

# CANADA'S UNRESOLVED MARITIME BOUNDARIES

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## PREFACE

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# CANADA'S UNRESOLVED MARITIME BOUNDARIES

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## ABSTRACT

The resolution of offshore boundary disputes must first be attained before managed development of the offshore region under dispute may begin. Presently, Canada shares maritime boundaries with Denmark, France and the United States. An examination of these offshore boundaries shows that only the maritime boundary between Denmark and Canada and the boundary off the Juan de Fuca Strait between Canada and the United States offer an area of little or no conflict. The other unresolved boundaries are disputed as the states concerned hold different positions regarding the delimitation of the offshore boundary lines.

A negotiated or adjudicated settlement to these boundaries must consider the history, the existing legal precedents for offshore boundary determination, the customary law involved and each state's interests, however varied they may be. It is only after careful consideration of these facts that an equitable boundary solution will be found. Without drawing conclusions on what the final boundary will be in each instance, this paper presents an analysis on each of Canada's unresolved boundaries. In addition to presenting the historical background on each boundary and arguments for certain boundary delimitations, the urgency attached to finding a boundary agreement is reviewed and a comparison attempted with the recent Gulf of Maine decision.

Overall, the paper incorporates past and present events to give a detailed analysis of the situation regarding Canada's unresolved offshore boundaries.

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## 1.0 INTRODUCTION

The delimitation of maritime boundaries between neighbouring states has grown more complex as they have pushed their zones of jurisdiction further from shore. For Canada, this has meant the expansion of its maritime jurisdiction to include all the adjacent continental shelf with the exception of the Flemish Cap on the Grand Banks. In delimiting the boundaries under Canada's jurisdiction, there exist specific areas where Canada shares a maritime boundary with either an adjacent or opposite state. Since the expansion of offshore jurisdiction is relatively new in terms of establishing global boundaries, offshore boundary claims by an individual state almost always conflict with those of a neighbouring state.

There are eight offshore areas over which Canada must establish a maritime boundary with a neighbouring state. Although these are not all in dispute, the boundary conflicts that exist are sensitive issues as they pertain to national sovereignty and the right to explore for and exploit various resources. "In addition to harvesting the living resources of the sea, the past thirty years have seen rapid advances in offshore technology which have facilitated the exploitation of offshore diamonds, placer-gold, manganese nodules, aggregates, oil and natural gas" (Mills, 1971). Thus, any offshore boundary agreement between Canada and a neighbouring state delineates more than just marine jurisdiction.

This paper examines each of Canada's unresolved offshore boundaries with an initial overview of the area, both coastal and offshore, and the zones of jurisdiction

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requiring a boundary settlement. This is done for the four maritime boundaries shared with the United States in the Beaufort Sea, in the Gulf of Maine, off the Juan de Fuca Strait and off Dixon Entrance. Also, a similar presentation is made for the Denmark - Canada boundary and the France - Canada boundary surrounding Saint Pierre and Miquelon.

After introducing the area of concern, a chronological sequence of events that contribute to the history of each boundary is attempted prior to discussing possible boundary solutions. Arguments both for and against a particular boundary delimitation are given in analyzing each solution as well as the particular state's position on that solution.

For each boundary, an attempt is made at determining the urgency with which a solution should be found and the reasons for this urgency. Finally, a comparison is made of the judicial issues that decided the Gulf of Maine boundary, as defined by the International Court of Justice, and similar judicial issues existing for the unresolved boundaries. For the sake of completeness, each boundary is examined individually.

## 2.0 ZONES OF DELIMITATION

The Third United Nations Convention on the Law of the Sea (UNCLOS III) formalized an international agreement on the limits of the territorial sea, the contiguous zone, the exclusive economic zone (EEZ) and the continental shelf. Although covering a wide range of issues on the law of the sea, the importance of UNCLOS III in promoting the peaceful solution of maritime boundary settlements over these zones is stressed.

With respect to Canada, there are certain offshore zones that have, or else require, an adjacent or opposite state agreement between Canada and its neighbours for the purposes of delimiting the maritime boundary (Figure 2.1). A single boundary agreement that covers all four zones could provide an ideal solution for certain cases. These zones are seen as the foundation to any states legitimate claim to extended offshore sovereignty.

The limits of each zone and the associated rights possessed by the state have been addressed by UNCLOS III and are contained within the Convention. The text that finally emerged from UNCLOS III (United Nations, 1983):

establishes a comprehensive framework for the regulation of all the ocean space. It is divided into 17 parts and nine annexes, and contains provisions governing, inter alia, the limits of natural jurisdiction over ocean space, access to the high seas, navigation, protection and preservation of the marine environment, exploitation of living resources and conservation, scientific research, sea-bed mining and other exploitation of non-living resources, and the settlement of disputes.

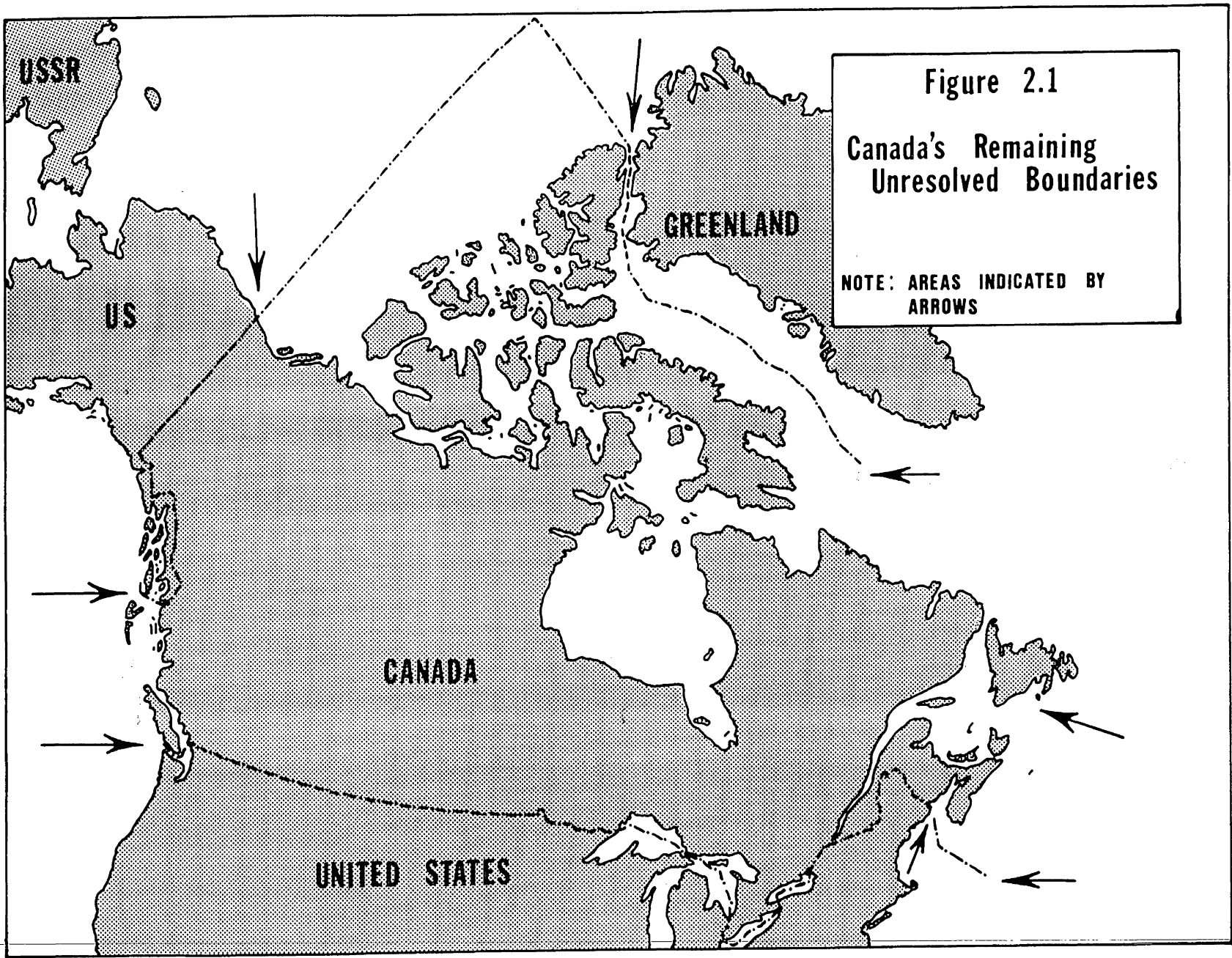


Figure 2.1

Canada's Remaining Unresolved Boundaries

NOTE: AREAS INDICATED BY ARROWS

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Although an active participant in the negotiations on the Law of the Sea, Canada has not ratified the agreement. Yet, Canada is a signatory of both the Convention and Final Act and thus may be delaying ratification for political reasons.

In attempting to examine the unresolved boundaries of Canada, a definition of the zones which require settlement in each situation is first presented. As a legal definition for each zone, the description and extent of the zone is taken from the UNCLOS III convention.

The territorial sea of each state extends from the baselines of the state outward to a limit not exceeding 12 nautical miles. The area contained within the territorial sea is under the sovereign rule of the coastal state with sovereignty extending to the air space over the territorial sea as well as to its bed and subsoil (art. 2, United Nations, 1983). Presently, Canada claims a 12 nm territorial sea as well as Denmark and France with the United States holding to the old 3 nm limit.

The contiguous zone is described as a zone contiguous to the territorial sea over which the coastal state does not have full sovereignty but may exercise control necessary to:

- prevent infringement of its customs, fiscal, immigration or sanitary laws and regulations within its territory or territorial sea;
- punish infringement of the above laws and regulations committed within its territory and territorial sea (art. 33, United Nations, 1983).

The contiguous zone extends a distance of 24 nm from the baselines used to measure the territorial sea. An analysis of the boundary between Canada and its neighbours over the contiguous zone is neglected. It is accepted that any boundary settlement that covers the EEZ or continental shelf will also delimit the contiguous zone.

The establishment of the EEZ is a direct result of coastal states extending their jurisdiction over the sea and sea bed for the purposes of exploiting and managing both

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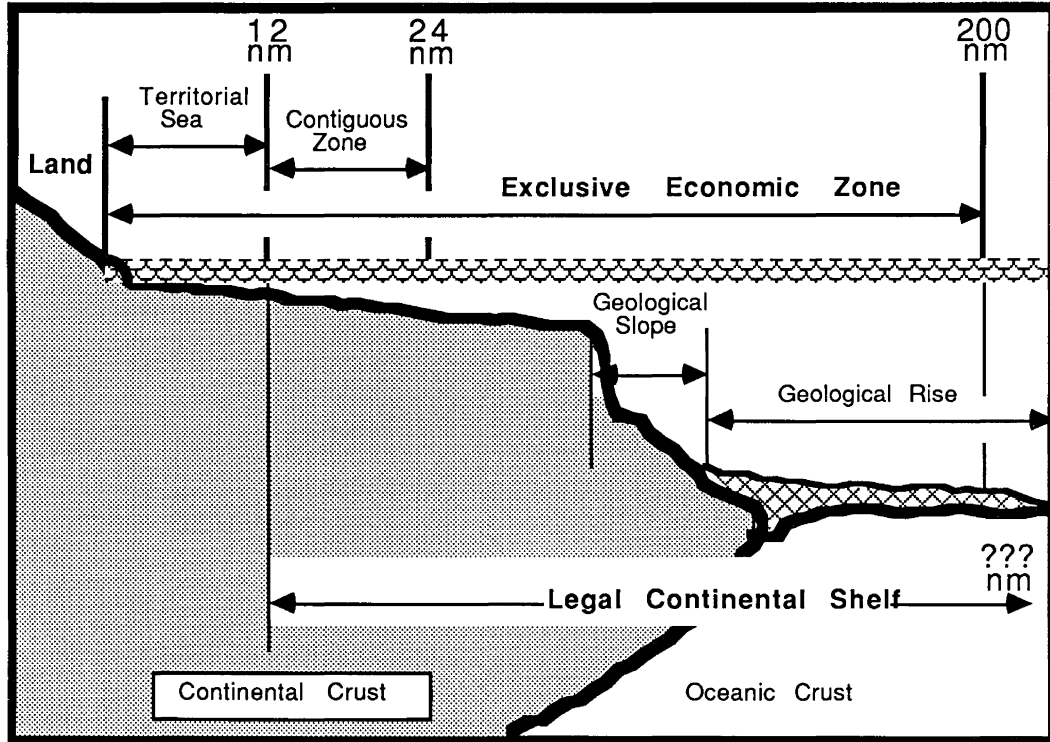
the living and non-living resources. The specific legal regime of the EEZ is specified within the UNCLOS III convention and pertains to the actual sovereign rights and areas of jurisdiction of the coastal state. For boundary delimitation purposes, the breadth of the EEZ is established as an area not extending beyond 200 nm from the baselines from which the breadth of the territorial sea is measured (art. 57, United Nations, 1983). The UNCLOS III convention has specified methods for the delimitation of the EEZ boundary between opposite and adjacent states (art 74, United Nations, 1983) that will lead to an equitable solution. Also, the convention has described methods for delimiting the EEZ boundary. The actual text of the convention relating to these last two points is contained in Appendix A. The EEZ is accepted by Canada, Denmark, France and the United States as a legal extension of the coastal states jurisdiction.

Finally, there is the continental shelf between opposite and adjacent states that requires an equitable boundary solution. For the purposes of delimiting the continental shelf, the UNCLOS III convention provided for solutions based on either the thickness of sedimentary rocks, distance from the foot of the continental slope, distance from the baselines of the state and distance from a specific contour depth. Again, the actual text defining the continental shelf, a state's rights over the shelf and methods of delimiting the shelf between opposite or adjacent states is contained in Appendix A. Canada, Denmark, France and the United States all support and recognize the state's interests in and upon the continental shelf.

These four zones (Figure 2.2) have quickly become entrenched within customary international law. The delimitation of boundaries over these zones has also been accepted, but the methods used have been as diverse as the zones themselves with both negotiated and arbitrated boundary settlements employing different methods to

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adequately deal with the specific circumstances of each case. An analysis of Canada's boundaries that have yet to be delimited over these zones is now attempted on a boundary by boundary basis.



**Figure 2.2 : Zones of Delimitation**

after : Hodgson & Smith (1979)



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### **3.0 U.S. - CANADA MARITIME BOUNDARY : BEAUFORT SEA**

The United States and Canada share a maritime boundary in the Beaufort Sea that extends seaward from boundary monument #1 near Demarcation Point (Figure 3.1). Outside of agreeing on the beginning point of the boundary (i.e. boundary monument #1), both states dispute the other's boundary claim as to the seaward extension of the land boundary. The settlement of this boundary remains as one of the major boundary issues between Canada and the United States, with both sides holding widely differing views. Canada maintains that the boundary was established as the 141<sup>st</sup> meridian during the 1903 Alaska boundary arbitration; the United States has countered that the boundary follows an equidistant line from the Yukon and Alaska coastlines.

This chapter examines the Beaufort Sea boundary in light of these two positions and the territory involved. Beginning with a review of the territory requiring settlement, the historical events that have contributed to each state's position are presented. Arguments toward possible solutions and scenarios are presented in light of recent International Court of Justice (ICJ) decisions, recognized international law and socio-economic conditions. Finally, the technical aspects and resources available for delineating the boundary or supporting a position are introduced and discussed.

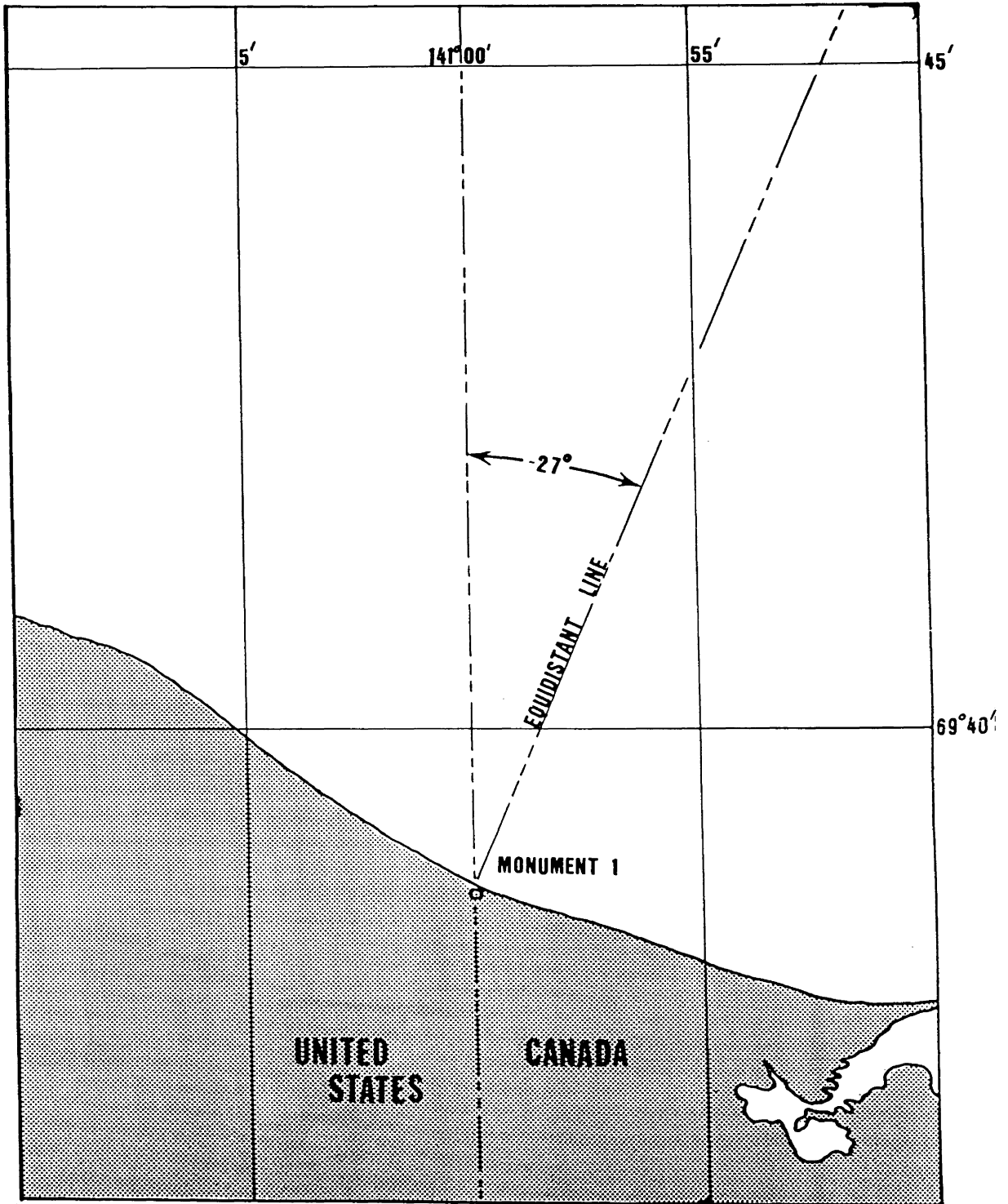


Figure 3.1: International Boundary Along the 141st Meridian

### 3.1 BEAUFORT SEA LAYOUT

Each of the offshore zones that may be claimed in the Arctic region of the Beaufort Sea requires that the boundary between Canada and the United States be extended seaward. This applies from the territorial sea all the way out to the limits of the continental shelf and thus covers all of the zones defined by UNCLOS III. Geographically, the offshore region may be divided three ways (Figure 3.2); first, there is a continuous unbroken coastline that forms a shallow concave bowl orientated in an east south-east direction. From here, the Beaufort Shelf extends to the 200 metre contour. Thereafter, the topography follows the Beaufort Slope down to the Canadian Basin.

