwest Passage with Canada will probably be settled in cases heard at the International Court of Justice (and possibly by arbitration) over several years of bilateral negotiations, regardless of United States participation in the LOS Convention.<sup>43</sup>

Military uses of the Arctic region will no doubt increase as technology improves the performance and capabilities of the submarines deployed by the Soviet Union and the United States in the region.<sup>44</sup> Some scholars of international law contend that the proposed Law of the Sea Convention does not provide definitive answers to all possible military uses.<sup>45</sup> Others feel that the legality of military uses in general is not open to question, although there are some military uses of the marine environment about which the LOS Convention is vague. The proposed Convention is replete with references to "warships" and other indications that military uses of the seas outside of territorial seas were clearly contemplated by the negotiators.<sup>46</sup> Because of an expected increase in the number and sophistication of submarines in the Arctic Ocean (including the Bering Strait and the Barents Sea), one particular area of interest concerning jurisdiction and military uses of the region is the emplacement of anti-submarine warfare devices on the continental shelf of another

state without the latter's consent. According to the United States Navy, such action would be legally permissible under the LOS Convention. The Navy argues that the coastal state's competence over its continental shelf is limited to resource-related rights and jurisdictions, which would not be unreasonably affected by the implantation of military devices.<sup>47</sup>

Although geographically remote, the Arctic region exhibits a wide array of marine boundary and jurisdictional issues that promise to become more intense over the next twenty years.<sup>48</sup> The Arctic will remain a nationally carved-up region with most marine boundary disputes settled on a bilateral basis. Bilateral agreements can be costly if precedents are set that hinder the latitude of jurisdictional negotiations with other countries. Given the small number of nations and the variety of boundary disputes in the Arctic, however, bilateral arrangements may work well, particularly if they are used to determine a legal reference with which to carry out jurisdictional negotiations.

A longer-term possibility would be for the nations that border the Arctic Ocean to develop a regional cooperative approach to protect their resource, environmental, scientific, and strategic interests. The short-term likelihood of such a regional effort is minimal in light of numerous conflicts of interest in the region. There are, however, areas of common interest and concern that could produce some form of functional cooperation in the region, possibly based on native organizations such as the Inuit Circumpolar Conference (ICC) model. In the words of Hans-Pavia Rosing, President of the ICC, "We would like to see governments and industries realize that the Arctic is our common responsibility. For the sake of us all, Inuit and non-Inuit alike, its sensitive environment, its unique culture and its vast beauty must be preserved. To meet our part of that responsibility, the Inuit Circumpolar Conference was formed six years ago. We see our role as a people to be the indigenous guardians of the Arctic."<sup>49</sup> In a slightly different vein, one commentator has suggested that it might be in the national interest of the United States to "'use' the Arctic for overreaching political purposes" to improve relations with Canada and the Soviet Union.<sup>50</sup>

A regional approach in the Arctic could, for example, help provide agreements on navigational aids, regional data centers,

shipping lanes, and pollution control arrangements. Whether within or outside the LOS Convention framework, Part IX, "Enclosed or Semi-enclosed Seas," offers possible guidelines for cooperation among the Arctic nations. Article 123 calls on states that border an enclosed or semi-enclosed sea to cooperate with each other in the exercise of their rights and duties, either directly or through an appropriate regional organization.<sup>51</sup> However, as R. Tucker Scully has pointed out, "the Arctic does not, like the Antarctic offer broad scope for implementation of policies on a region-wide basis." He cautions, however, that to ignore the need for a regional approach in policy formulation could be a mistake. He adds that, "the formulation of interests, objectives, programs, and activities in the Arctic include as a basic element consideration of their regionwide implications."<sup>52</sup>

Evidence of successful future bilateral arrangements in the Arctic may indicate that a more multilateral approach to the region would be possible. Canada and Denmark, for example, have recently concluded an environmental agreement for the prevention, reduction, and control of pollution from resource and transportation activities.<sup>53</sup> The agreement, which applies to Nares Strait, Baffin Bay, and Davis Strait, deals with hydrocarbon and all other potential pollutants. There is also an environmental protection agreement between the United States and Canada called "The Canada-United States Oil Spill Contingency Plan, Beaufort Sea Annex."<sup>54</sup> A history of limited joint scientific research in the Arctic already exists, and may increase along more formal lines if the development of an international Arctic science network is successful.<sup>55</sup>

To conclude, if some of the jurisdictional problems can be amicably worked out on a bilateral basis, and this appears likely, then the chances for success of a more regional approach are greater.