An examination of the features in the region, either coastal or offshore, on either side of the 141<sup>st</sup> meridian show an absence of any kind of major geographical anomaly. The coastal configuration on the Canadian side of the 141<sup>st</sup> meridian extends to the east as far as Herschel Island with no offshore islands in between. The location of construction basepoints may be constrained as far east as Herschal Island due to the nature of the coastline forming McKenzie Bay beginning at Herschal Island. Although, on the Tuktoyaktuk Peninsula basepoints may be used to generate an equidistant line. On the Alaska side of the 141<sup>st</sup> meridian, the coastline remains very regular, although there are numerous offshore islands present. As the islands tend to be close to shore, with a narrow elongated shape oriented in the direction of the coastline, they do not disfigure the coastal pattern established by the land. In this manner the islands are a natural prolongation of the land. For line construction purposes Pt. Barrow is the most westerly basepoint position.

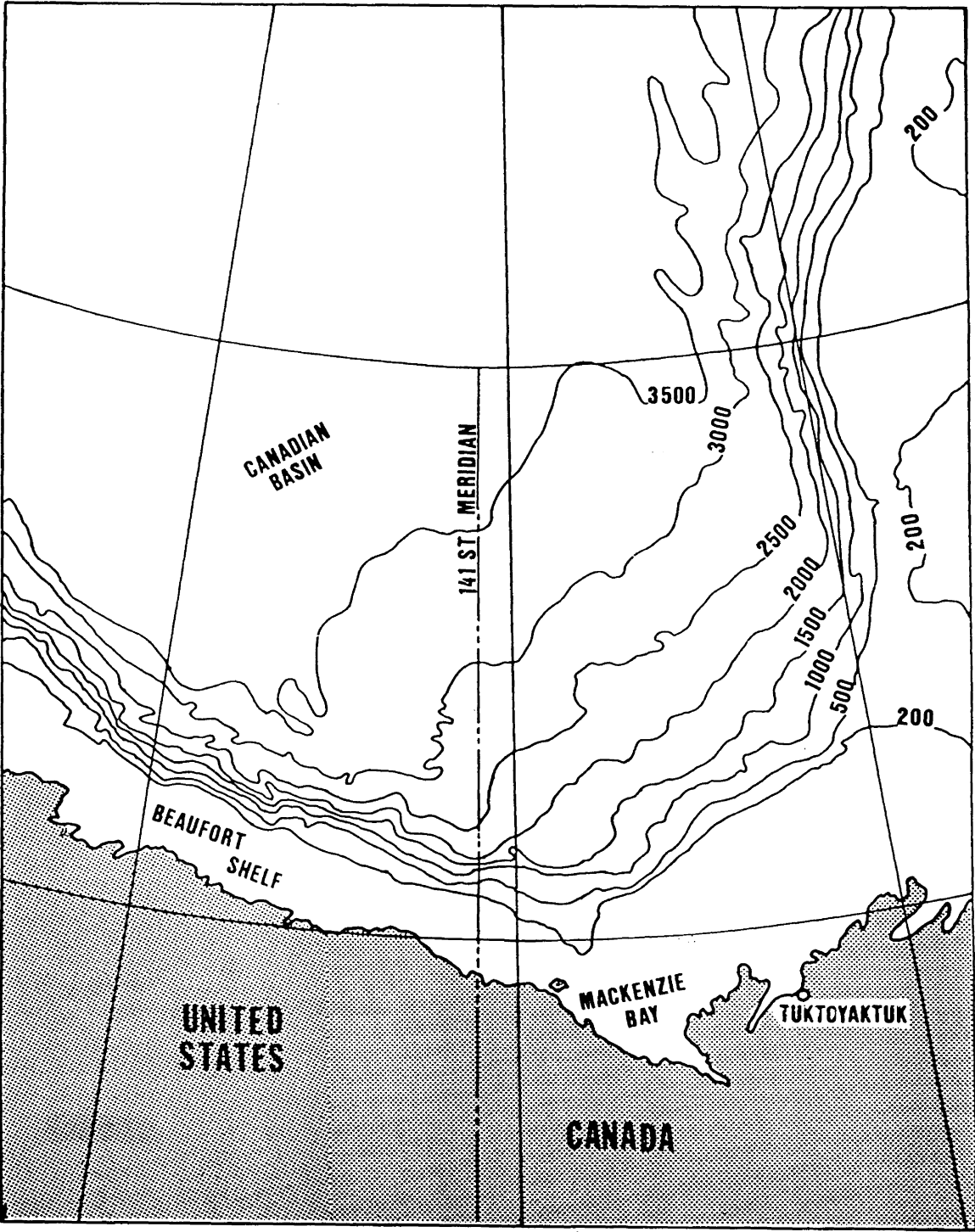


Figure 3.2: Beaufort Sea Layout

Figure 3.2 shows Tuktoyaktuk, NWT as the only town within this remote part of the world. Even then Tuktoyaktuk is still 339 km from boundary monument # 1. A settlement on Herschal Island has now been abandoned. On the American side of the 141<sup>st</sup> meridian Pt. Barrow, Alaska, is the nearest community at a distance of 585 kilometres. This leaves just two communities, one town on the Canadian side and one on the U.S. side for the region. The fact that a population base is non-existent in the area will be followed-up on later.

The continental shelf topography out to the 200 m contour is consistent off both nations' coastlines, although the 50 m contour does extend almost twice as far off Alaska than it does off the Yukon, but again this is not a disrupting circumstance. Lying west of the 141<sup>st</sup> meridian, this anomaly is not within the disputed area.

### **3.2 HISTORICAL BACKGROUND**

The major events that contribute to the present legal definition of the area's boundaries may be considered more easily if viewed in the context of nineteenth century European politics. It was agreements between the three major states with concerns in the region, i.e. Great Britain, Russia and the United States, that determined the extent of current possessions. Also, within these agreements lie the issues that confront negotiators and possibly future arbitrators who attempt to define a legal boundary extension.

In 1825 Russia and Great Britain signed a treaty covering the territory of Alaska that limited the expansion of Russia southwards and defined the possessions of each state. The boundary to the Beaufort Sea was defined in Article III of the treaty as (Bourne and McRae, 1976):

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the line of demarcation shall follow the summit of the mountains situated parallel to the Pacific coast, as far as the point of intersection of the 141<sup>st</sup> degree of west longitude (of the same meridian); and, finally, from said point of intersection, the said meridian line of the 141<sup>st</sup> degree, in its prolongation as far as the frozen ocean, shall form the limit between Russia and the British possessions on the continent of America to the northwest.

Although defined on paper only, at the time, this treaty and the limits it defined determined the extent of future United States holdings in the area.

The significance of this occurred in 1867 when Russia ceded all of its North American possessions to the United States. In the treaty of Cession the eastern boundaries of Alaska were defined by simply quoting Articles II, III and IV of the 1825 Russian-Great Britain treaty (Bourne and McRae, 1976). In this manner the United States acquired the territory of Alaska during the same year in which the confederation of Canada was formed. All future dealings would now be conducted between the two neighbours and not an overseas power acting for its colonial possession, although Britain did act with Canada for a number of years as Canada retained a privy council connection.

In the Beaufort Sea region, Canada made the first indication as to what the seaward boundary should be in the Arctic region. In 1897, the sector principle was introduced as an order-in-council establishing Canada's Arctic region as delimited by an area between the the 141<sup>st</sup> meridian on the west and the 60<sup>th</sup> meridian on the east (Beauchamp et al., 1973). Thus, jurisdiction and state sovereignty was extended offshore in Canada's view to cover all of the Arctic region to the North Pole between the two longitudes. At the time of this government announcement, Canada was unsure whether all of the lands in the Arctic region had been discovered and was thus ensuring that future discoveries of any landmasses, within the identified sector, would be the possession of Canada. Nevertheless, by defining the 141<sup>st</sup> meridian as one of

the boundaries, Canada was extending its sovereignty over an area that would later prove to be part of the Arctic Ocean.

Further use of the 141<sup>st</sup> meridian as the international boundary between Canada and Alaska occurred in 1898 with the creation of the Yukon territory. The eastern boundary of the Yukon territory was described as (Beauchamp et al., 1973):

beginning at the intersection of the 141<sup>st</sup> meridian of west longitude from Greenwich with a point on the coast of the Arctic Sea, which is approximately 69° 39', and named on the Admiralty charts, "Demarcation Point", thence due south on said meridian (which is also the boundary line between Canada and Alaska) for a distance . . .

It would seem then, that by the end of the nineteenth century Canada had accepted the 141<sup>st</sup> meridian as the land boundary between itself and the United States in this area. Although an acceptance of the 141<sup>st</sup> meridian as the international boundary for part of the Alaska-Canada border would seem achieved at this point, a dispute did arise that required an arbitrated decision as to what the Alaska-Canada land boundary truly was.

On 20 October 1903, a decision was rendered by the Alaska Boundary Tribunal that is seen as accepting the 141<sup>st</sup> meridian as the westward boundary. This tribunal was established by Great Britain/Canada and the United States through a convention to resolve the whole Alaska boundary issue. Throughout the hearings it was clear that the 141<sup>st</sup> meridian was accepted by all as the westward limit of Alaska and the wording of the Anglo-Russian agreement of 1825, i.e. "as far as the frozen Ocean", gave rise to no dispute with respect to the northward extension of this line (Beauchamp et al., 1973). The land boundary was subsequently surveyed and monumented in 1906 with the beginning point of the boundary, boundary monument #1, established on the coast of the Beaufort Sea (Figure 3.1).

Thus, following Canada's endorsement of the sector principle as the maritime boundary in the Beaufort Sea, there does not seem to have been any concerted effort to



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further define or negotiate a seaward extension to the boundary. The U.S. position on the sector theory and its subsequent division of the Arctic between coastal nations has been one of non-acceptance. The United States has never agreed to the sector theory or other national claims to the Arctic basin. When in 1929, the U.S. government asked the navy if it was advisable to convene a conference on dividing the Arctic into five national sectors, the answer was that a division of this kind would in fact constitute claims for sovereignty over the high seas and a novel attempt to artificially create a closed sea, thereby infringing on the rights of all nations to the free use of the area (Theutenberg, 1984).

The emergence of Arctic Ocean issues and in particular pollution problems in the 1960s prompted Canada to enact The Arctic Waters Pollution Prevention Act in 1970. This act uses the 141<sup>st</sup> meridian as the westward extension of the Canadian maritime boundary with the United States and exercises control to a distance of 100 nm offshore for the purposes of regulating pollution.

The enactment of this legislation may have also been prompted by the discovery of oil in 1968 at Prudhoe Bay, Alaska, and the granting of exploration permits in the Beaufort Sea by the Canadian government beginning in 1969. Again, the 141<sup>st</sup> meridian was used by the Canadian government in defining the territory available for oil leases. By early 1970, the Canadian government had issued offshore oil and gas exploration permits covering approximately 150 million acres in the Arctic. Some of these permits covered tracts more than 140 miles off the coast and in waters more than 2600 metres deep (Johnson and Zacher, 1977). Thus, Canada was using the 141<sup>st</sup> meridian as the dividing line while extending its control and sovereignty.

In support of this dividing line, the Canadian government began hydrographic activity in 1969 off the Yukon coast that used the 141<sup>st</sup> meridian as the U.S.-Canada

boundary. This policy was used as recently as 1984-85 with the tendering of a multi-purpose hydrographic and geological program off the Yukon coast that acknowledged the 141<sup>st</sup> meridian as a boundary line in delimiting the work area for the contract.

With the conclusion of UNCLOS III in 1983, the positions of Canada and the United States toward their zones of offshore sovereignty and jurisdiction have an indirect influence on the Beaufort Sea line of delimitation. As was seen in Chapter 2.0, the articles of UNCLOS III are now becoming recognized within international law. Thus, any boundary extension that is going to be defined over the offshore zones in this region must have the zones defined through prior notice. In the case of Canada this could be seen as being achieved with its prior historical stance on the 141<sup>st</sup> meridian plus the area to its east, and its endorsement of UNCLOS III. As mentioned previously, the United States voted against the UNCLOS III agreement but this could really be seen as indifferent to its position on offshore zones. The Truman Proclamation of 1945 and President Reagan's proclaimed 200 nm exclusive economic zone of 1983 would seem to indicate the true United States position. In announcing the Economic Zone Proclamation, President Reagan reiterated that many of the non-seabed regime aspects of the Law of the Sea (LOS) convention were acceptable, and that much of the LOS convention relating to these issues, in particular the exclusive economic zone, had emerged as customary international law (MacDorman, 1984).

It would seem that to this point only Canada's position on the Beaufort Sea dividing line has been reviewed, without a precise statement of the U.S. view given. It has been shown however that the United States does not agree with the Canadian view that the sector theory should be applied with the application of the equidistant solution surely more suitable to U.S. claims. Recently, the United States has said that beginning in January, 1988, it plans to offer parcels of offshore lands to U.S.

exploration companies within an area claimed by Canada east of the 141<sup>st</sup> meridian. The basis of this is the United States belief that the territory is American based on the equidistance principle. Thus a dispute left simmering may now be coming to maturity.

### **3.3 BOUNDARY DELIMITATION SOLUTIONS**

The possible solutions to the Beaufort Sea boundary may initially be seen as either an adoption of the 141<sup>st</sup> meridian or an equidistant line. Yet, there also exists the chance that some form of a modified equidistant line may be implemented. This section examines the possible solutions and arguments, both for and against, in regard to the various boundary line implementations. An analysis is done of the sector theory, the equidistant line, the Grisbadarna principle and the urgency of finding a solution. Finally, a comparison is performed with the recent Gulf of Maine decision.

#### **3.3.1 The Sector Theory**

Originally proposed in 1897 for Canada's Arctic region (Section 3.2), the sector theory is a method for delimiting an area claimed by a state. The theory consists of land claims being made on the basis of the land within a sector defined by the delimitation of longitudes from points below the pole to the pole itself, resulting in a pie shaped division of territory. Within the north circumpolar region Canada and Russia are the only countries that have applied the sector theory as a basis of their land and maritime claims (Figure 3.3). Although applied in the past as a means of gaining

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sovereignty over the islands of the Arctic archipelago, the theory is now being applied to maritime areas such as the exclusive economic zone and the continental shelf.

From the beginning of the century Canadian maps have shown a Canadian sector going from the country's western border along the 141<sup>st</sup> longitude west and from the eastern border along the 60<sup>th</sup> longitude west up to the pole (Theutenberg, 1984). As a means of identifying Canada's northern international boundary, these same lines of delimitation are shown on the most recent maps available from the Canadian department of Energy, Mines and Resources (Energy, Mines and Resources Canada, 1985) and the Canada Oil and Gas Lands Administration (COGLA, 1985). Canadian government support of the sector theory as a means of defining the EEZ and continental shelf boundaries can only be seen as increasing. In 1969 Prime Minister Trudeau added that he believed the sector principle to apply to the sea-bed and the continental shelf, but not to the water and ice (Theutenberg, 1984). This view of the sector theory does not conflict with the earlier view by the United States that the sector theory could not be used to enclose the high seas as only the zones of UNCLOS III would be defined with this principle.

Yet, the view proposed by then Prime Minister Trudeau does allow for two distinct offshore boundaries being determined. This would then have the 141<sup>st</sup> meridian as the continental shelf boundary, with another line possibly delimiting the fisheries zone or exclusive economic zone.

Internationally, the Soviet Union has adopted the sector theory, at least in literature, where Soviet writers refer to the Soviet northern seas as the entire Soviet sector up to the North Pole (Theutenberg, 1984). This sector of the Arctic is considered as historical waters to which the Soviets have a historical right, created by the Russian people's industrious work during several centuries. A second Russian reference

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enclosing all of the Arctic up to the North Pole is contained in a note to the American government following a 1924 incident. A decree in 1926 stated that the treaty between the United States and Russia, which draws a demarcation line between the two countries in the Bering Strait, "goes in a direct line to the north, without deviation right to the Polar Sea" (Theutenberg, 1984). Using this line as the eastern sector line the Soviets also propose a western line that would go from 32° 04' 35" east to the North Pole with a deviation to allow for the Norwegian/Russian agreement on the Svalbard Islands (Figure 3.3).

In the southern circumpolar region, the continent of Antarctica has also been divided into sectors using the sector principle. In Antarctica there are nine sectors with the governments of Norway, Australia, France, Chile, Argentina, New Zealand and the United Kingdom exercising jurisdiction over one or more sectors. But, there exists a major difference between the Antarctic and Arctic application of the sector principle (Theutenberg, 1984):

In the Arctic, states used the principle to establish their sovereignty over land yet to be discovered which lay between lines of longitude defined by the easternmost and westernmost limits of the land fronting the Arctic Ocean. In the Antarctic the United Kingdom, France and New Zealand used it to claim slices of the Antarctic dependant on acts of discovery on the land Antarctica.

It is possible therefore that customary international law recognizes the use of the sector theory to describe the area of jurisdiction of land masses by a state. An application of the principle over maritime limits may still be weak within international law. Thus, the application of the sector theory by Canada to delimit the U.S. - Canada boundary in the Beaufort Sea must be supported by additional arguments that are in favour of the 141<sup>st</sup> meridian.

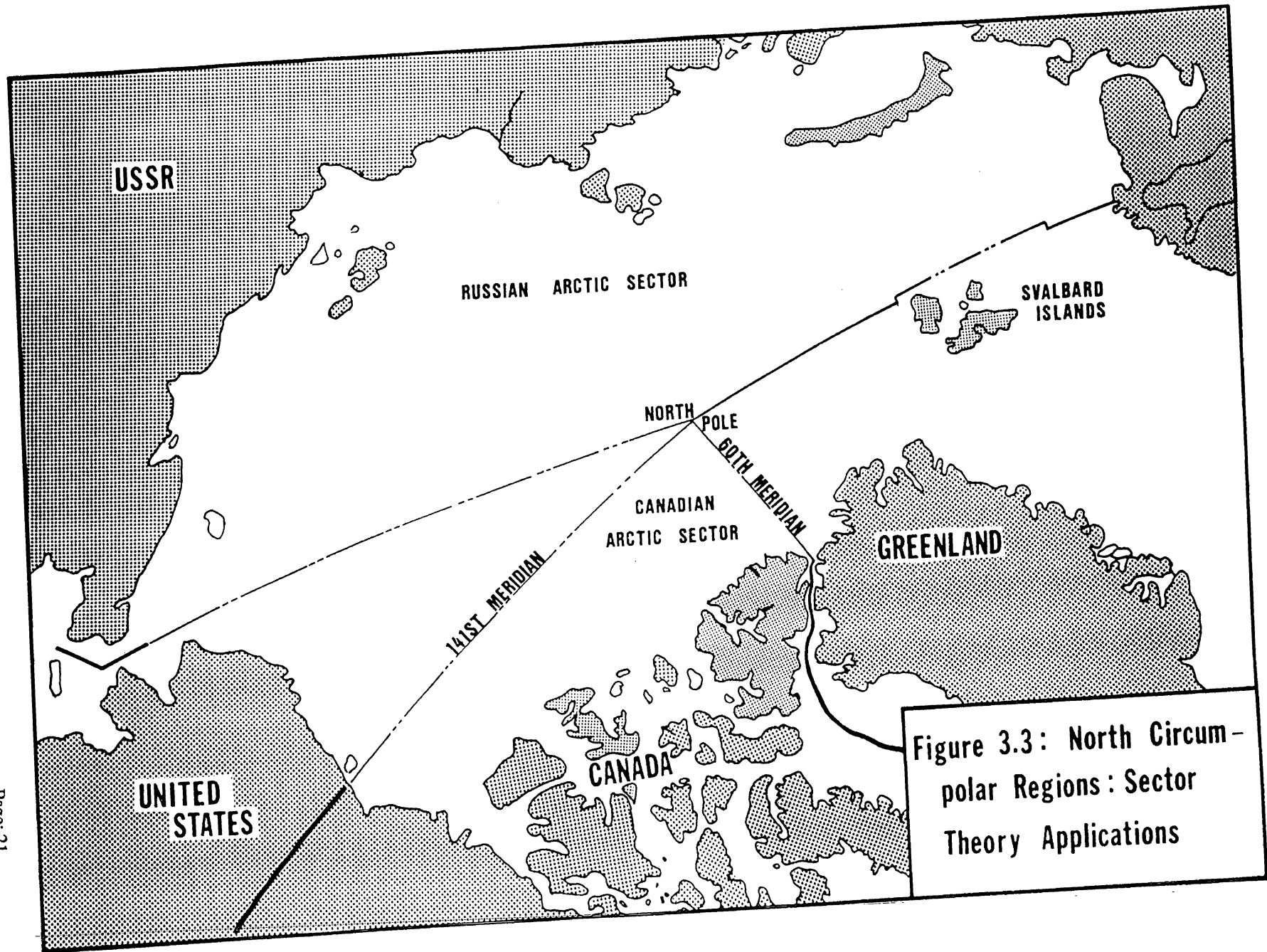


Figure 3.3: North Circum-polar Regions: Sector Theory Applications

### 3.3.2 The Grisbadarna Principle

Support for the sector theory and hence the 141<sup>st</sup> meridian as the dividing line on behalf of Canada may be derived from an aspect of international law known as the Grisbadarna Principle. This principle originated from a dispute between Norway and Sweden settled by the Permanent Court of Arbitration that decided the maritime boundary between the two countries over the Grisbadarna lobster bank.

The decision rendered by the arbitrator's statement became known as the Grisbadarna Principle and may be stated as (Lagoni, 1979):

it is a settled principle of the law of nations that a state of things which actually exists and has existed for a long time should be changed as little as possible; and this rule is especially applicable in a case of private interests which, if once neglected, cannot be effectively safeguarded by any manner of sacrifice on the part of the government of which the interested parties are subjects.

One application of this may be seen in the United States acquiescence to the historical claim of Canada's use of the sector principle. This is supported on Canada's part by its hydrographic work in the area and its granting of oil and gas leases for the area. Although no actual exploration work has been performed by a Canadian operator within the offshore region under dispute, there is exploration activity occurring to the east off the Yukon coast.

Outside of the Norway-Sweden arbitration, the Grisbadarna Principle has been applied by West Germany and Denmark. When these two countries re-delimited certain areas of the continental shelf in the North Sea in compliance with the International Court of Justice's decision, a certain area where drilling operations had been conducted by Danish concessionaires was retained by Denmark, although from a strictly geographical point of view it should have been allotted to Germany (Figure 3.4). Apparently, the determining factor was the Grisbadarna Principle rather than the

unity of the deposit, because only promising traces but no definite deposit of oil and gas had been discovered in that area at the time of the delimitation (Lagoni, 1979).

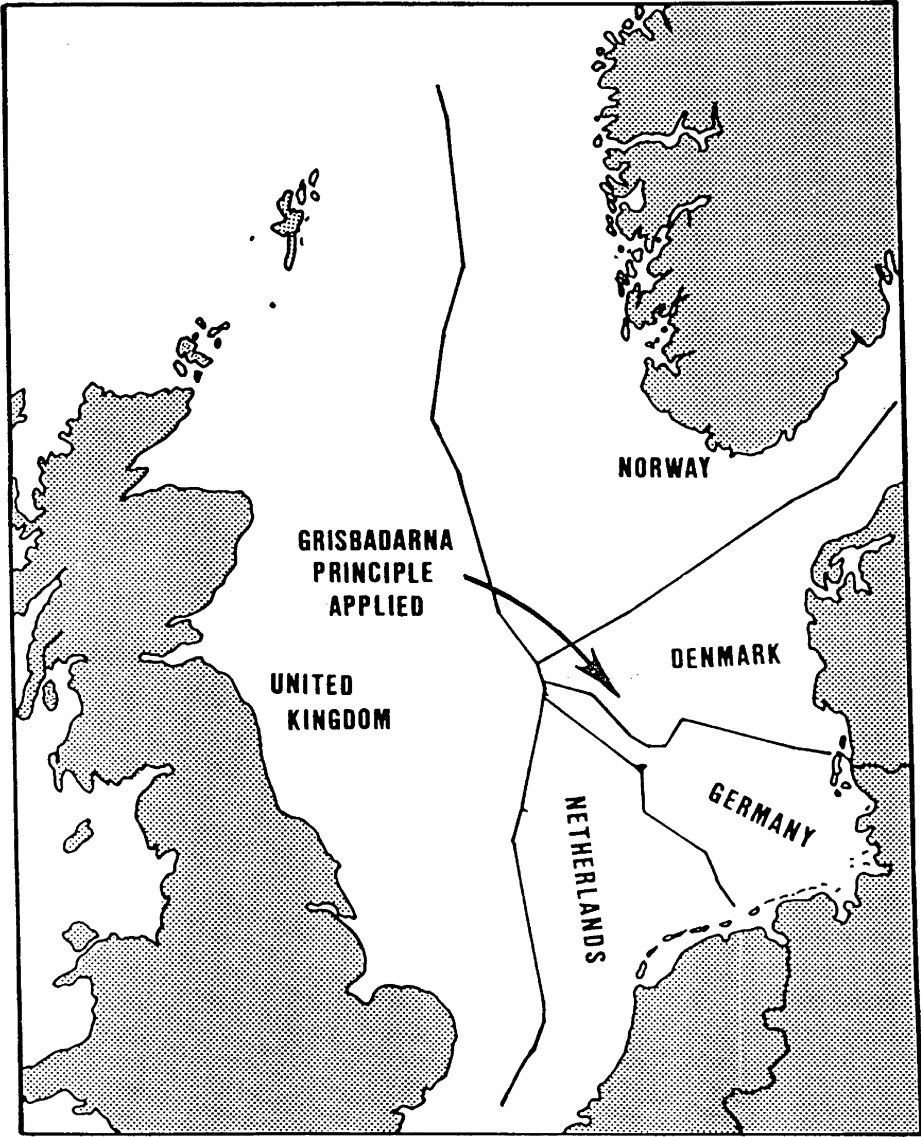
With these applications, the Grisbadarna Principle is considered established within international law. Thus, Canada could have a possible case for using this principle within the context of the 141<sup>st</sup> meridian. As an argument, the Grisbadarna Principle is relevant should the boundary dispute go before a court of arbitration or be negotiated.

### **3.3.3 Equidistance**

If the United States is not going to accept the sector theory and its associated 141<sup>st</sup> meridian then it would have to be presumed that its position would favour that of an equidistance principle. A line drawn off the Beaufort coast in accordance with this principle is shown in Figure 3.1. Although this line would not favour Canada, it is definitely advantageous to the United States to support its implementation. The establishment of a line by the equidistant principle is seen as technically simple for construction purposes, while at the same time having arguable points in its favour.

The shape of the coastline has already been described as concave with an azimuth of approximately 120 degrees. Its orientation plus the lack of any irregular topographical features along the coastline or offshore (Figure 3.2), offer an easily constructed line from the selected basepoints. The lack of a coastal population on either side of the Yukon or Alaska border, plus the absence of a socio-economic base that would result from this population also contribute to making the equidistant line a simply constructed one. This is due to the fact that no proportioning has to be done to account for variances in the populations and coastline lengths.





**Figure 3.4 : ICJ North Sea Continental Shelf Boundaries**  
AFTER : HODGSON & SMITH (1979)

## CANADA'S UNRESOLVED MARITIME BOUNDARIES

The application of the equidistant line is fully accepted as an equitable solution by international law. Thus, its proposal by the United States as the maritime boundary does seem fitting. For Canada, its prior treaty with Denmark using an equidistant line and its support of the equidistant line for two of the other three U.S. boundaries, i.e. Dixon Entrance and Juan de Fuca Strait, show that this country fully recognizes the equidistant principle.

If neither the 141<sup>st</sup> meridian or equidistant line are adopted than a possible solution would be the rotation of a geodesic line about the beginning point, boundary monument #1. This type of line would be a compromise on the part of both states, but may be the only equitable solution to the dispute. The actual location of such a line and its supporting arguments may lie only in the art of negotiation where both states would give a little to reach a compromise. The amount of area that lies between the 141<sup>st</sup> meridian and an equidistant line has been calculated as approximately 31,137 square kilometres. A dividing line giving equal area, within the disputed area, to both states could be this compromise line. With such a considerable portion of territory involved, the final resolution of the boundary depends on the urgency of the governments to come to an agreement.

### 3.4 SETTLEMENT URGENCY

An analysis of the major Beaufort Sea factors that could press for the solution of this boundary is required if any degree of urgency is to be attached. As with all boundary disputes, there are underlying factors that contribute to each state's position. Within the Beaufort Sea region, there exist mainly economic factors along with those of national sovereignty.

## CANADA'S UNRESOLVED MARITIME BOUNDARIES

Since there is an absence of population the need for considering the human element is almost non-existent. Also, there has not been any appreciable harvesting of the living resources off the coasts within the area of the boundary dispute by either nation. Yet, a major socio-economic factor exists in the form of offshore energy resources. Both Canada and the United States have already been shown to be active within the region with both countries having proven resources of oil and gas. Since the offshore area is inhospitable most of the time, any actual exploitation would only be done on a major geological structure. This is the case in the Prudhoe Bay region. Thus an identifiable concern within the region is the delineation of all energy resources to determine the viability of exploiting the resource. With present world market conditions favouring the supply side, the importance of the region has declined as an energy base and any resulting urgency toward a solution has lessened.

Geographically, the region was best described in the Anglo-Russian treaty as “the frozen ocean” with the sea being ice covered most of the year except for a short summer ice free window during July to September. Even then, the permanent polar ice pack only retreats northward a maximum of 140 miles from shore. During this ice free window fragmented ice flows remain as a hindrance, but do not completely disrupt shipping as happens with the winter months. These types of environmental conditions are not conducive to any form of urgency on behalf of either government. Also, the possibility of disputes occurring within the region is diminished due to the lack of activity.

The recent announcement by the United States that it proposes to grant drilling rights within "Canadian" waters has begun debate on the issue in earnest. Both Canadian federal and territorial representatives have refuted U.S. claims to the area and herein may be the degree of urgency required to propel negotiations onward.

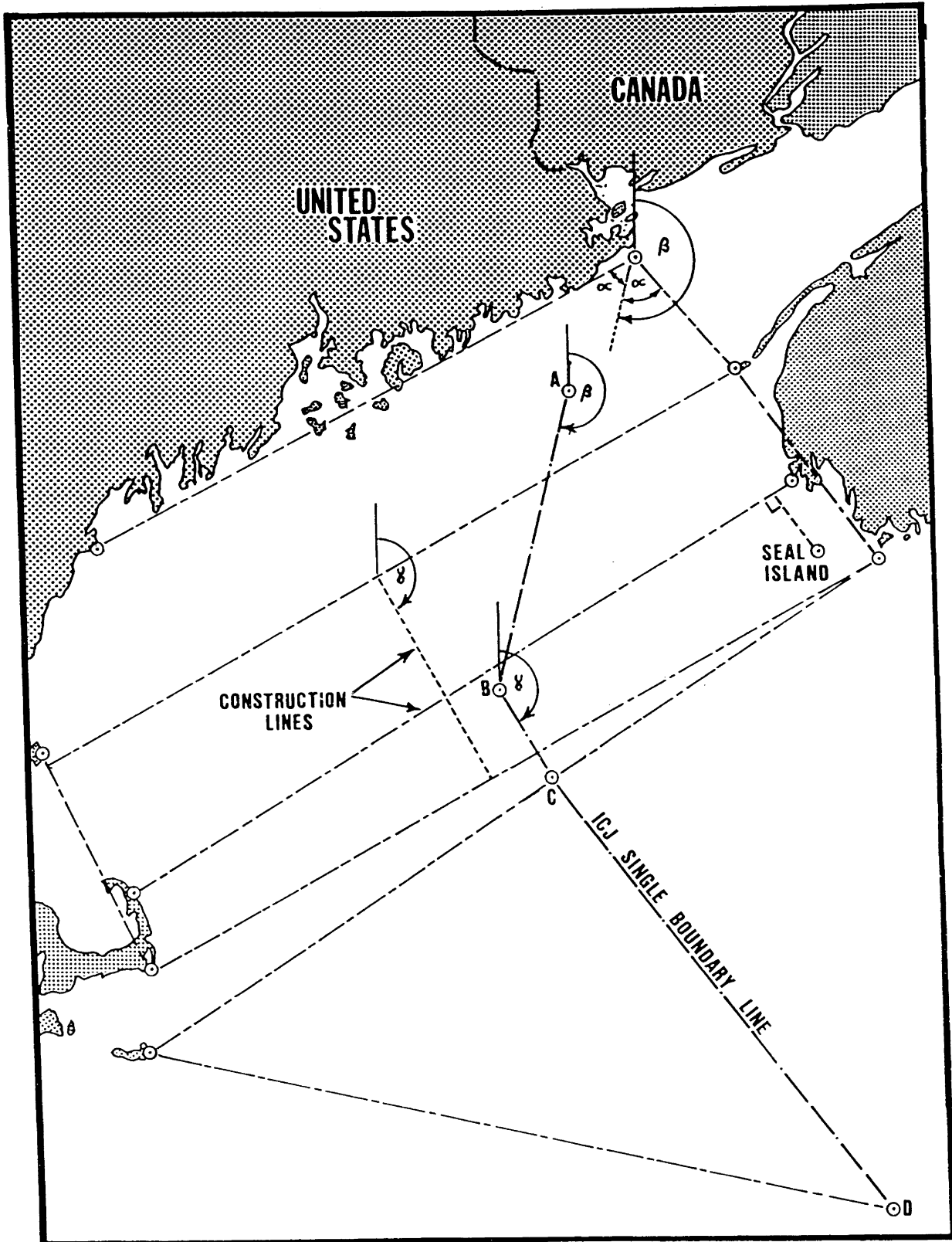
### 3.5 GULF OF MAINE COMPARISON

The recent Gulf of Maine dispute introduced Canada to the world court on an opposite side to that of the United States. Following arguments by both sides as to the placement of the correct boundary within the Gulf of Maine, the ICJ reached a decision on October 12, 1984. Although both countries state that the decision of the court will only apply to that particular boundary and not establish wide reaching precedents (Lenarcik, 1985), there exist similarities and differences that are easily shown with other unresolved boundaries. A comparison is now attempted with the Beaufort Sea boundary.

The coastal configuration in the Gulf of Maine region and that found along the Beaufort Sea are opposites. In the Gulf of Maine there is a complicated coastline that was used during the presentation of cases by each respective state and by the ICJ within its decision. Beginning with a polygonal model of the Gulf the court relied on the coastline configuration to form two sectors through which the boundary was delimited. The second segment of the line was dependent on coastline lengths within the polygon, thus resulting in a proportioning or ratio that forced a median line eastwards toward Nova Scotia (Figure 3.5). Also, the proportioning was influenced by the half island effect given to Seal Island with this reducing the ratio from 1.38 : 1 to 1.32 : 1.

Such a coastal influence within the Beaufort Region on line placement is cancelled as there exists a simple, easily defined and modelled area (Sect. 3.1). Without geographical anomalies the Beaufort boundary, whether it is negotiated or arbitrated, will not be effected by land ratios or half effects given to islands.

The Gulf of Maine decision was applied to two boundaries at once, such that the fisheries boundary and continental shelf to the end of the fisheries boundary were



**Figure 3.5: Gulf of Maine – ICJ Boundary Delimitation**

**AFTER : LENARCIK (1985)**

## CANADA'S UNRESOLVED MARITIME BOUNDARIES

resolved by one line. This could and really should be applied for the Beaufort Sea where one boundary would be used to resolve all of the zones. A solution of this type, regardless of the actual delimiting line, is an equitable approach to adopt for negotiations and/or submittal to arbitration.

A small point to consider within the overall ICJ decision is that the third line segment ends at the same place as the originally proposed equidistant line application of Canada. If an altering of the boundary is attributed to only the geographical effects then there could be support of an equidistant line under uncomplicating factors. With an uncomplicated line such as the one produced by the Beaufort Sea coastline, possible support of the equidistant principle may exist within the eyes of the court.

Any boundary that is finally adopted for the Beaufort Sea would in all likelihood be dispute free. This is ensured by the absence of socio-economic conditions that have fueled the fishing disputes on Georges Bank.

Finally, an analysis of the technical delimitation of the Gulf of Maine boundary shows that 11 charts were used to delimit the full boundary, Appendix B. In the region of the Beaufort Sea boundary, Canada has 3 charts compiled that allow for basepoint determination. These are at a large enough scale to allow good definition of the basepoints. In the case of the Gulf of Maine a standard deviation for each basepoint position is given as  $(\phi, \lambda) = 1''$  (Beazley, 1984). This may not be achievable from the Canadian charts for the area as the chart scales are smaller by a factor of approximately 1 : 3 and 1 : 10.

**CANADA'S UNRESOLVED MARITIME BOUNDARIES**

## **4.0 Denmark - Canada Maritime Boundary : Davis Strait, Baffin Bay and Nares Strait**

Canada and Denmark are opposite states that share a maritime boundary from the Atlantic Ocean to the Arctic Ocean. The two countries agreed to a common maritime boundary in 1973 that covers the majority of the offshore region between the two states. Yet, there remain two specific areas that require further extension of the offshore boundary to complete the seaward extension of the countries' jurisdiction.

This chapter examines the boundary as established by treaty in 1973 with an analysis of the two unresolved areas attempted. The historical background to this boundary is restricted to the agreement between Canada and the Kingdom of Denmark in 1973. Also, the solutions for the further extensions of the boundary are drawn from this previous agreement. Initially, a geographical description of the area is given prior to examining the boundary between the two states.