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The maps used herein were based on the following sources: *Polar Regions Atlas*, Central Intelligence Agency, May 1978; *Prospective Maritime Jurisdictions in the Polar Seas*, by Marc Vaucher, Marine Policy and Ocean Management Program, Woods Hole Oceanographic Institution, Technical Report, WHOI-83-1; *Hypothetical Limits of the U.S. Continental Margin in the Arctic*, U.S. Arctic Oil and Gas, National Petroleum Council, December 1981; and *Arctic Ocean*, National Geographic Society, 1976.

### Notes

1. For a good analysis of past jurisdictional issues, see K. Bertrand, "Optional Considerations: the Historical Background," in *Science, Technology and Sovereignty in the Polar Regions*, G. Schatz, ed. (1974), p. 18; and D. Pharand, *The Law of the Sea of the Arctic, With Special Reference to Canada* (1973), p. 151.

2. See David A. Ross and K. O. Emery, "The Shelf Break: Some Legal Aspects," *The Shelf Break: Critical Interface on Continental Margins*, Society of Economic Paleontologists and Mineralogists, Special Publication, in press, 1983. Also see Ted. L. McDorman, "The New Definition of 'Canada Lands' and the Determination of the Outer Limit of the Continental Shelf," *Journal of Maritime Law and Commerce* 14, no. 2 (April 1983): 195-223.

3. According to Bernard Oxman, the United States ensured that there was common understanding between the delegations to the ninth session of UNCLOS III regarding the effect of the language in paragraph 6 of Article 76. This holds especially true for the Soviet delegation, because both the United States and the Soviet Union are neighbors in the Arctic and sub-Arctic regions. Oxman points out that the Soviet Union was the main proponent of an amendment on ridges that eventually became part of Article 76. See Bernard Oxman, "The Third United Nations Conference on the Law of the Sea: The Ninth Session," *American Journal of International Law* 75 (1981): 211, 228, note 87. On the subject of the Chukchi Plateau, the U.S. Representative, Ambassador Richardson, made the following statement on the record in Plenary on April 3, 1980: "Our support for the proposal regarding the continental shelf contained in Ambassador Aguilar's report rests on the understanding that it is recognized—and to the best of our knowledge there is no contrary interpretation—that features such

as the Chukchi Plateau situated to the north of Alaska and its component elevations cannot be considered a ridge and are covered by the last sentence of the proposed paragraph 5 bis." Oxman, *ibid.*

4. Paragraph 10 states: "The Provisions of this article are without prejudice to the question of delimitation of the continental shelf between States with opposite or adjacent coasts." Article 83 of the LOS Convention, "Delimitation of the continental shelf between States with opposite or adjacent coasts," states: "(1) The delimitation of the continental shelf between States with opposite or adjacent coasts shall be effected by agreement on the basis of international law, as referred to in Article 38 of the Statute of the International Court of Justice, in order to achieve an equitable solution. (2) If no agreement can be reached within a reasonable period of time, the States concerned shall resort to the procedures provided for in Part XV. (3) Pending agreement as provided for in paragraph 1, the States concerned, in a spirit of understanding and co-operation, shall make every effort to enter into provisional arrangement of a practical nature and, during this transitional period, not to jeopardize or hamper the reaching of the final agreement. Such arrangements shall be without prejudice to the final delimitation. (4) Where there is an agreement in force between the States concerned, questions relating to the delimitation of the continental shelf shall be determined in accordance with the provisions of that agreement."

5. See *Toronto Star*, March 26, 1983. Also see, "Undersea Territory: Canada May Claim Arctic Ridge," *The Globe and Mail*, March 18, 1983, p. 1.