### **4.1 AREA UNDER CONSIDERATION**

The geographical configuration of the Denmark-Canada boundary is such that it delimits the territorial sea, exclusive economic zone and continental shelf shared by the two countries. The actual land regions involved (Figure 4.1) are the eastern coast of Greenland and the western coasts of Labrador, Baffin Island, Devon Island and



CANADA'S UNRESOLVED MARITIME BOUNDARIES

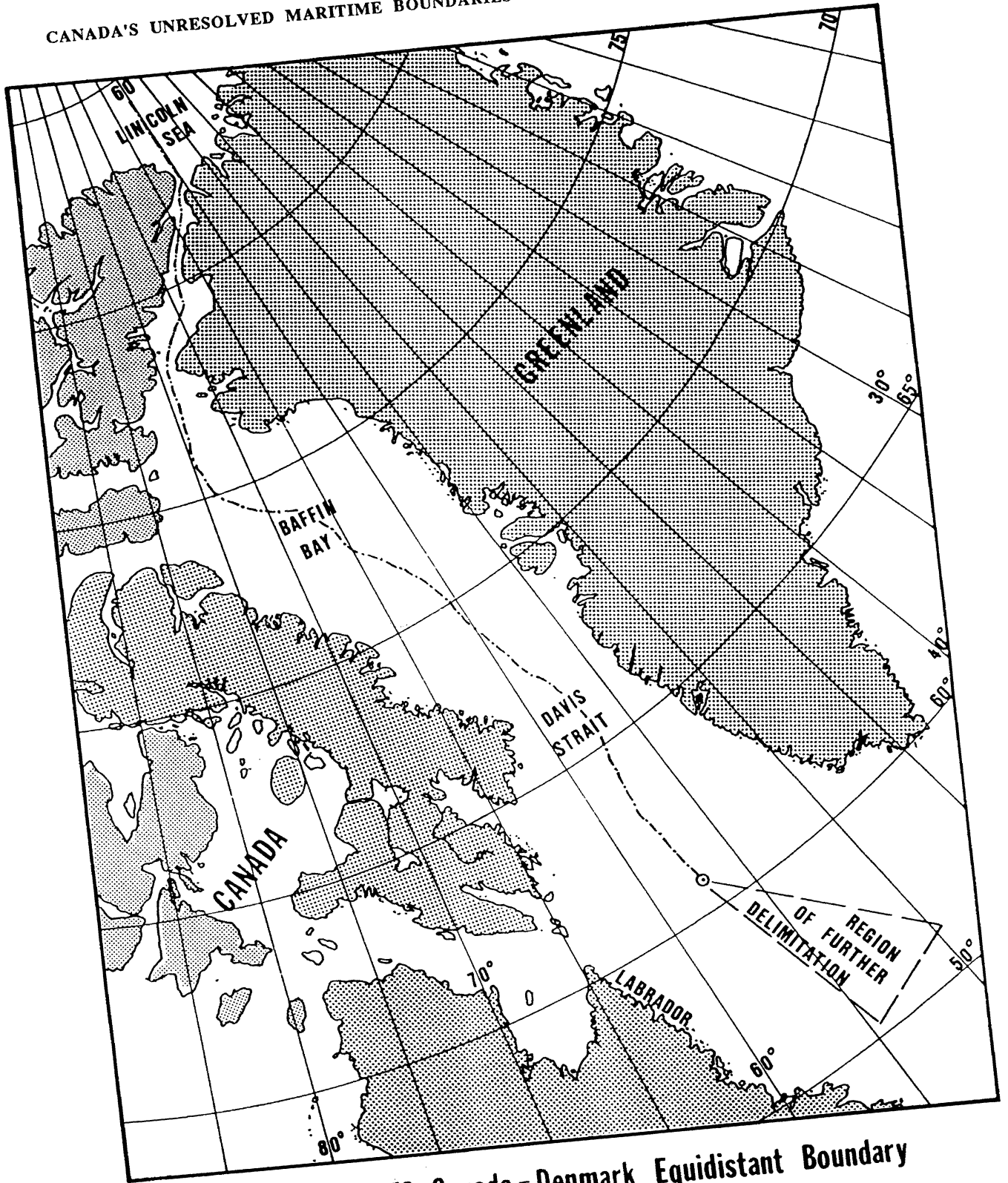


Figure 4.1 : 1973 Canada - Denmark Equidistant Boundary

Chapter 4: Denmark - Canada maritime boundary : Davis Strait, Baffin Bay and Nares Strait

Ellesmere Island. Overall, the area is considered as an Arctic region with an associated limited population and economic base.

The maritime area under consideration is configured into five distinct geographical zones. Beginning with the southernmost region there is the Atlantic Ocean separating Greenland from the southern tip of Baffin Island and the north-eastern coast of Labrador. This is where the southern part of the 1973 boundary agreement begins and over which a further boundary extension is required. Due to the distance being greater than 200 nm from either coast within much of this area, only a delineation of the continental shelf dividing line is considered significant here. Next, there is Davis Strait separating the eastern coast of Baffin Island from Greenland, with Davis Strait leading into Baffin Bay. Davis Strait runs north north-west and is narrowest along latitude 66° 32' north with a maximum depth of approximately 600 metres.

Moving north, the area of Baffin Bay is contained by Baffin Island, Devon Island and Ellesmere Island on the west with Greenland providing an enclosure to the east. The basin of Baffin Bay has a maximum depth slightly greater than 2300 metres. Both Davis Strait and Baffin Bay are wide enough such that the territorial seas of both Canada and Denmark have independent boundaries. For the EEZ and continental shelf, a common boundary was agreed to in 1973 (Figure 4.1). This is a median line that extends southward into the Atlantic Ocean and northward through Nares Strait. Nares Strait is a narrow channel that connects Baffin Bay with the Arctic Ocean separating Ellesmere Island and Greenland. Through this Strait the median line boundary also acts as a dividing line for the territorial seas of Canada and Denmark. Finally, there is the Arctic Ocean lying north of Greenland and Ellesmere Island with the specific body of water in this region referred to as the Lincoln Sea. The 1973 boundary agreement does provide for an equidistant line dividing the maritime zones within the Lincoln

## CANADA'S UNRESOLVED MARITIME BOUNDARIES

Sea, but the line does not extend far enough to cover the full EEZ and continental shelf that may be claimed by the two states.

The amount of coastline belonging to the two countries is seen as approximately the same, with no coastal distortions present in the area of the remaining two boundary extensions. The population base is restricted to five communities along Greenland's coast with one community or base on Ellesmere Island.

The continental shelf area of the Atlantic Ocean may be considered a navigable body of water, with restrictions imposed by ice cover and icebergs. The Lincoln Sea is not a navigable area, as it is within the permanent polar ice pack region and is ice covered year round. Presently, there are no major economic activities taking place within the two areas, although Canada has included waters off Labrador and Baffin Island with Fishing Zone 4 (Canada Gazette, 1977). This zone has a 200 nm boundary and for jurisdictional purposes is an extension of the Grand Banks fishing zone.

### 4.2 HISTORICAL BACKGROUND

The treaty of 17 December 1973 delimited much of the maritime boundary between Greenland and Canada. This treaty established a dividing line between Greenland and the Canadian Arctic Islands that allowed each state to exercise its rights under the Convention on the Continental Shelf of April 29, 1958 (Canada Treaty Series, 1974).

The treaty used the equidistance principle to establish a median line over two sections. First, from latitude 61° 00' north to 75° 00' north the boundary was represented by geodesic lines joining 113 geographical points. The positions of these points were computed from straight baselines along the coasts of the Arctic Islands and Greenland. This portion of the boundary covered Davis Strait and Baffin Bay. The

## CANADA'S UNRESOLVED MARITIME BOUNDARIES

second dividing line ran along Nares Strait with the coordinates of the boundary points contained within two series. Again geodesic lines were used to join the points, with a total of nine points in Series A and five points in Series B. The positions of the points within these two series are defined by latitude and longitude on Canadian Hydrographic Service charts 7071 of 31 July 1964 and 7072 of 30 April 1970 (Canada Treaty Series, 1974).

The treaty provided for further negotiation on the boundary to clarify any discrepancies found in the charts or coordinates and to deal with exploration and exploitation along the dividing line. Since two different datums were used, i.e. NAD'27 for Canada lands and Qornoq for Greenland (Canada Treaty Series, 1974), the treaty recognized that future surveys would provide better estimates of the datum shifts involved and thus recognized that updating and adjusting of coordinates with respect to both datums was required. In the case of disputes over straddling resources, the treaty has a built-in clause that gives equal sharing based on the Anglo-Norwegian type of sharing in the North Sea where Norway gets 60% and Britain 40% based on the location of the dividing line over the mutual resource deposit (Gault, 1985). Finally the treaty recognized that changing international law over the continental shelf could alter delimitation of national jurisdiction. With this treaty in place between the two states, the resolution of the remaining maritime boundary should follow according to the principles and techniques used in 1973.

### 4.3 BOUNDARY DELIMITATION SOLUTIONS

The only possible boundary solution over the remaining maritime areas shared by Canada and Denmark is an equidistant line. This would be in keeping with the dividing line agreed to in 1973 and is seen as consistent with the context of that treaty. The two boundary extensions would in all likelihood be resolved through negotiation rather than any form of arbitration.

The extension of the boundary to cover the remainder of the continental shelf in the Atlantic would originate from treaty point 1. From here the boundary would follow a median line to the end of the continental margin. In the Lincoln Sea, the boundary extension would originate from boundary point 127 and presumably follow a median line again. The selection of the median line by the two countries shows that there were no special circumstances under consideration in 1973, with a precedent set between the two countries following the selection of the equidistance principle for boundary delineation.

A consideration within the Lincoln Sea is Canada's historical use of the sector principle and the 60<sup>th</sup> meridian as a boundary for these Arctic waters. As with the 141<sup>st</sup> meridian used in the Beaufort Sea Canada has recognized the 60<sup>th</sup> meridian since the beginning of the twentieth century. An examination of Figure 4.1 shows that an adherence to the 60<sup>th</sup> meridian as the offshore boundary for part of the Lincoln Sea does not prove detrimental to Denmark.

A comparison with the Gulf of Maine boundary decision is not attempted as the author feels that no such comparison is possible. This is due to the fact that both Denmark and Canada have followed a boundary delimitation process that adheres to negotiation and a strict application of the equidistance principle. Next, the urgency of resolving the two boundary extensions is examined.

#### 4.4 SETTLEMENT URGENCY

There has been an absence of disputes between Canada and Denmark over the areas requiring further boundary delimitation. Concerns have been expressed by Denmark over certain Arctic Ocean issues; specifically liquid natural gas transportation under high pressure, but this is confined to the Davis Strait and Baffin Bay region. As pertains to the 1973 boundary treaty, both sides accept the dividing line as the international boundary. It would therefore appear that an agreement to further extend the dividing line has a low priority with neither state actively pursuing an agreement.

With a treaty in effect over the majority of offshore lands between Greenland and the Canadian Arctic Islands there is no pressing need for further boundary extension at this time. This is supported by the lack of economic activity in the areas especially with regards to offshore energy exploration. Also, the two areas are among the most hostile in the world for working conditions, with specialized equipment and techniques required that make the region one of the most expensive to operate within. With neither industry or government actively seeking a solution to the boundaries, the final extensions are seen as being negotiated at the opportunity of each government.

The 1973 treaty and other government publications have identified the charts and techniques used for initially defining the median boundary. With this in place, the construction baselines along each coast and the line type and datums have already been agreed to between the two states. A list of the charts used for delineating the 1973 boundary are shown in Appendix B. These charts may also be used for delineating the Atlantic Ocean and Lincoln Sea extensions.

**CANADA'S UNRESOLVED MARITIME BOUNDARIES**

## **5.0 France - Canada Maritime Boundary : Saint Pierre and Miquelon**

Saint Pierre and Miquelon are the last vestige of French colonial power in North America. Lying a little more than a dozen miles off the Newfoundland coast, these two French islands are the source of a major boundary dispute between France and Canada. There is a minor dispute over delimitation of the boundary in the channel between Saint Pierre and Miquelon, but the major stumbling block in resolving the disagreement is the offshore continental shelf (Mills, 1971).

This chapter examines the origins and history of this boundary dispute with an attempt made at possible boundary solutions. A comparison is made between this boundary dispute and the Gulf of Maine dispute with an idea of the urgency of resolving this dispute given. Initially though, an outline of the coastal configuration, economic activity and offshore region under consideration is presented.

### **5.1 COASTAL CONFIGURATION AND LAYOUT**

The islands of Saint Pierre and Miquelon lie, at their closest point, 14 nautical miles south of Newfoundland, but the Canadian island known as Little Green Island lies only three miles from the French coastline (Beauchamp et al., 1973). Within this area Canada shares a territorial sea boundary with France as well as some form of dividing



## CANADA'S UNRESOLVED MARITIME BOUNDARIES

line delimiting the EEZ and continental shelf. This section gives a brief overview of the land areas and the disputed offshore region.

Offshore, the dispute over the boundaries covers the western and south-western portion of the Grand Banks, part of the southern continental slope and past the midway point in the Laurentian Channel to the west (Figure 5.1). The Grand Banks are of a unified composition and geological structure as they extend from Newfoundland with the disputed portion dividing the Grand Banks from the Scotian Shelf. The fishery of the region is rich with various migrating fish stocks entering the region annually. Offshore energy resources have not been explored for within the disputed area, but may be contained therein as finds have been announced for the eastern Grand Banks and Sable Island regions.

The landmass of Saint Pierre and Miquelon is 93 square miles with a population of 6041 in 1982 (Canadian Hydrographic Service, 1983). The island of Saint Pierre supports a harbour and town with the major industry tied to supplying the offshore fishing fleets. A local fishing fleet also operates from the port of Saint Pierre with most of the population concentrated within this port. Across the channel, Newfoundland has a number of communities located at the tip of the Burin Peninsula that are similar to the port of Saint Pierre. Each of these is also dependent on the fishery as the major economic input to the region, with offshore energy exploration providing additional economic input. For area, the island of Newfoundland is much greater at 42,734 square miles.

In determining the basepoint locations for a boundary delimitation, the straight baselines and associated basepoints of Saint Pierre and Miquelon would be chosen for France. Canada's straight baselines and the determining basepoints would be located

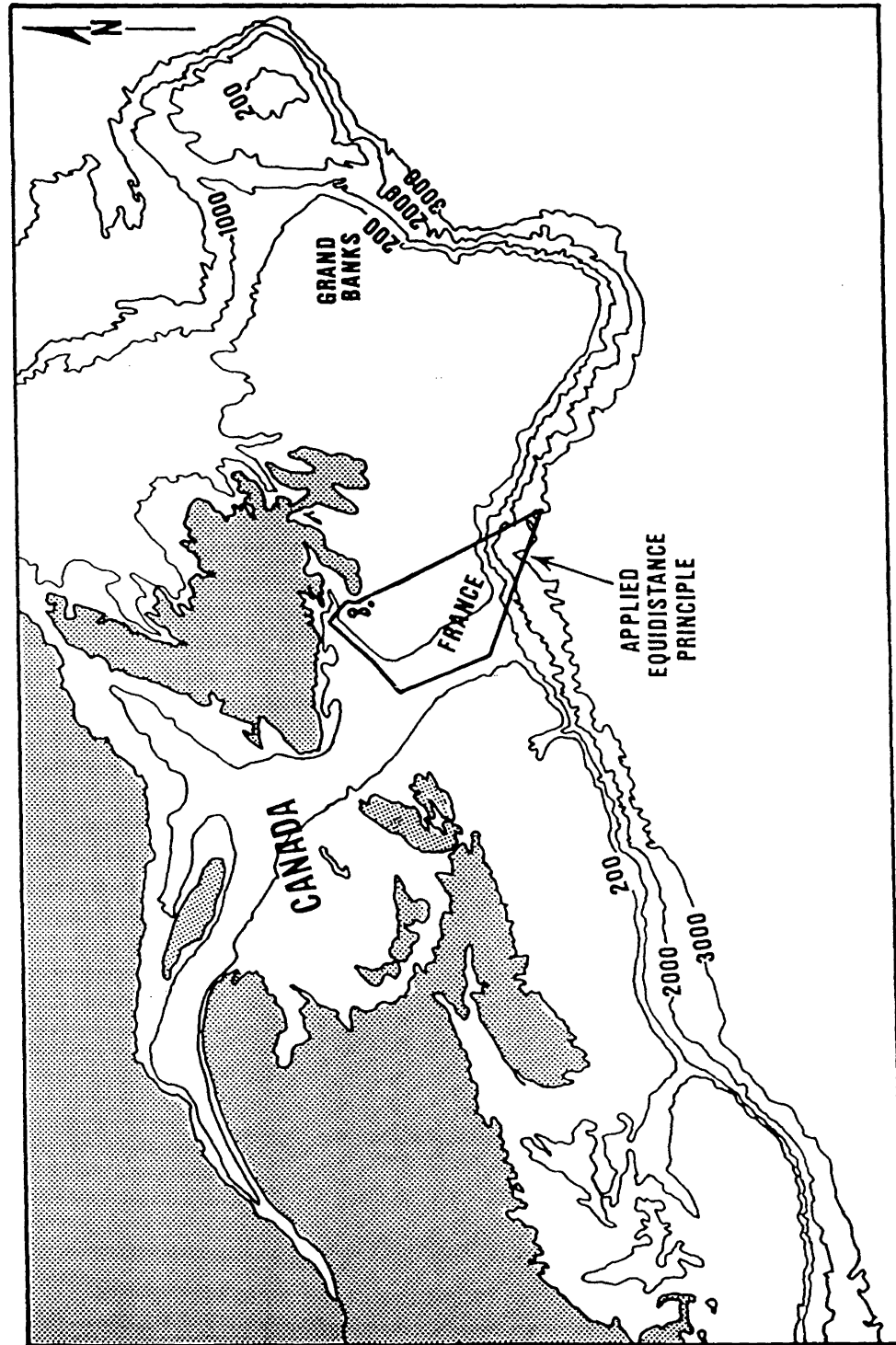


Figure 5.1 : St. Pierre et Miquelon Equidistance Offshore Boundary  
AFTER : MILLS ; (1971)

along the southern coast of Newfoundland, the Burin Peninsula, the Avalon Peninsula, the eastern coast of Cape Breton, and Sable Island.

## 5.2 HISTORICAL BACKGROUND

In 1763 the islands of Saint Pierre and Miquelon were ceded to France as part of the treaty ending the Seven Years war. This treaty also allowed for French fishing rights along the coast of Newfoundland with the remainder of North America given to the British. Since then, France has lost its rights to the Newfoundland coast but has kept and developed the islands of Saint Pierre and Miquelon as French fishing outposts on the Grand Banks. This section examines the recent history leading to the present dispute between France and Canada over the offshore maritime boundaries.

Conflict initially arose over the maritime boundary in this area due to the promise of offshore oil and gas in the early 1960s. On 17 October 1966, a Canadian order-in-council designated certain shelf areas in the vicinity of Saint Pierre and Miquelon as being open to exploration permits. On 24 December 1966, the federal government took the rarely used step of advertising a public invitation to tender in the Canada Gazette on these recently designated exploration blocks (Johnson and Zacher, 1977). These steps were the first move toward applying jurisdiction over the region and were done to establish de facto Canadian jurisdiction there (Johnson and Zacher, 1977).