6. The 1867 Convention on the Cession of Alaska defined the maritime parameters in the Bering and Chukchi Seas and the North Pacific Ocean of the area to be transferred to United States sovereignty. Article 1 of the Convention provides that Russia agrees, "to cede to the United States . . . all the territory and dominion now possessed by his Majesty on the continent of America and in the adjacent islands," east of a line passing through the designated points due north, without limitation, into the same "Frozen Ocean" and southwesterly "to the meridian of one hundred and ninety-three degrees west longitude, so as to include in the territory conveyed the whole of the Aleutian islands east to that meridian." The Convention of 1867 has been interpreted as extending only to 72 degrees North. Jurisdiction remains unclear beyond this point as the term "Frozen Ocean" refers only to the Arctic Ocean, not specifically to the permanently frozen edge of the Arctic ice cap.

7. Erik B. Wang, "Canada—United States Fisheries and Maritime

Boundary Negotiations: Diplomacy in Deep Water," *Behind the Headlines*, Canadian Institute of International Affairs, April 1981.

8. 1867 15 Stat. 539, T.S. No. 301. See Bevans, *Treaties and Other Agreements of the United States of America, 1776-1949* at p. 1216. The 1867 Convention identifies the marine boundary as: "The west limit within which the territories and dominion conveyed, are contained, passes through a point in Behring's Straits on the parallel of sixty-five degrees thirty minutes north latitude, at its intersection by the meridian which passes between the islands of Krusenstern, or Ignalook (little Diomedé), and the island of Ratmoff, or Noonarbook, and proceeds due north, without limitation, into the same Frozen Ocean. The same western limit, beginning at the same initial point, proceeds thence in a course nearly southwest, through Behring's Straits and Behring's Sea, so as to pass midway between the northwest point of the island of St. Lawrence, and the southeast point of Cape Choukotski, to the meridian of one hundred and seventy-two west longitude; thence from the intersection of that meridian, in a southwesterly direction, so as to pass midway between the island of Attou and the Cooper Island of the Kormandorski couplet or group in the North Pacific Ocean, to the meridian of one hundred and ninety-three degrees west longitude (167 degrees east longitude) so as to include in the territory conveyed the whole of the Aleutian Islands east of the Meridian."

9. *The North Sea Continental Shelf Case*, 1969. I.C.J. at 52. This case involved an adjudication of a maritime boundary between adjacent and opposite states of a common continental shelf. At issue in the case were seabed minerals, not water-column resources. The Court ruled that delimitation: "is to be effected by agreement in accordance with equitable principles, and taking into account all of the relevant circumstances, in such a way as to leave as much as possible to each Party all those parts of the continental shelf that constitute a natural prolongation of its land territory into and under the sea, without encroachment on the natural prolongation of the land territory of the other." The Court did not reach a specific delimitation, but gave direction to the contesting parties to resume their deliberations with guidelines giving greater attention to "special circumstances" between coastal states with adjacent or opposite coastlines in addition to equidistance. The Court undertook an examination of both the direction and the proportionality of coastal frontage. See also *Arctic Summary Report*, U.S. Geological Survey Open File Report 81-621, October 1981, for information on lease-sale areas in the Bering and Beaufort Seas.

10. For a good discussion of the present status of the maritime boundaries of the United States, see Mark B. Feldman and David Colson, "The Maritime Boundaries of the United States," *American Journal of International Law* 75, no. 4 (October 1981): 729-765.

11. "U.S., Soviet Union Discuss Arctic Boundary," *Inside Energy/Federal Lands* (New York: McGraw-Hill, Inc., May 23, 1983). According to the State Department, the talks were not "directly related" to the Navarin Basin question, but to resources in general, including fisheries.

12. Robert B. Krueger, "Bering Sea Petroleum: A New Meeting Ground for the Soviet Union and the United States," unpublished paper, January 1983. See also Robert W. Smith, "A Geographical Primer to Maritime Boundary-Making," *Ocean Development and International Law* 12, no. 1/2 (1982): 7-22, especially pp. 11-12. Also see Robert D. Hodgson and Robert W. Smith, "Boundaries of the Economic Zone," in *Law of the Sea: Conference Outcomes and Problems of Implementation*, eds. Edward Miles and John K. Gamble (Cambridge Mass.: Ballinger Publishing Co., 1977), p. 183; and Robert W. Smith, "Trends in National Maritime Claims," *Professional Geographer* 32, no. 2 (1980): 216-223.