The first French move to exert jurisdiction over the region also occurred in the area of issuing oil and gas exploration permits. In 1967, the French government issued an oil exploration permit to Petropar (now Elf Oil) in this region, an action that was even more significant in view of the fact that the French Government itself held a large equity interest in the company (Johnson and Zacher, 1977). A retaliation to this move

by France resulted in Canada issuing exploration permits to Mobile and Gulf in 1968. These permits were issued such that there existed an overlap with the French permits and thus a dispute arose. The area under dispute is shown in Figure 5.1 and is seen as consisting of a large portion of the continental shelf south of Saint Pierre and Miquelon and Newfoundland.

A move by France to exert jurisdiction over all its adjacent submerged lands resulted in a 1968 law proclaiming sovereignty over the continental shelf adjacent to any French territory. This of course included the islands of Saint Pierre and Miquelon and indicated a French right to the continental shelf in the region. In December 1968, France passed this law regulating and proclaiming sovereign rights over the exploration for, and exploitation of, natural resources of the continental shelf adjacent to French territory, specifically including overseas French territories (Johnson and Zacher, 1977). Subsequent to this, France and Canada agreed not to undertake any provocative permit-granting activity in the disputed area, and oil companies were advised to refrain from carrying out seismic and drilling operations until the conflicting claims could be settled through bilateral negotiation (Johnson and Zacher, 1977). Meetings have taken place since that time, but have not resulted in an open agreement, with the areas in dispute still held as off-limits to exploration.

On 8 March 1970, Canada ratified the 1958 UN Continental Shelf Convention with expressed reservations on France's declared reservations to the convention. As France had earlier signed this agreement with reservations, Canada was reacting to a perceived threat on the part of France regarding Canadian offshore claims. These of course were directly related to the dispute over the area surrounding Saint Pierre and Miquelon. The reservations may be stated as (Johnson and Zacher, 1977):

- The Canadian government indicated its dissatisfaction with a French reservation relating to a boundary calculated from baselines established after 29 April 1958

## CANADA'S UNRESOLVED MARITIME BOUNDARIES

(the date the convention was signed) or to a boundary extending beyond the 200 metre isobath; and

- A Canadian reservation concerned the French reservation to a boundary in areas where there were “special circumstances” within the meaning of Article 6, para. 1 and 2.

These reservations were clearly directed at the boundary surrounding the islands of Saint Pierre and Miquelon where the Canadian government felt that special circumstances do indeed exist. In effect, the Canadian government was arguing that such "special circumstances" warranted a substantial reduction in the shelf area allocated to France (that is, the small area of the islands in relation to the shelf area accruing under the equidistance principle) (Johnson and Zacher, 1977).

In 1971 France extended all of its territorial sea boundaries to 12 nautical miles. This was in keeping with the changing definition on the legal extent of the territorial sea. This extension of the territorial sea boundary to 12 nm around Saint Pierre and Miquelon can be separated into two sections. First, an extension to 12 nm on the south and west sides of the islands did not conflict with Canada's territorial sea extension. However, on the east and north sides of Saint Pierre and Miquelon the 12 nm territorial seas of both nations overlapped. These extensions to the territorial sea required a dividing line within the separating channel.

On 27 March 1972, a Canada-France Agreement on Mutual Fishing Practices addressed the landward boundary between Saint Pierre and Miquelon and Newfoundland (Figure 5.2). From this 1972 agreement Symmons (1980) addressed three factors :

- the agreement settled the maritime boundary on the landward side of the islands;
- Canada declared that if it were to extend its fishery limits in the future, it would subject to certain conditions, continue to recognize French fishing rights in the Atlantic; and
- the agreement contained a no prejudice clause which *prima facie* gave both states a *carte blanche* to declare future 200 mile fishery zones.

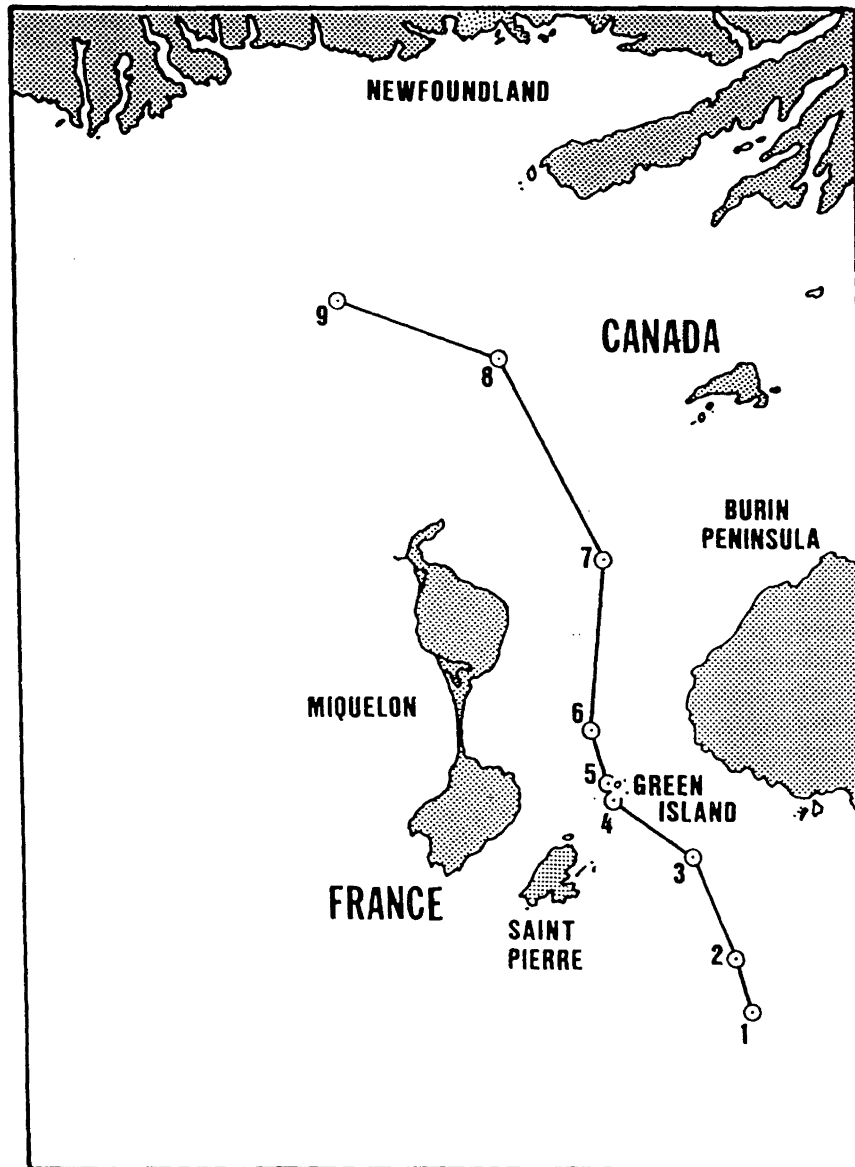


Figure 5.2 : 1972 Mutual Fisheries Agreement Boundary

AFTER: SYMMON (1980)

The no prejudice clause was contained within Article 9 of the agreement and reads (Symmons, 1980):

No provisions of the present agreement shall be interpreted as prejudicing the views and future claims of either party concerning internal waters, territorial waters or jurisdiction with respect to fisheries or the resources of the continental shelf.

This wording then tends to make the agreement hold only for the fisheries agreement signed and not any binding boundary delimitation. The map indicating this boundary (Figure 5.2) as established from the agreement shows an equidistant line being followed that neglects Little Green Island situated in the channel. It is shown that Little Green Island is not afforded a complete territorial sea of which it should be due. A confusing aspect of this agreement is Article 8 which states (Symmons, 1980):

The line defined in the annex to the present agreement determines, in the area between Newfoundland and the islands of Saint Pierre and Miquelon, the limit of the territorial waters of Canada and of the zones submitted to the fishery jurisdiction of France.

As such, it would seem that the territorial sea boundary of Canada has been addressed without addressing the same boundary of France. While at the same time, Article 8 is delimiting a fisheries boundary for France without mention of a Canadian fisheries boundary. This cumbersome wording makes it unclear whether it is a territorial sea boundary or a 12 nm fisheries zone which is being delimited (Symmons, 1980).

The delimitation of the seaward boundary over the continental shelf was addressed in May, 1972 with the *Releve des Conclusions* between Canada and France. This confidential understanding between France and Canada, the exact details of which have not been fully published, followed closely on the 1972 Mutual Fisheries Agreement (Symmons, 1980). Although details are scarce on the 1972 *Releve des Conclusions*, reference to the agreement is found in the continental shelf arbitration case between Great Britain and France.

## CANADA'S UNRESOLVED MARITIME BOUNDARIES

By a French decree dated 25 February 1977, Saint Pierre and Miquelon became the first French overseas insular possession to be granted a 200 mile EEZ. This French decree may have been in response to Canada's Territorial Sea and Fishing Zones Act of 1 January 1977 which established Canada's jurisdiction to 200 nautical miles. Article 1 of the French decree stated that the interior limit of this zone was to extend 188 nautical miles from the territorial seas of the islands "sous reserve d'accords de delimitation avec le Canada" (Symmons, 1980). Again this extension of its maritime boundary around Saint Pierre and Miquelon to include a 200 nm EEZ was in keeping with the trends of international law. Thus, France declared a full EEZ while holding the practice of preserving a no prejudice clause within the decree thereby allowing for further negotiations with Canada.

Finally, in September 1977, France defined the straight baselines from which the islands adjacent territorial sea was to be measured with mention made of the 1972 France-Canada fisheries agreement (Symmons, 1980). To this point, both France and Canada had declared the following :

- 12 nautical mile territorial seas;
- 200 nautical mile EEZs;
- jurisdiction over the adjacent continental shelf; and
- straight baselines for the purposes of delineating all these zones.

If ever there was a basis for disagreement, herein lay the cause. Active discussions and negotiations have been ongoing between France and Canada toward finding a solution to these areas of dispute. These negotiations resulted in a recent controversial agreement between France and Canada that was arrived at only after a decade of discussions.



## CANADA'S UNRESOLVED MARITIME BOUNDARIES

The agreement of January 1987 is a one year agreement signed between France and Canada that provides for :

- fisheries harvesting within Canadian waters by France;
- licensing of the French factory freezer trawlers operating within the disputed zone by Canada;
- Canadian observer status on French vessels within Canadian waters; and
- provisions for further negotiations between France and Canada to find terms of reference for submittal of the boundary around Saint Pierre and Miquelon to third party arbitration.

Although the first three aspects of this agreement have proved controversial, it is definitely in Canada's best interests to pursue an arbitrated solution to the offshore boundary. Next, the possible solutions that may be found for this dispute are presented.

### 5.3 BOUNDARY DELIMITATION SOLUTIONS

There does not seem to be an immediate identifiable simple solution to the offshore boundary in the region of Saint Pierre and Miquelon, as was negotiated between Denmark and Canada for the Arctic region. As a boundary solution, there does exist the application of the equidistance principle in its true form, although how equitable a solution this really is, is debatable. Treatment of Saint Pierre and Miquelon as enclaves with only a 12 nm boundary is another solution, but again, is this equitable? This section examines both of these possible boundary solutions as well as modifications to these solutions with other boundary delimitations presented that have been arrived at for similar island/mainland situations.

### 5.3.1 Pure Equidistance Principle

Under the 1958 Geneva Convention France claims offshore oil, gas and mineral rights from Saint Pierre and Miquelon halfway (median-line) to the nearest parts of Canada on three sides, and southward more than 200 nm to the outer edge of the continental shelf (Beauchamp et al., 1973). This claim is based on the application of the equidistance principle for delineating the maritime boundary and allots to France the largest possible portion of the Grand Banks continental shelf to which it could be entitled.

An equidistant boundary is presently shared by Canada and France on the landward side of the islands. As shown in section 5.2, this boundary resulted from the 1972 Mutual Fisheries Agreement and is actually a modified equidistant line considering the treatment given Little Green Island. Beginning with the endpoints of this dividing line, France has proposed an equidistant line to delineate the southern Grand Banks. Such a line is in the best interests of France while being detrimental to Canada. Geological research shows that the continental shelf appurtenant to Saint Pierre and Miquelon stretches a distance of about 400 kilometers south-west from the islands. Thus the effect of the equidistance claim would be to encompass for France a seabed amounting to 19,000 square miles and extending some 85 miles south of Saint Pierre, there being 170 miles between it and Nova Scotia (Symmons, 1980).

The fact that Saint Pierre and Miquelon are islands adjacent to Canada and thus sharing the continental shelf should not in itself restrict France's fair claim to a portion of the offshore zones. Arguably, a strict application of the equidistance principle as a method of fair and equitable delimitation is justified. French history and jurisdiction in the area have been established as long as Britain's and then Canada's. Also, an equidistant line is recognized within international law as providing an equitable method

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of boundary delineation under certain conditions. For France, the equidistant principle would thus be applied to the territorial sea on the landward side and the EEZ and continental shelf on the seaward side of the islands.

Canada has not accepted France's application of the equidistance line and has stated that :

- the equidistant line is disproportionate when relating the land mass of Saint Pierre and Miquelon to Newfoundland; and
- special circumstances exist that deny the strict application of this argument.

It has been stated in the House of Commons (Symmons, 1980):

that it would be "unrealistic, in view of the land base involved, for Canada to permit a 200 mile zone on the seaward side" and that Canada made it clear in its talks with France that the land mass of Saint Pierre and Miquelon when compared with that of Newfoundland justified "a more appropriate solution than that suggested by the French government".

With the UNCLOS III agreement suggesting that an equitable solution be found, but without giving specific methods, and looking at recent ICJ decisions, Canada's stance on an alternative boundary delimitation being implemented is also justified.

The application of a pure equidistance line denies the south coast of Newfoundland, west of the Burin Peninsula, any access to the Grand Banks. This would not be an equitable delimitation for this region.

Any presentation by Canada may be backed up by the ICJ's decision in the North Seas continental shelf case. In this case, the court stated that a delimitation according to equitable principles should bring about a reasonable degree of proportionality "between the extent of the continental shelf areas appertaining to a coastal state and the length of the state's coast" (Karl, 1977). Canada's argument that Saint Pierre and Miquelon are enclaves is now presented.

### 5.3.2 Treatment as an Enclave

Since France and Canada do not themselves constitute adjacent or opposite states, Saint Pierre and Miquelon could be considered as enclaves within Canadian territory. As enclaves the two islands would maintain the same form of boundary on the landward side while a boundary solution to the seaward side would substantially reduce the French claim. As a minimum, France is guaranteed a 12 nm territorial sea boundary to the south-west. In a delimitation according to equitable principles, a reasonable degree of proportionality should exist between the effect given an island in a delimitation and the island's coastline, measured in some objective fashion, relative to the coastlines of the determining states (Karl, 1977). This proportionality may extend French jurisdiction beyond 12 nautical miles but would in no way extend the EEZ and continental shelf up to the limits originally delimited by France.

Canadian recognition of France's 12 nm territorial sea is contained within the 1977 Territorial Sea and Fishing Zones Agreement. This act specifies that Fishing Zone 4 does not include any areas within "the territorial sea of the islands of Saint Pierre and Miquelon" (Symmons, 1980). Outside of the territorial sea of France, Canada has not acknowledged any further jurisdiction on the part of France. Thus it would seem that Canada's view is of France having a territorial sea, EEZ and continental shelf all within a 12 nautical mile boundary.

The ICJ arbitration case on the delimitation of the continental shelf between Great Britain and France (Figure 5.3) is noted as a precedent in this type of situation. While looking at the boundary surrounding the British Channel Isles, the ICJ concluded that (Colson, 1978):

The presence of these British Islands close to the French coast, if they are given full effect in delimiting the continental shelf, will manifestly result in a substantial diminution of the area of

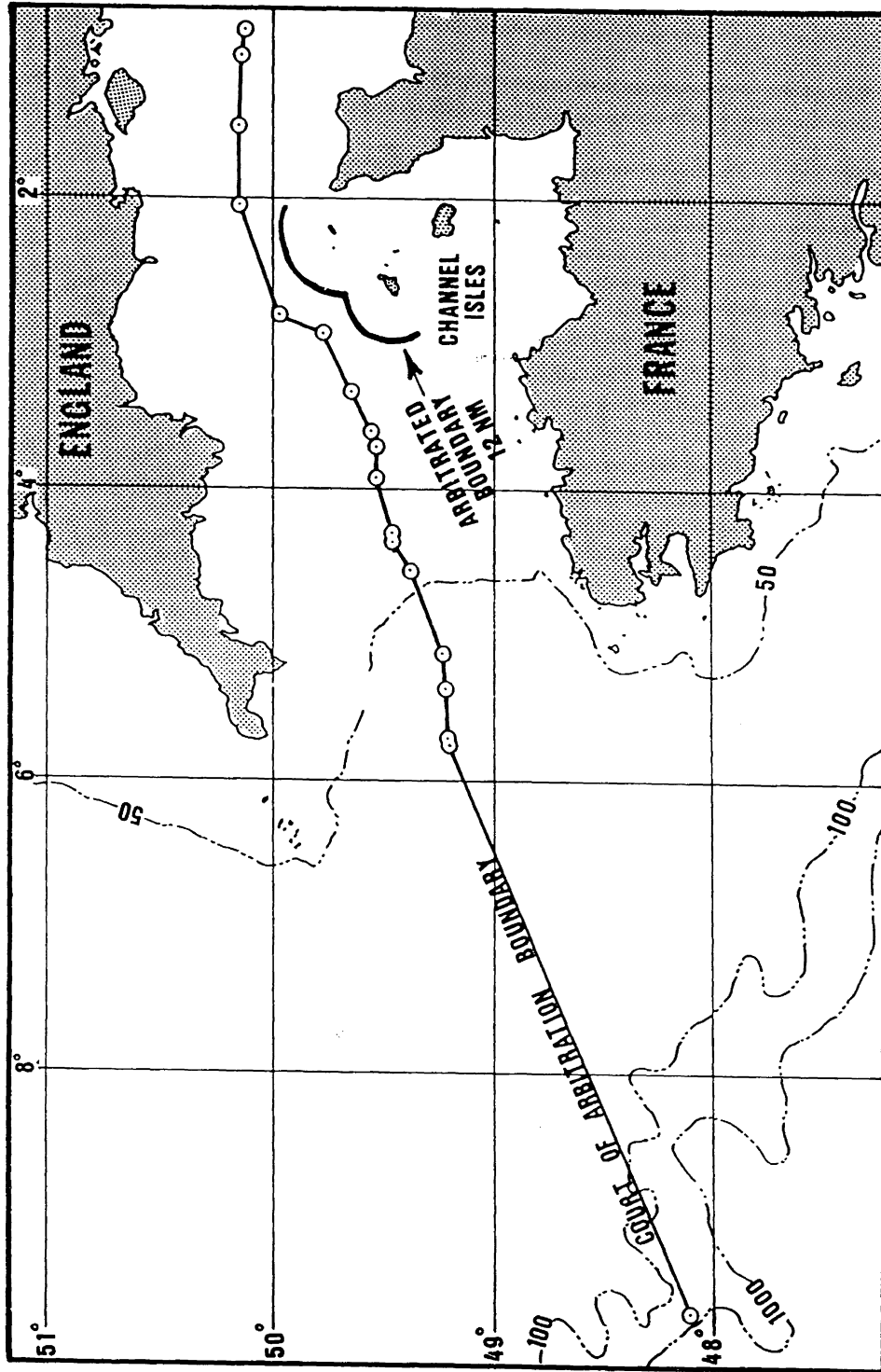


Figure : 5.3 : Continental Shelf Boundary Between France and England

AFTER : COLSON (1978)

continental shelf which would otherwise accrue to the French Republic. This fact by itself appears to the court to be, *prima facie*, a circumstance creative of inequity and calling for a method of delimitation that in some measure redresses the inequity.

Although implementing a 12 nm boundary on the seaward side of the Channel Isles that covered all the zones, the court did stress that there were factors both for and against such a line and that it was the court's decision that this line was the most equitable. This treatment by the ICJ of the Channel Isles was originally argued by France with support for the enclave solution drawn from the 1972 *Releve des Conclusions* agreement between France and Canada (Symmons, 1980). Thus it appears that within this confidential agreement France and Canada have discussed some form of enclave solution for the two islands off Newfoundland.

For an enclave method of delimitation to be adopted, various factors would have to be addressed. These are :

- the historical rights established by France within the region;
- the socio-economic factors of population, fishing and farming established on Saint Pierre and Miquelon and Newfoundland;
- the guarantee of the UNCLOS III agreement to an EEZ and continental shelf for all coastal states; and
- the equity of the final boundary.

In determining the extent of the offshore zones beyond 12 nm both France and Canada would have to agree that limiting special circumstances exist for both sides. Special circumstances are introduced in the form of coastline, landmass and population ratios as well as the distances of the two islands from France. Also, to the seaward side the amount of territory involved allows a more generous solution than if the area was cramped.

As a non-independent insular territory far removed from its metropolitan owner, the French islands constitute a typical example of what has been dubbed the distant island

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problem (Karl, 1977). As distant islands of France, Saint Pierre and Miquelon disturb the natural prolongation of Canada's jurisdiction over the offshore. By offering an enclave solution, Canada is rectifying this problem and regaining jurisdiction over what may be seen as Canada's offshore region.

Although Saint Pierre and Miquelon may be treated as enclaves within a boundary solution, this does not ensure that the same boundary would be applied to all of the zones. The treatment of the continental shelf boundary may be entirely different than that given the EEZ boundary with any number of special agreements over each zone contained in an agreement. These special agreements may also have an independent boundary delimited for each one and could cover resource sharing within the fishery, energy or mineral sectors. Overall, this type of solution may be the most equitable in recognizing the special interests of both states over the offshore region. There is no doubt that many islands may be viewed as "incidental special features" which, if given full effect in continental shelf delimitations, would cause an unjustifiable difference of treatment (Karl, 1977).

Should an enclave type of boundary be defined for the region and a special sharing agreement occur for the offshore then France and Canada must look at what solution would be the most equitable and best suited to national interests. Within this area there are the living and non-living resources that would be shared. Presently, Canada has been actively pursuing a sharing agreement for the fisheries of the Grand Banks with France. This has been based on imposing quotas for the harvesting of fish caught by each state thereby ensuring the future productivity of the region. Within the energy sector no such agreement has been pursued. Yet, sharing agreements may be deemed to be the most equitable for the energy resources lying within certain areas of the disputed zone.

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Four solutions for the sharing of offshore energy resources have been proposed by Lagoni (1979). These are :

- Geological cooperation in which each state receives a share of the total production in proportion to the amount of the reserve in its territory at the time the agreement was signed. This type of agreement presently exists between Czechoslovakia and Austria but requires a prior delimitation of the boundaries.
- Joint cooperation between state operators in the region where they work closely together to exploit the resource through mutual agreements. The Federal Republic of Germany and the Netherlands presently employ this type of agreement.
- Unitized exploitation of common deposits where a single operator exploits the resource on behalf of the two states. An agreement of this form was entered into by Japan and South Korea and does not require as precise a definition of the state's boundaries.
- An agreement which has the states exercise joint control over the mineral resources of an area which is partitioned through mutual agreement by the states.

Again, a boundary solution would have to be arrived at beforehand.

The implementation of any of these agreements would seem to require that the states establish their respective boundaries plus the zones of joint sharing. With such a large discrepancy between the Canadian and French positions, a possible area of joint concern may be established as was done with the fisheries agreement thereby containing a no prejudice clause for future negotiation. Although not defining the exact boundary which should be afforded the islands as enclaves, it has been shown that treatment of Saint Pierre and Miquelon as enclaves is surely equitable.

### 5.3.3 Previous Island Agreements

Two previous island agreements where the islands of a distant state are located next to the mainland of another nation are now presented. These agreements were arrived at via different means; in one instance the boundary was arbitrated by the ICJ, whereas in



the other the boundary was negotiated between the two states. It is shown that both of these agreements may influence the final boundary delimitation around Saint Pierre and Miquelon.

As stated in section 5.2, the continental shelf arbitration case between Great Britain and France addressed the situation where the Channel Isles of Britain lay only a few miles from the French coastline. During the hearings France argued that the Channel Isles should be granted an enclave type of boundary based on the specific geographical, geological and legal characteristics of the Channel Isles (Colson, 1978). Since the rules of customary law applied in the area, the court took the view that the question was whether the Channel Isles (Colson, 1978):

should be given the full benefit of the application of the principle of natural prolongation . . . or whether their situation close to the mainland of France requires, on equitable grounds, some modification of the application of equidistance.

The court's decision was that the islands should be treated with a modification resulting in an enclave boundary delimited to a distance not exceeding 12 nautical miles.

In reaching this decision the court took account of several factors that are similar to the present Saint Pierre and Miquelon situation. First, as between France and the United Kingdom, the Channel Isles had to be treated as islands of the United Kingdom rather than semi-independent states (Colson, 1978). This treatment applies between France and Canada where the islands of Saint Pierre and Miquelon are islands of France having no type of independent status. Thus as the court of arbitration evaluated the law and geography between Great Britain and France so too must the same be evaluated between Canada and France, not Canada and Saint Pierre and Miquelon. Second, the Channel Isles are of significant size and population and are of economic and political importance (Colson, 1978). Again, the same may be said of Saint Pierre

and Miquelon although the numbers differ with respect to population and economy for those found in the Channel Isles. Third, the court considered the navigational, defense and security interests of both parties within the area, recognizing the predominant interest of France (Colson, 1978). Considering these same interests, one realizes the predominance of Canada's defense and security interests in the Grand Banks region.

Finally, there is the fact that France cited the 1972 *Releve des Conclusions* as one of its precedents with the court addressing this agreement. In examining the situation of the Channel Isles with that of Saint Pierre and Miquelon, the court established that there were distinguishing factors (Symmons, 1980):

The fact that in this region the mainland coasts of France and the United Kingdom are opposite each other distinguishes the case of the Channel Isles from such a case as that of St. [sic] Pierre and Miquelon, where there is no French coast opposite Newfoundland and where, in consequence, the continental shelf remains largely open both to the south and east. Also, that case is not one of opposite states, so that no question arises there of a delimitation between States, whose coastlines are in an approximately equal relation to the continental shelf to be delimited. There being nothing to the east of Saint Pierre and Miquelon except the open waters of the Atlantic Ocean, there is more scope for redressing inequities than in the narrow waters of the English Channel.

Next, the Papua New Guinea-Australia agreement in the Torres Strait is presented. This agreement delimited the maritime boundaries of two Australian islands lying well north of Australia but only miles off the Papua New Guinea coast. Although similar to the Channel Isles case with respect to there being opposite coastal states involved, this agreement was unique in that there were two boundary lines delimited.

The continental shelf dividing line was delimited with an equidistant line giving no effect to the two islands, thus a median line exists as the dividing line in the Strait. Also, the two islands were not afforded any continental shelf. But, in drawing the dividing line for the EEZ and fisheries zones, the two islands were used as basepoints for Australia. The maritime boundary agreement here has great significance as a

precedent for the Franco-Canadian dispute since it shows that the same enclosing line need not be adopted as an equitable solution for both the continental shelf and the 200 mile fishery zone/EEZ boundary (Symmons, 1980). This supports the adoption of two different dividing lines off Saint Pierre and Miquelon that would address France's historic fishing rights within the EEZ while allowing for Canada's natural prolongation onto the continental shelf. Next, the urgency of resolving the dispute is examined.

#### **5.4 SETTLEMENT URGENCY**

It is now apparent from recent negotiations in St. John's, Newfoundland, and Paris, France, that both countries would like to resolve the boundary dispute. Although, it would appear that Canada wishes to conclude some form of agreement quickly considering present federal government policy on the fisheries. With the fisheries resource on the Grand Banks suffering from overfishing, there has been a depletion in stocks, with French overfishing in the disputed zone contributing heavily to this depletion. Thus, Canada is trying to manage the resource through quotas for each nation including a quota for French fishing within the disputed area.

Canada would therefore like to find a negotiated agreement with France; but, with present French fishing practices on the southern part of the Grand Banks below Saint Pierre and Miquelon, France is not eager to give up any of the territory and offshore rights that it considers French. This would also be true for French energy interests on the Grand Banks, where prior French action in issuing offshore licences shows a determined effort on the part of France to claim subsoil rights within the disputed zone. Presently energy exploration and exploitation has been halted within the disputed region until a resolution of the boundary dispute is solved. Coupled with present

energy prices and the supply sided situation there is no impetus on behalf of renewed energy exploration to quickly resolve the dispute.

Yet, some degree of urgency is attached when the view is taken that this dispute could mushroom between friendly States. With Canada's firm stance on the fisheries issue, the finding of an equitable boundary over the zones is all the more necessary. The progress recently made to negotiate the terms of reference for submittal of this dispute to a third party arbitrator indicates that this boundary is not negotiable, and that both States find the World Court a better forum for delimiting the boundary in an equitable manner.

## **5.5 GULF OF MAINE COMPARISON**

In the Gulf of Maine, the dispute was submitted to arbitration before the ICJ; this type of court implemented boundary solution is likely as Canada and France have recently begun negotiations to submit the boundary to the world court. Should the dispute be submitted to arbitration it is possible that a single boundary solution may be requested for the continental shelf and EEZ as was done with the Gulf of Maine. However, this type of solution may not be the most equitable.

The geographical idea of proportioning coastlines may be used, although this seems unjust considering Saint Pierre and Miquelon's small size. With the geography of the region dissimilar to that of the Gulf of Maine, there is not the same reasons for proportioning the coastlines.

In examining the information and charts available it is seen that the offshore boundaries and basepoints around Saint Pierre and Miquelon are easily delimited on existing Canadian charts, Appendix B. Whereas both U.S. and Canadian charts were

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used for the Gulf of Maine decision, it appears that all of the boundaries in the Franco-Canadian dispute may be delineated on Canadian charts. This of course would depend on the cooperation of France. In delimiting the boundary points on only one series of charts, complications arising from different datums, reference ellipsoids and mapping planes would be avoided.

## **6.0 U.S. - Canada Maritime Boundary : Outer Georges Bank and Marchias Seal Island**

Only the territorial sea dividing line around Marchias Seal Island and the outer continental shelf dividing line beyond Georges Bank remain unresolved following the 1984 ICJ Georges Bank decision. Within the Gulf of Maine region the 1984 ICJ decision resulted in the final delimitation of the major portion of the U.S.-Canada maritime boundary dividing this offshore region. The ICJ decision was initially introduced in section 3.5 and is shown in Figure 3.5. Of concern in this chapter are the two remaining sections of the boundary; that is, the inner territorial sea boundary from Grand Manan Channel to Point A of the ICJ decision and again from the seaward end point of the ICJ line, Point D (Figure 3.5), out over the remainder of the continental margin.

The agreed starting point for the line established by the chamber was southward of the international boundary terminus in Grand Manan Channel. This point was fixed by the parties to avoid having the chamber rule on the status of Marchias Seal Island. Seaward of the line established by the ICJ, both Canada and the United States claim jurisdiction in respect of the continental margin beyond 200 miles, in keeping with the provisions of the 1982 LOS convention (Legault, 1984/5).

This chapter reviews the historical background of these two boundary sections after initially showing the regional geography involved. After that, the possible solutions for a dividing line are examined with both the pros and cons of each alternative

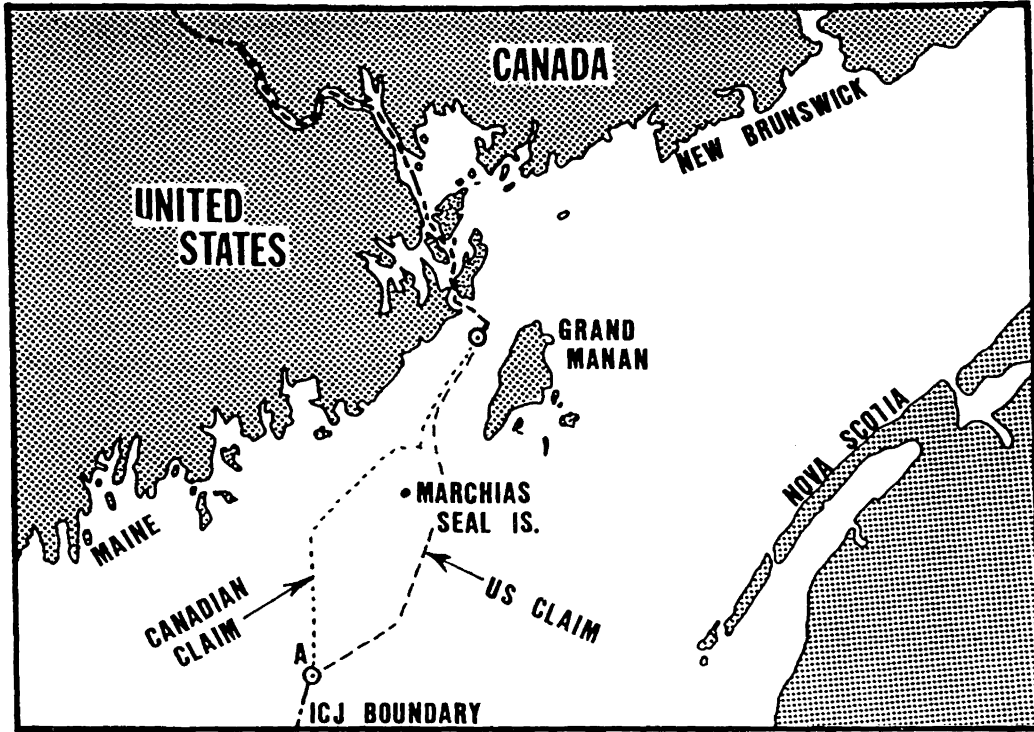
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discussed. The urgency of resolving each section is explored with a final comparison done with the ICJ Georges Bank decision. Also, in comparing the two boundaries with the earlier ICJ line one must consider what kind of precedent this line will give to the method of delimitation.

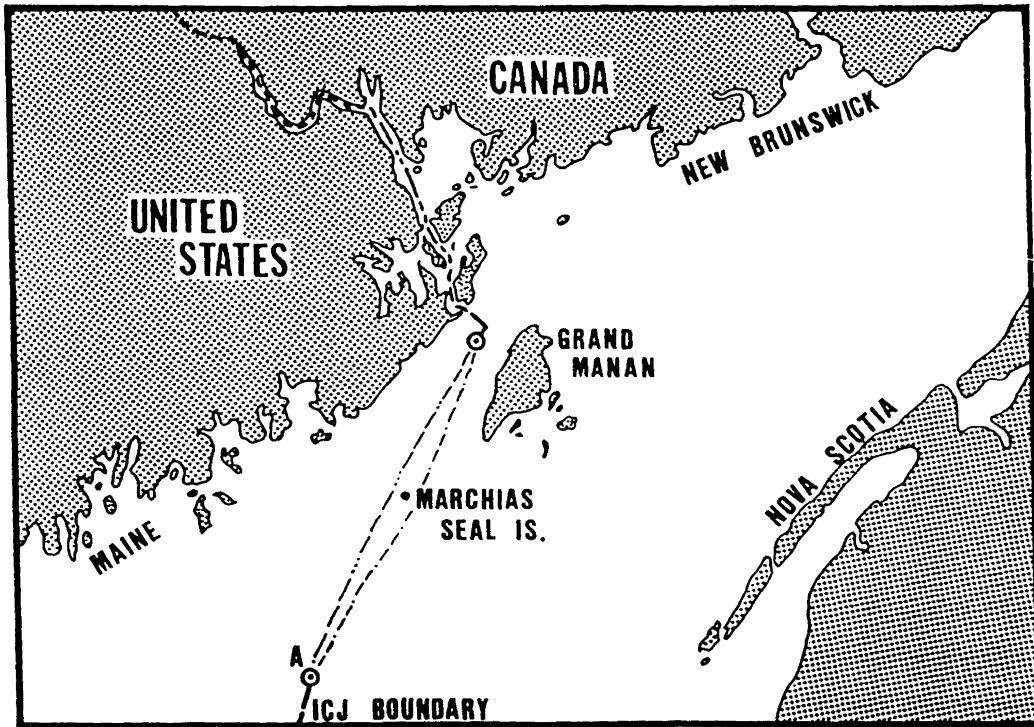
### 6.1 GULF OF MAINE LAYOUT

The Gulf of Maine coastal and offshore layout has been well defined by various authors (Legault, 1984/5; Nichols, 1982) in their examination of the ICJ decision and arbitration. For this reason, only the two areas of direct concern are presented. First, the area surrounding Marchias Seal Island and its present territorial sea boundaries are examined prior to moving offshore to look at the continental margin.

Marchias Sea Island is located west of Grand Manan Island within the entrance to the Bay of Fundy. To the northeast and southwest of the island the maritime boundary between Canada and the United States has been delimited. Between the boundary terminus in Grand Manan Channel to the northeast, and Point A of the ICJ dividing line to the southwest, there is a gap of about 45 miles in which the boundary between the two countries has yet to be determined (Figure 6.1). It is easily seen that a boundary agreement within this area depends heavily on the possession of Marchias Seal Island. Lying west of Grand Manan Island a distance of 11.4 miles the island is claimed by Canada; the U.S. also claims ownership of the island with a distance of only 11.2 miles separating the state of Maine from the island.



**Figure 6.1a: Present Boundary Claims : Bay of Fundy**



**Figure 6.1b: Modified Equidistant Boundary**



Economically, the area around the island provides a rich seasonal fishery for the local residents of New Brunswick and Maine. Although not considered a densely populated area, the mainland region does support a diversified economy, with a main emphasis on the local fishery. The island itself is only 15 acres (McEwen, 1986) and is presently a proclaimed bird sanctuary under the Canadian Wildlife Service. Where the unresolved dividing line begins in Grand Manan Channel between Grand Manan Island and the state of Maine (Figure 6.1), the ownership of Marchias Island will swing the dividing line either north or south.