13. U.S. Department of State, Office of Research in Economics and Science, Bureau of Intelligence and Research, No. 14 (Revised), October 1, 1965, at p. 3.

14. Note, "Canadian and Soviet Arctic Policy: An Icy Reception for the Law of the Sea?," *Virginia Journal of International Law* 16, no. 3 (1976): 609, 611.

15. Barnaby J. Feder, "A Legal Regime for the Arctic," *Ecology Law Quarterly* 6 (1978): 805.

16. "Canadian and Soviet Arctic Policy," p. 611.

17. The Agreement denies any jurisdiction over contiguous waters and continental shelf to whichever nation is able to sustain its claim to the island. Title to the rock would appear to be of limited value from the viewpoint of habitation or resource development. See Erik B. Wang, Department of External Affairs, Ottawa, "Canadian Sovereignty in the Arctic: A Comment on *The Arctic in Question*," in *The Canadian Yearbook of International Law* 1976 14: 307-316.

18. Donant Pharand, *The Law of the Sea of the Arctic* (Ottawa: University of Ottawa Press, 1973), pp. 134-141.

19. W. Harriet Critchley, "Canadian Security Policy in the Arctic: The Context for the Future," in *Marine Transportation and High Arctic Development: Policy Framework and Priorities, Symposium Proceedings*, March 21-23, 1979, Montebello, Quebec, p. 184. Critchley cites

the following precedents to substantiate her view: The *Eastern Greenland Case*, decided by the Permanent Court of International Justice in 1933 (Permanent Court of International Justice, Series A/B, No. 53) and the *Clipperton Island Arbitration* in 1931 (*American Journal of International Law* 26: 390).

20. Robert S. Reid, "The Canadian Claim to Sovereignty over the Waters of the Arctic," *The Canadian Yearbook of International Law* 1974 12: 111-136.

21. W. Harriet Critchley, *op. cit.*

22. *Ibid.*, and D. Pharand, *The Law of the Sea of the Arctic*, pp. 59-61, 171-175. For a good analysis of the development of the Canadian position on international straits and the specific arguments concerning the Northwest Passage, see Roger D. McConchie and Robert S. Reid, "Canadian Foreign Policy and International Straits," in *Canadian Foreign Policy and the Law of the Sea*, eds. Barbara Johnson and Mark W. Zacher (Vancouver: University of British Columbia Press, 1977), pp. 158-193.

23. An international strait is one that joins two parts of the high seas or the high seas and the territorial sea of another state, and must fit the other criteria in international law which are used to designate international straits. The *Corfu Channel Case* (I.C.J. Reports, 1949) held that such a strait must have been a useful route for international maritime traffic. The test for an international strait is based on both geographic location and actual use, not potential use.

24. Donant Pharand, "The Northwest Passage in International Law," *Canadian Yearbook of International Law* 1979 17: 123.

25. D. M. McRae and D. J. Goundry, "Environmental Jurisdiction in Arctic Waters: The Extent of Article 234," *University of British Columbia Law Review* 16 (1982): 197-228.

26. See D. Pharand, *The Law of the Sea of the Arctic*, pp. 124-125.

27. United States Department of State letter dated September 28, 1978, from Lori F. Damrosch, Attorney-Adviser, Office of Assistant Legal Adviser for European Affairs, to Mr. Thomas Layman, Associate Editor, Dictionary Department, Collins and World Publishing Co., Inc. The letter is the official reply to a request from Collins and World for clarification on the jurisdictional status of Wrangel Island.

28. *Ibid.*

29. Soviet practice has been inconsistent with an extreme sector claim. For example, they have "landed aircraft on the ice in other 'sectors,' sent submarines into them, maintained ice research stations that drifted into them, and established stations on islands in other sectors." From Barnaby J. Feder, "A Legal Regime for the Arctic,"

pp. 802-804. See also D. Pharand, *The Law of the Sea of the Arctic*, p. 171.

30. Central Intelligence Agency, *Polar Regions Atlas*, May 1978, reprinted January 1979. U.S. Government Printing Office, p. 32.

31. "Northern European Security Issues," *Report of a staff mission to five NATO countries and Sweden November 29-December 14, 1982*, to the Committee on Foreign Affairs, U.S. House of Representatives, 97th Cong. 2d Sess., 1983, pp. 5-6.

32. *Ibid.*

33. An additional justification for the Soviet position derives from an opinion of the International Court of Justice in *The North Sea Continental Shelf Cases* (1969) I.C.J. 3. In those cases the Court held that the equidistance principle has no special priority as an equitable principle which should delimit a shelf boundary. See Barnaby J. Feder, "A Legal Regime for the Arctic," p. 803, footnote 108.

34. Lewis M. Alexander, "The Ocean Enclosure Movement: Inventory and Prospect," *San Diego Law Review* 20, no. 3 (1983): 575. Also see Olenicoff, *Territorial Waters in the Arctic: The Soviet Position* (Rand Corp. Publication, R-907-ARPA, July 1972).

35. Treaty Concerning Spitzbergen, February 9, 1920, 2 LNTS 8. Reprinted in *The Challenge of New Territories* 152 (Oslo: The Fridtjof Nansen Foundation Study No. 1, 1974, F. Sollie, ed.)

36. Original signatories of the Spitzbergen Treaty (1920) were: Australia, Canada, Denmark, France, Great Britain, India, Italy, Japan, New Zealand, Norway, South Africa, Sweden, the Netherlands, United States, at the Versailles Peace Conference. Additional signatories are: Afghanistan, Albania, Argentina, Austria, Belgium, Bulgaria, Chile, China, Czechoslovakia, Dominican Republic, Egypt, Estonia, Finland, Germany, Greece, Hedjaz, Hungary, Monaco, Poland, Portugal, Romania, Spain, Switzerland, USSR, Venezuela, Yugoslavia.

37. Spitzbergen Treaty, Article 3.

38. *Ibid.*, Article 2.

39. The Soviet Union has long sought to increase its "land rights" on the islands, "by challenging and/or demanding participation in certain Norwegian activities and by maintaining a permanent coal-mining population larger in size than the resident Norwegian community." See *Polar Regions Atlas*, p. 33.

40. Norway cites two legal grounds for its claim that the Svalbard shelf is subject to Norwegian control. First, Norway maintains that under legal principles established by the International Court of Justice, limitations on Norway's sovereign rights over Svalbard under the

Treaty should not be presumed from the Treaty's silence on the subject. Second, Norway points out that there is a continuous shelf between Norway and the Svalbard Archipelago. According to international law (both the 1958 Convention on the Continental Shelf and the LOS Convention), a shelf can only be delimited when adjacent to two different "states." Norway asserts that Svalbard is not "another state" in relation to Norway. See Barnaby J. Feder, "A Legal Regime for the Arctic," p. 810, footnote 158.

41. Prior to the discovery of coal on the islands comprising the Svalbard Archipelago at the end of the nineteenth century, little interest was expressed in their ownership. Until 1920 the islands were considered "res nullius," or belonging to no one. Sovereignty over the islands was given to Norway at the Versailles Peace Conference at the end of World War I. The Svalbard Treaty was signed on February 9, 1920, by most major powers. Norway formally accepted Svalbard on August 14, 1925. Although Germany and Russia had both shown mining interest in the islands they were debarred from the Peace Conference. Norway, a neutral country, was consequently awarded the archipelago. For a good overview of the Svalbard Treaty and comparisons of it with a possible Antarctic resource-sovereignty regime, see William E. Westermeyer, *Alternative Regimes for Mineral Resource Development in Antarctica* (Boulder, Colo.: Westview Press, 1983). The principles governing the Svalbard Treaty are described in Willy Ostreng, *Politics in High Latitudes: The Svalbard Archipelago* (translated by R. I. Christophersen), (Montreal: McGill-Queen's University Press, n.d.). Also see Falk Bomsdork, "Norway's Nordpolitik and the Soviet Union," *Aussenpolitik* 30, no. 2 (1979): 258-273.