The unresolved offshore boundary over the continental margin begins at Point D (40° 27' 05"N, 65° 41' 59"W) which is the terminus point of the 1984 ICJ maritime line. This point is south of Georges Bank and is located between the 3500 m and 4000 m isobath (Figure 6.2). This part of the continental shelf is beyond the fishing area and would only offer economic activity in the form of offshore energy exploration. Yet, even then the area is presently technically restrictive and economically unviable. Since the UNCLOS III agreement provides for various methods of determining the outer continental boundary, Appendix A, it is assumed that the United States and Canada will opt for a boundary out to 350 nm. This would be supported by all the definitions of allowable boundary extension wherein the boundary must be no more than 350 nm from the baselines from which the territorial sea is measured or a distance of 100 nm from the 3500 m contour, Figure 6.2.

## 6.2 HISTORICAL BACKGROUND

Initially, the boundary case surrounding Marchias Seal Island is reviewed as no real history is attached to the offshore continental margin area left unresolved by the recent

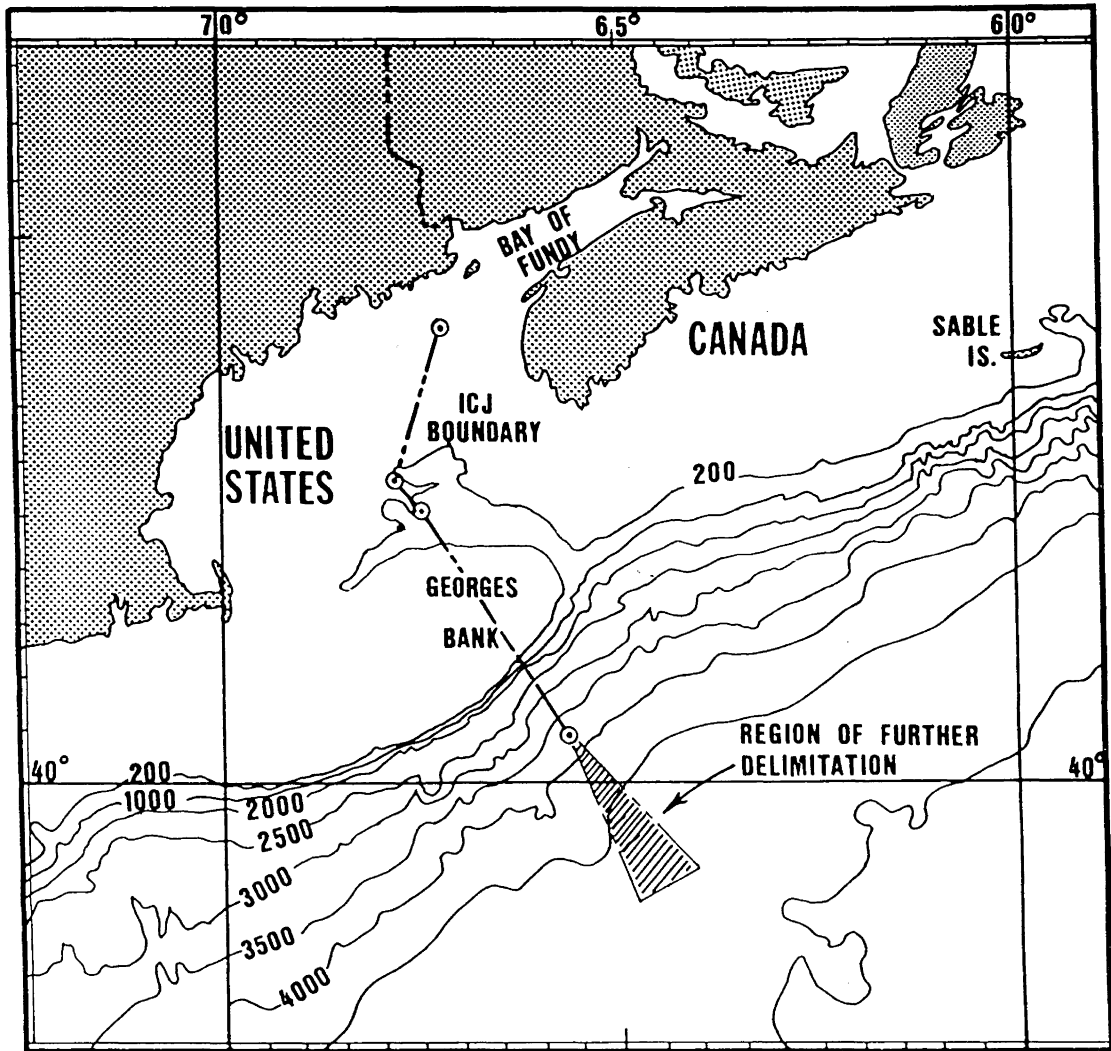


Figure 6.2: Outer Continental Shelf - Georges Bank Boundary

## CANADA'S UNRESOLVED MARITIME BOUNDARIES

ICJ decision. As shown in Figure 6.1 Marchias Seal Island is about halfway between the terminus of the early territorial sea boundary in Grand Manan Channel and Point A of the EEZ and continental shelf arbitration line. As mentioned earlier, resolution of the dividing line relies on the ownership of Marchias Seal Island being resolved.

Canada's claim to the island originates with the Alexander Charter of 1621 whereby a crown grant of Nova Scotia was given to Sir William Alexander (Nichols, 1982). This original grant is made up of the present provinces of Nova Scotia and New Brunswick and fixed part of the western limit of New Brunswick as a straight line drawn across the mouth of the Bay of Fundy (McEwen, 1986). Due to the inadequate mapping of the region at the time of the grant it is now difficult, and even impossible, to establish the closing line across the Bay of Fundy.

The U.S. claim to Marchias Seal Island is based on the 1783 Treaty of Paris wherein the United States was granted (Nichols, 1982):

all islands within twenty leagues of any part of the shores of the United States . . . excepting such islands as are now or heretofore have been, within the limits of the said province of Nova Scotia.

If 3 miles is accepted as equalling one league at the time of this treaty, then this gives the United States ownership of all islands lying to a maximum distance of 60 miles from the coast of Maine. Marchias Seal Island is certainly within this area and would thus belong to Maine, if it were not for the limiting factor that all islands lying within six leagues, or 18 miles, of the Bay of Fundy closing line were to be considered part of the original Alexander grant. Thus if Marchias Seal Island was part of the original province of Nova Scotia, it would not be included in lands ceded to the United States in 1783.

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In 1814 the Treaty of Ghent was agreed to between the United States and Great Britain. This engaged two commissioners to settle the title to the islands in Passamaquoddy Bay and also the island of Grand Manan. As a result, Grand Manan was declared to be part of Canada, but no mention of Marchias Seal Island was made in the Commissioners' award of 1817 (McEwen, 1986).

Since 1784 New Brunswick has assumed administration of the island and established a lighthouse there in 1832, with the Canadian federal government maintaining the lighthouse since 1912 (Nichols, 1982). In 1944, the Canadian government declared the entire island, together with a surrounding belt of water one mile in width, to be a bird sanctuary (McEwen, 1986). It would appear that Canadian possession has been open, notorious, and continuous since the eighteenth century with American acts of possession consisting mainly of the drying of fish nets, storm refuge, tourism and occasional smuggling (Nichols, 1982).

Prior to submitting part of the Gulf of Maine boundary to the ICJ, both states had made full boundary claims within the Gulf of Maine and Bay of Fundy. These claims outlined both states' position regarding Marchias Seal Island with the boundaries shown in Figure 6.1a. The beginning point (A) for the ICJ arbitration (Figure 3.5) was the point at which the original Canadian and American claims intersected within the Gulf of Maine. From point A the American claim is seen as extending south of Marchias Seal Island while the Canadian claim lies north of the island.

Offshore, from Point D (Figure 3.5) of the EEZ-continental shelf line out over the open seas, the area left unresolved from the 1984 arbitration is relatively small. In this area a further extension to the boundary line will result only after both nations have decided on what they recognize as their continental margin and have published their respective outer continental margin boundary limits. The history to this boundary

extension may be in that it was left unresolved by the 1984 ICJ arbitration, with both Canada and the United States not stressing an early delimitation for the remaining portion of the continental slope.

### 6.3 POSSIBLE BOUNDARY SOLUTIONS

With the majority of the boundary now resolved in the Gulf of Maine, priority has switched from the Georges Bank to the area surrounding Marchias Seal Island as a source of dispute between Canada and the United States. Although this dispute may have been present all along, the recent ICJ decision has allowed this area to again attract attention and stand out as an unresolved boundary. Since the ownership of Marchias Seal Island will influence the delineation of the dividing line, the author feels that four possible boundary delimitations exist, Figure 6.1a and 6.1b.

From facts presented by McEwen (1986) and Nichols (1982) the case for Canada seems reasonably strong based on historic title and unchallenged possession of the island. With Canada's ownership of the island, a boundary line would lie north of Marchias Seal Island and may be delimited either by the equidistance principle or some modified form thereof.

The application of a pure equidistance dividing line with Marchias Seal Island as a basepoint would be most advantageous for Canada. This median line would be centred between the state of Maine and initially Grand Manan Island, extending westward to a turning point a median distance from Maine and Marchias Seal Island, thence to Point A of the ICJ maritime boundary (Figure 3.5). In so doing, this line would deny the coast of Maine a portion of historic fishing grounds lying directly south of the state. Perhaps a solution should take this into consideration.

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One such solution would be to give Marchias Seal Island a half island effect thus reducing its influence on the dividing line. Also, a dividing line such as the landward dividing line between Saint Pierre and Miquelon and Newfoundland could be implemented. In this way Marchias Seal Island would be treated much the same as Green Island and allowed only a small territorial sea. However a modified median line is found, it will have the effect of moving the dividing line south and perhaps being of a more equitable form than the pure equidistance principle.

Should the United States be granted ownership of Marchias Seal Island, then again these two types of solutions exist. In the first instance, a pure equidistance line may be implemented that would separate first Grand Manan from Maine, then Grand Manan from Marchias Seal Island with the line terminating again at Point A. Although this type of solution may be in the best interest of the United States, it would not be an equitable boundary. If U.S. ownership was upheld, then the historic rights of Canada within the Bay of Fundy could only be recognized through some form of modified line. This time the line would be moved northward and westward in recognition of Canada's interests.

Since this is both a territorial sea and EEZ boundary, then a delimitation between Canada and the United States requires, that for the United States territorial sea, some form of recognition must be given to a 12 nm territorial sea for the United States. This may come about with the United States declaring a 12 nm limit or as a term of reference submitted to a third party arbitrator. Thus any line delineated would recognize a 12 nm limit and not the present 3 nm limit.

An extension south of Point D (Figure 3.5) to cover the area of the continental margin left unresolved in 1984 should, for all purposes, follow the line segment C-D (Figure 3.5). This type of solution would be in keeping with the chamber's decision

and provide an equitable boundary line to both states. An alternative to following the ICJ line would be the establishment of an equidistant line from Point D. The difference between these two lines would result from coastline configuration and basepoint location upon which the equidistant line is dependent. The final solution for this segment of the Gulf of Maine boundary should be arrived at through negotiation rather than arbitration. The same is not easily said for the inner dividing line where arbitration appears to be the only route for finding a maritime boundary.

#### **6.4 SETTLEMENT URGENCY**

Of the two unresolved boundaries, it has already been shown that the inner territorial sea boundary surrounding Marchias Seal Island requires the more urgent resolution. Yet, the dispute over ownership of Marchias Seal Island may delay a solution such that a negotiated settlement of the outer continental shelf boundary may occur first.

The fisheries within the area of Marchias Seal Island is restricted to mainly an inshore fishery with both Canadian and American fishermen of the local area harvesting the resource. Thus the total economic contribution of the disputed area is small when viewed within the overall scope of the Bay of Fundy and Georges Bank fishery. What is important here is that either Canadian or American federal fisheries officials may intervene and prosecute fisherman of the other nation thought to be in its fisheries jurisdiction. Although this type of action may prompt a resolution to the boundary, it does not seem justified in light of Article 9 as set out in the U.S.-Canada Reciprocal Fisheries Agreement. This agreement states (Feldman and Colson, 1981):

In the boundary regions, the following principles shall be applied as interim measures of mutual restraint pending the resolution of

questions pertaining to the delimitation of areas subject to the respective fisheries jurisdiction of each party .

1. As between parties, enforcement shall be conducted by the flag state;

Although this agreement was entered into between Canada and the United States so that conflicts within the disputed zone are avoided, there is no guarantee that both states will continue to recognize the agreement. In this instance, any disregard for the agreement will focus attention on the boundary dispute. Should a state wish to bring the dispute to the forefront within the Marchias Seal Island disputed zone then this is certainly an alternative.

A seaward extension to the ICJ line is not urgent. This boundary line may well be one of the last lines delimited in resolving Canada's maritime boundaries. There are no factors present within this region that could cause dispute requiring an urgent settlement by either state.

## **6.5 GULF OF MAINE COMPARISON**

The outer delimitation from the Georges Bank over the continental margin should share the same technical aspects as the 1984 arbitrated boundary. Since this is only an extension of the ICJ decision then the court's reasons for delimitation remain unchanged. In this manner the Gulf of Maine arbitrated boundary remains as a precedent for future boundary delineation. Having already resolved the 200 mile limit, only a boundary extension over the continental shelf requires delimitation.

The dispute over the boundary within the area of Marchias Seal Island is seen as being dissimilar to that of the ICJ resolved dispute. First, the ownership of Marchias Seal Island must be resolved before any attempt can be made at deciding the maritime



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boundary. Once ownership is resolved, then the two states are dealing mainly with a territorial sea boundary where the area of delimitation is restricted compared to the Gulf of Maine.

The determination of the outer Georges Bank boundary should rely on the use of geodetic lines and azimuths as did the 1984 ICJ decision. Also, the charts, Appendix B, and specifications used by Beazley (1984) would help with the delineation. Specifically, calculations would be done on a Universal Transverse Mercator (UTM) grid centred at 68° West. Should the third line segment (C-D) be retained then the boundary would adhere to its azimuth.

## **7.0 U.S. - Canada Maritime Boundary : Juan de Fuca Strait**

The offshore boundary extending from the terminus point of the present territorial sea boundary in the Juan de Fuca Strait is not yet resolved. Yet, this boundary has remained free of conflict and dispute since both states extended their offshore zones of jurisdiction in the 1970s. This is due to the fact that both Canada and the United States share a willingness to delimit the boundary using the principle of equidistance. It is shown that this boundary delimitation should be arrived at via negotiation rather than arbitration.

The region involved and historical background of the maritime boundary between the province of British Columbia and the state of Washington are initially presented. Next, a solution to the offshore boundary is given, followed by an examination of the urgency attached to finding an equitable delimitation between the two states. Finally, a comparison is attempted with the ICJ's boundary arbitration in the Gulf of Maine.

### **7.1 THE JUAN DE FUCA STRAIT REGION**

The present boundary in the Juan de Fuca Strait terminates at boundary point number 12 located on a line joining Cape Flattery, Washington and Bonilla Pt., British Columbia. As such, this line only delimits the territorial sea within the Juan de Fuca Strait. Beyond the entrance to the Strait, there remains an unresolved boundary for the

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remainder of the territorial sea plus the EEZ/fisheries zone and the continental shelf between Canada and the United States.

The coastline involved in delimiting these boundaries consists of the western coast of Vancouver Island and the northwestern coast of the United States. The basepoints selected within Canada for an equidistant boundary construction should incorporate those listed in the 1977 Territorial Sea and Fishing Zones Act. Outside of the points located on Vancouver Island, Cape St. James on the southern tip of Moresby Island would also be used for construction purposes. In the United States, either single basepoints delimiting straight baselines would be selected or points along the low water line chosen. These would be located within the states of Washington and northern Oregon.

Although there is a tendency to follow the 49th parallel within this region, as it has long been the land boundary, the proposed maritime boundary deviates from this considerably. Using an equidistant construction technique, the offshore boundary is influenced by the direction of Vancouver Island and the northern coast of Washington State. Consequently, the boundary line follows a direction of approximately South 70° West (Figure 7.1). For this to happen, Vancouver Island and the upper United States is orientated south-east while the remainder of the United States follows almost a southerly direction.

The offshore region supports an active fishery with Canadian and American fishermen involved in both inshore and offshore fisheries. The continental shelf restricts the outward extent of the fisheries zone as it is quite narrow at 50 miles to the 200 m isobath. This of course is in comparison to the Atlantic continental shelf. The 200 mile EEZ boundary is seen to extend beyond the edge of the continental shelf with both countries fishing zones extending to 200 miles. Lying just outside the 200 mile

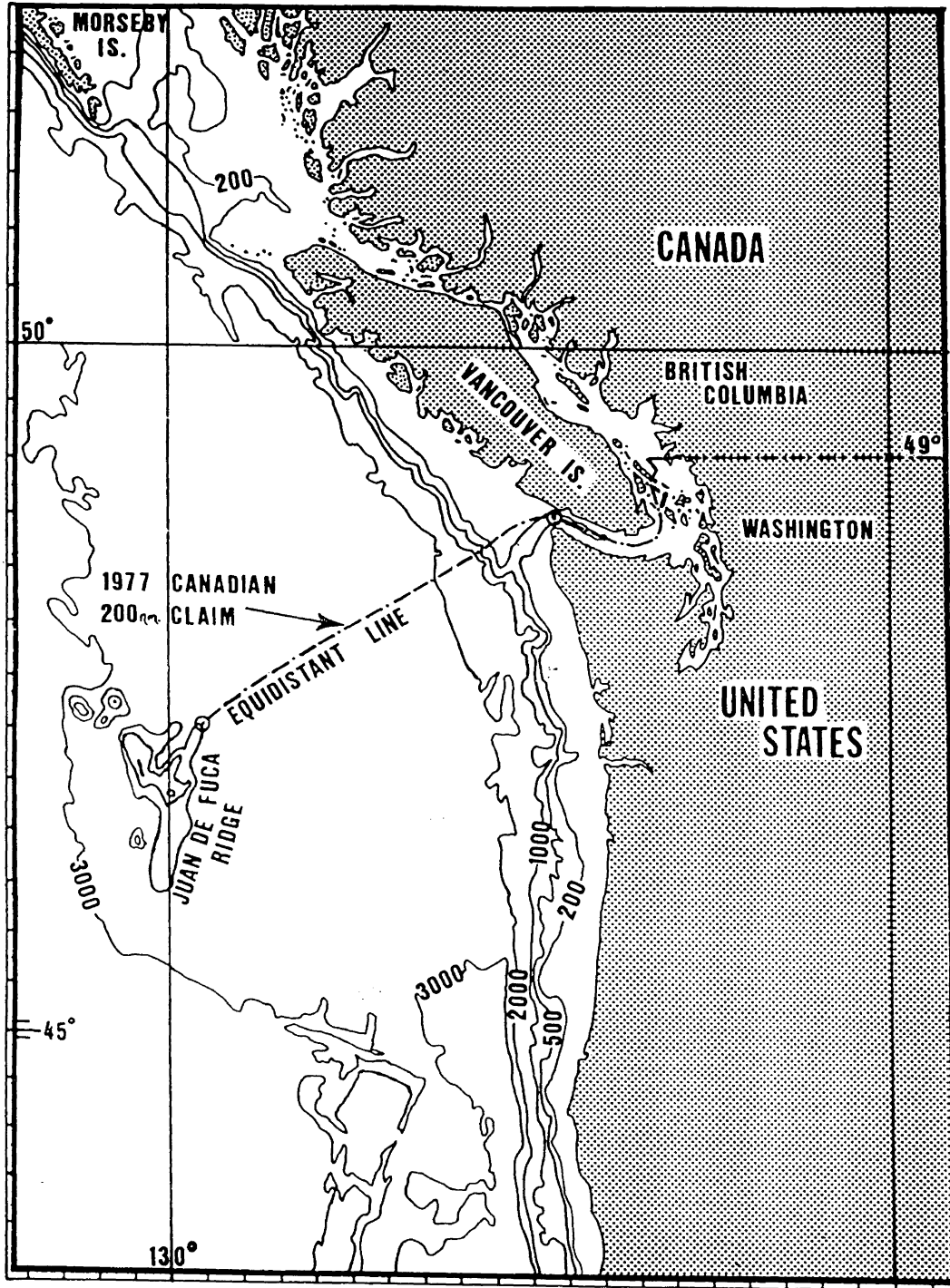


Figure 7.1: Juan de Fuca Strait Offshore Region

boundary is the Juan de Fuca Ridge. This is the major offshore anomaly over which the continental shelf boundary must be extended. Closer to shore there is a channel leading into Juan de Fuca Strait.