42. Pertinent examples of cases comprising customary international law that have been codified into the Law of the Sea Convention include: Maritime Boundary Dispute "Grisbadarna Case," (*Norway vs. Sweden*), (Perm. Court Arbitration, 1909), translated in *American Journal of International Law* 4 (1910): 226-235; Arbitration on the Delimitation of the Continental Shelf (*United Kingdom vs. France*), (Decision of June 30, 1977), reprinted in Communication Paper No. 7438 (March 1979); and Case Concerning the Continental Shelf (*Tunisia vs. Libya*), 1982, International Court of Justice 7 (February 24, 1982): 29-35, 92-94, 67.

In the "Grisbadarna Case," the Court held that "in conformity with the fundamental principles of the law of nations, both ancient and modern, in accordance with which maritime territory is an essential appurtenance of land territory," extension of the land boundary seaward must be considered inseparable, and is automatically ceded. The

Court moved beyond the immediate coastal and barrier islands boundary between Norway and Sweden known as the Koster-Tisler Line in its delimitation. The Court traced a line perpendicular to the general direction of the coast keeping in mind the coastal configurations of both nations in the contested area. Seaward of the Koster-Tisler line, the Court angled the delimitation line between two fishing banks, allowing for single state management of the enclosed resource. The Court held that each bank was dominated by the fishermen of one country by historic use and occupancy. The Court noted that Sweden had expended revenues to improve the Grisbadarna fishing region, with the active encouragement of the Norwegian government, performing a duty normally expected for sovereign powers. Rhumb lines were used by the Court in delimiting the boundary.

In the Anglo-French Continental Shelf Arbitration (*United Kingdom vs. France*) of 1977, the ICJ ruled on a case involving an island state with offshore islands adjacent to the continent in regard to shelf delimitation. The Court ruled that: "the equidistance/special circumstances rule and the rules of customary law have the same object—the delimitation of the boundary in accordance with equitable principles. In the view of this Court, therefore, the rules of customary law are a relevant and even essential means . . . for interpretation [of] the provisions of Article 6 (of the Convention on the Continental Shelf)." In this case, the ICJ sought to give credence to the slowly developing international law of unique circumstances of coastal irregularities, an issue it most likely will deal with as coastal states seek to control greater amounts of the continental shelf for national management and exploitation. The Court ruled that Article 6 of the 1958 Continental Shelf Convention formulated a single rule, combining both equidistance and special circumstances, leading to an equitable principles test.

43. For discussions of dispute settlements, see G. A. Pierce, "Dispute Settlement Mechanisms in the Draft Convention on the Law of the Sea," *Denver Journal of International Law and Policy* 10 (1981): 331; Louis Sohn, "Settlement of Disputes Arising out of the Law of the Sea Convention," *San Diego Law Review* 12 (1977): 495; Hodgson, "International Ocean Boundary Disputes," *Ocean Policy Study* 1 (1978): 37; and Feldman and Cohen, "The Maritime Boundary of the United States," *American Journal of International Law* 75 (1981): 729.

44. On the development of new submarines for deployment in the Arctic Ocean, see "Navy Trains to Battle Soviet Submarines in Arctic," *New York Times*, May 19, 1983, p. A17.

45. See Arvid Pardo, "The Convention on the Law of the Sea: A

Preliminary Appraisal," *San Diego Law Review* 20, no. 3 (1983): 489-503, esp. p. 494. Pardo explains: "The legality of the following, among many other, military uses of the marine environment remains undetermined: (a) transit of foreign warships in the territorial sea without notification to, or the consent of, the coastal State; (b) reservation of vast areas of the high seas for significant periods of time for missile testing or other security purposes; and (c) emplacement of anti-submarine warfare devices on the continental shelf of another State, without the latter's consent."

46. Correspondence with Rear Admiral Bruce A. Harlow, JAGC, United States Navy, Office of the Judge Advocate General, letter dated September 13, 1983. According to Admiral Harlow, the U.S. Navy holds that the LOS Convention is quite clear on the point that neither authorization, nor notification, is required for warships' transit of the territorial sea in innocent passage. The United States Navy also believes that the LOS Convention basically incorporates the standard of the 1958 Geneva Convention on the High Seas and of customary international law to the effect that one country's high seas uses are permissible as long as they do not unreasonably interfere with another country's uses. Under the terms of the LOS Convention, therefore, weapons testing that does not unreasonably interfere with others' uses remains a permissible high seas use. For an analysis of this principle in the context of nuclear bomb testing, see McDougal and Schlei, "The Hydrogen Bomb Tests in Perspective: Lawful Measures of Security," *Yale Law Journal* 64, no. 8 (1955).

47. Correspondence with Rear Admiral Bruce A. Harlow. A fuller treatment of the issues raised under UNCLOS by military devices on the continental shelf may be found in Treves, "Military Installations, Structures, and Devices on the Seabed," *American Journal of International Law* 74 (1980): 808.

48. Arctic policy and economic activities in the United States have a long way to go to match similar levels in Canada. Recent efforts indicate growing interest and concern. The Woods Hole Oceanographic Institution sponsored an Arctic Policy Workshop in May of 1983, in conjunction with a book entitled *United States Arctic Interests: The 1980s and 1990s*, William E. Westermeyer and Kurt M. Shusterich, eds., to be published in 1984 by Springer-Verlag. The workshop and book brought together noted Arctic specialists from industry, academia, the federal and Alaskan state governments, and Canada to address United States resource development issues and political/regulatory concerns in the Arctic. For an overview analysis of the

Arctic as an area where there is a need for a strong federal commitment to develop vast resources in an environmentally responsible way, see Melvin A. Conant, "The Call of the Arctic," *Oceanus* 25, no. 4, (Winter 1982/83): 51-57.

49. *The President's Report*, Inuit Circumpolar Conference, July 25th-31st, 1983. Also see *Inuit Circumpolar Conference Charter*, 1980, Nuuk, Greenland, ICC Document 1.

50. Lincoln P. Bloomfield, "The Arctic: Last Unmanaged Frontier," *Foreign Affairs* 60, no. 1 (Fall 1981): 87-105, at 105.

51. The LOS text (in Article 123) calls on states to:

"(a) to co-ordinate the management, conservation, exploration and exploitation of the living resources of the sea;

(b) to co-ordinate the implementation of their rights and duties with respect to the protection and preservation of the marine environment;

(c) to co-ordinate their scientific research policies and undertake where appropriate joint programmes of scientific research in the area;

(d) to invite, as appropriate, other interested States or international organizations to co-operate with them in furtherance of the provisions of this article."

52. R. Tucker Scully, "Arctic Policy: Opportunities and Perspectives," in *Proceedings Preprints, Arctic Technology and Policy*, March 2, 3, 4, 1983, Massachusetts Institute of Technology, Cambridge, Massachusetts. Mr. Scully is Director, Office of Oceans and Polar Affairs, U.S. Department of State. He believes that, "it is important to establish a region-wide prism as one of the primary means through which we examine the definition of our interests and the conduct of our business in the Arctic. By ensuring that U.S. activities and actions relating to the Arctic can be assessed in the context of the region as a whole, we will best ensure that effective Arctic policies can not only be formulated but also implemented."

53. Ken Beauchamp, "An Overview of Current International Legal Issues in the Arctic Waters," *Proceedings of the Third National Workshop on People, Resources, and the Environment North of 60 degrees*, Yellowknife, Canada, June 1983. Mr. Beauchamp is the Director of the Arctic Ocean Programme, Canadian Arctic Resources Committee.

54. Proceedings of the Special Committee of the Senate on the Northern Pipeline. *Thirteenth Proceedings on: Offshore Transportation Study*, June 15, 1982, 30A: 41.

55. See *Northern Science Network Newsletter*, UNESCO—MAB Northern Science Network Secretariat, Edmonton, Vol. 1, No. 1, April 1983.