## 7.2 HISTORICAL BACKGROUND

This section examines the present maritime boundary within the Juan de Fuca Strait with an outline given of the acts and agreements that both countries have passed or entered into affecting the offshore zones.

Both the land boundary and maritime boundary separating Washington and British Columbia were initially settled by the Treaty of Washington. This treaty settled the land boundary as the 49<sup>th</sup> parallel and the water boundary within the Gulf of Georgia by simply stating that the boundary line along the 49<sup>th</sup> parallel should run “. . . to the middle of the channel which separates the continent from Vancouver Island; thence southerly through the middle of said channel, and of Fuca's Straits to the Pacific Ocean” (Beauchamp et al., 1973). Besides this treaty, the United States and Britain also entered into an agreement in 1873 that helped to further delimit the offshore boundary in Juan de Fuca Strait. This agreement is known as the Northwest Water Boundary Protocol and was entered into after disputes and skirmishes had arisen within the region (Feldman and Colson, 1981).

Surveys of the boundary between British Columbia and Washington were performed between 1909 and 1911 with monuments erected at that time along the coast, Figure 7.2. This was done according to the provisions of Article 9 of a treaty signed at Washington, D.C. in 1908 between Canada and the United States. The boundary was established beginning at an initial point on the 49<sup>th</sup> parallel on the

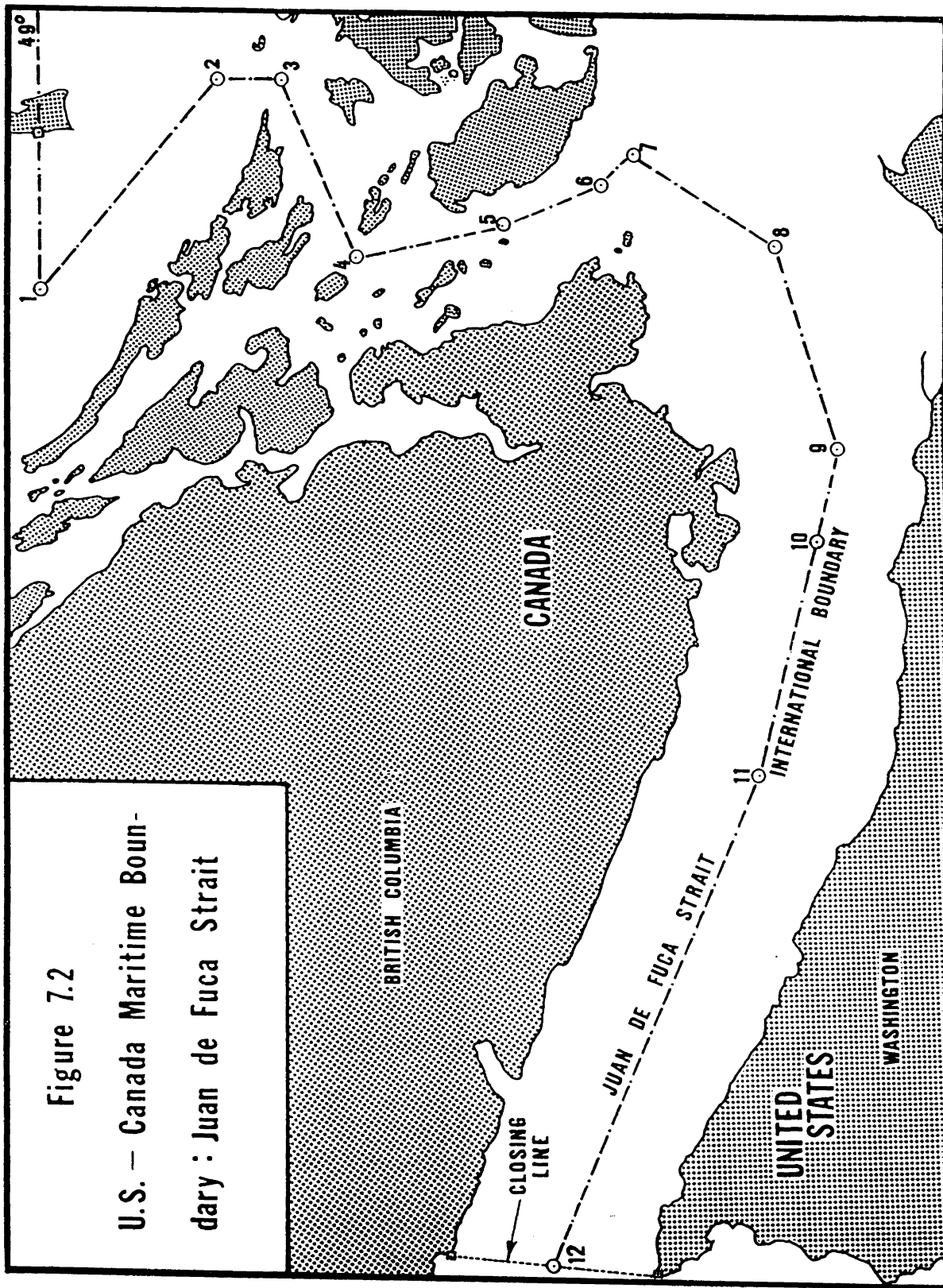


Figure 7.2  
U.S. — Canada Maritime Boundary : Juan de Fuca Strait

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western side of Roberts Point and follows the middle Channel to the Pacific with twelve turning points. This boundary is shown on the “Joint Chart of the International Boundary Between United States and Canada From the Forty-Ninth Parallel to the Pacific Ocean” (International Boundary Commission, 1921). As with the other offshore regions, the boundary through Juan de Fuca Strait settled the question of offshore jurisdiction until the two countries began extending their offshore zones with the Truman Proclamation of 1945.

Beginning with Canada’s Territorial Sea and Fishing Zones Act of 1977 and the enactment of the United State’s Fishery Conservation Zone of the same year, both states announced economic jurisdiction off the coasts of Washington and British Columbia to 200 kilometres. However, since the equidistance principle was employed to delimit these zones by both countries a conflict over disputed territory was avoided.

### **7.3 A SOLUTION TO THE BOUNDARY DELIMITATION**

With both countries adhering to an equidistance boundary for the seaward extension from turning point 12 in the Juan de Fuca Strait, it would appear that this boundary has been resolved. Yet, even though both states endorse a median line, the basepoints from which this line is to be generated must be negotiated. Also, the line proposed by Canada and that of the United States do not exactly agree, although negotiation should find an equitable solution to this problem.

The United States has indicated its willingness to negotiate boundaries with Canada based upon equidistance methodologies, with Canada adopting that approach for the west coast boundaries (Feldman and Colson, 1981). For this reason, a negotiated rather than arbitrated solution to this boundary should be found.

## 7.4 SETTLEMENT URGENCY

Of the four areas where Canada shares a maritime boundary with the United States, the region off Juan de Fuca Strait offers the least resistance to settlement. As shown in sections 7.2 and 7.3 both countries have proposed a boundary solution based on adherence to a median line. This has resulted in similar boundary line proposals that diminish the area of overlap and hence dispute. In attaching urgency to finding a negotiated solution, previous boundaries have been shown to be in dispute due to conflicts in either the energy or fisheries resource. This is not the case for the boundary at the mouth of the Strait of Juan de Fuca as no current push for a settlement is being proposed by the oil industry (Beauchamp et al., 1973). Also, the similarity in boundaries of both countries has not provided for a dispute with the fishing industry.

Yet, a negotiated settlement may be pursued on account of possible mineral resources. The Juan de Fuca Ridge just beyond the geological continental shelf, but within the 200 nm zone on the west coast of the United States, is an area of interest for polymetallic sulfides. The United States Department of the Interior is presently exploring the possibility of issuing mineral leases in this area and it is all too likely that polymetallic sulfides are adjacent to the Canadian west coast within 200 nautical miles (McDorman, 1984). Should mineral resources be found within this area then they would be located at the extremity of the zone of jurisdiction and where the largest discrepancy in claims would lie.

Any urgency in resolving this boundary is thus dependent on initially finding exploitable mineral resources within the region and their subsequent exploitation. Politically, this boundary may be resolved rather quickly as it offers an expedient solution through negotiation and would show that the present government is able to realize a negotiated solution that is equitable for Canada.



## 7.5 GULF OF MAINE COMPARISON

This section compares the future boundary delimitation between Washington and British Columbia with the 1984 Gulf of Maine delineation. As shown previously, the Gulf of Maine was resolved through arbitration, whereas the boundary off the Strait of Juan de Fuca should be resolved by negotiation. Also, the amount of disputed territory within the Gulf of Maine was such that it forced an arbitrated solution once both sides conceded that negotiation was impossible. Off the Juan de Fuca Strait, it is not so much the amount of disputed territory involved, but the finding of a single equidistant line that remains to be resolved.

The use of a single boundary line to delimit both the continental shelf and fisheries zones between Canada and the United States was enforced for the Gulf of Maine. This type of single line solution should also be implemented in this instance, where both states have proposed a median line out over the Juan de Fuca Ridge.

The complications arising from coastline and coastline ratios that occurred in the Gulf of Maine arbitration should not occur for the boundary off southern British Columbia. The features of the Juan de Fuca Strait region are similar to those found in the Beaufort Sea where a simplistic coastline is prevalent. Unlike the limited number of turning points required to delimit the Gulf of Maine boundary, Canada has proposed in the Territorial Sea and Fishing Zones Act of 1977 an equidistant line requiring 45 turning points.

Finally, the delineation of the Juan de Fuca Strait offshore boundary will rely on charts from both countries, Appendix B, to identify basepoints as was the case in the Gulf of Maine. The area has been surveyed along both coasts with sufficient charts available for the delimitation. These are at a large enough scale to identify all basepoints while allowing for the delineation of the whole boundary on one chart. For

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Canadian purposes this would be chart number 3000 “Juan de Fuca Strait to Dixon Entrance” at a scale of 1 : 1 250 000.

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## **8.0 U.S. - Canada Maritime Boundary : Dixon Entrance**

The final maritime boundary examined is that lying within the Dixon Entrance region and shared by the United States and Canada. This boundary is composed of a boundary line that was arbitrated within the Dixon Entrance and the unresolved boundary extending over the EEZ and continental shelf. The existing boundary, as claimed by Canada within the Dixon Entrance, is disputed by the United States. It will be shown that before the EEZ and continental shelf boundaries can be resolved, a solution to the boundary within the Dixon Entrance will have to be found.

This chapter presents initially an outline of the coastal configuration and offshore region. This is followed by a presentation of the history surrounding the boundary and the possible boundary solutions available. Next, the urgency of resolving this dispute is reviewed with a comparison attempted with the Gulf of Maine decision. As with the previous chapters, the author has kept to a consistent chapter format. It is hoped that the reader has not tired with this type of outline.

### **8.1 COASTAL CONFIGURATION AND OFFSHORE LAYOUT**

There exist two distinct coastlines that must be considered for the delimitation of a full maritime boundary in the Dixon Entrance region. These coastlines are comprised of

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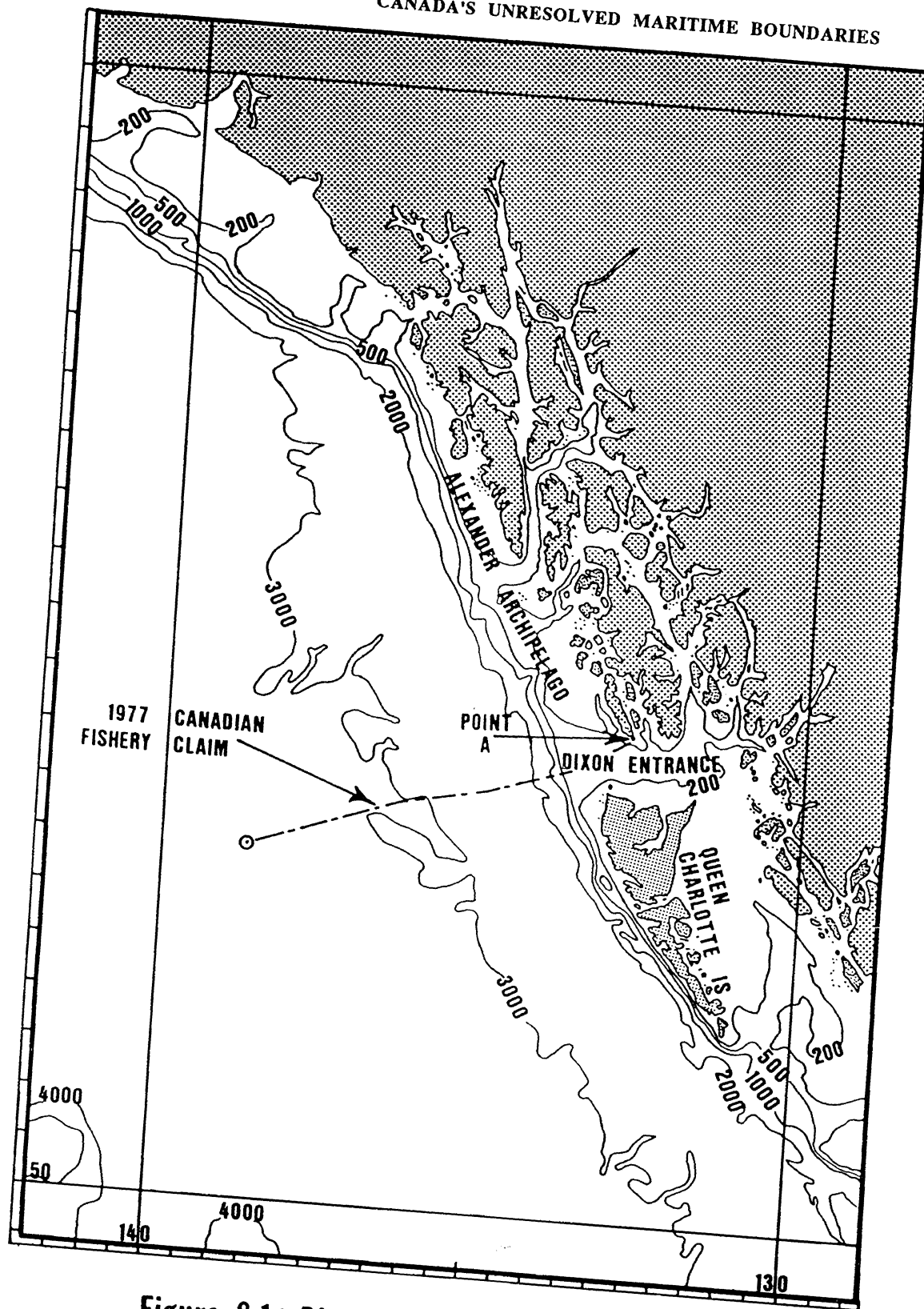
islands, an island archipelago and the mainland of Alaska and British Columbia. The offshore region may also be divided into two areas that correspond to the two coastlines, with one area within Dixon Entrance and another offshore Dixon Entrance.

For boundary construction purposes the mainland regions of Alaska and British Columbia influence only the beginning portion of the territorial sea boundary near Portland Channel. The remainder of Dixon Entrance is enclosed by the Queen Charlotte Islands, the Alexander Archipelago and those islands close to but situated off the mainland of both states, Figure 8.1. At the outside portion of Dixon Entrance a distance of 33 miles separates the northern tip of the Queen Charlotte Islands from the southern tip (Cape Muzon) of the Alexander Archipelago.

From a closing line drawn across Dixon Entrance, the determination of the offshore EEZ and continental shelf boundaries rely on the configuration of the Queen Charlotte Islands and the Alexander Archipelago. Overall the island coastline is orientated in an east south-east direction. Thus a median line boundary will follow a west south-west direction.

Offshore, the 200 metre isobath provides a natural division in the Dixon Entrance with the 500 metre isobath being more representative of the continental shelf. The exploitable continental shelf is restricted to about 10 miles west of the Queen Charlotte Islands while providing a larger area off the Alexander Archipelago.

The region has a rich fisheries resource. Yet, the area is limited in population with scattered communities along the coast of both states. The resources of the region are not restricted to the fisheries as forestry and mining provide additional economic stability.



**Figure 8.1: Dixon Entrance Offshore Region**

## 8.2 HISTORICAL BACKGROUND

Initially, the boundary in this region was shared between Great Britain and Russia with a historical background equalling that of the Beaufort Sea maritime boundary. It was shown in section 3.2 how the various tribunals in establishing the Alaska - Canada land boundary laid the foundation for each state's present boundary claim in the Beaufort Sea. The decisions of these tribunals are shown to be even more significant for the maritime boundary within the Dixon Entrance.

The United States acquired Alaska from the Soviet Union in 1867 when Russia ceded all of its North American possessions to the United States. This Treaty of Cession described the boundaries of eastern Alaska by relying on the definition provided within the 1825 treaty between Great Britain and Russia. Thus, the boundary separating western Canada from Alaska in the Dixon Entrance region was initially contained within Article III of the Anglo-Russian treaty. This is described as (Bourne and McRae, 1976):

. . . Commencing from the southernmost point of the island called Prince of Wales, which point lies in the parallel of 54 degrees 40 minutes, north latitude, and between the 131st and 133rd degree of west longitude (Meridian of Greenwich), the said line shall ascend to the north along the channel called Portland Channel, as far as the point of commencement where it strikes the 56th degree of north latitude.

This is part of the same quotation used to initially define the boundary to the Beaufort Sea in section 3.2. This delimitation of the boundary was found insufficient with questions arising between first Great Britain and the United States and then Canada and the United States over the boundary in Dixon Entrance. On 20 October 1903, a decision was handed down by the Alaska boundary tribunal that resulted from a treaty dated 24 January 1903 between Great Britain/Canada and the United States. This treaty requested that a series of questions on the wording of the Anglo-Russian

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Alaska boundary treaty be resolved. Questions over the wording arose due to the discovery of gold in northern British Columbia with clarification of the boundary between the two countries requested. This was in response to 30 years of diplomatic dispute over the boundary, the establishment of boundary commissions and the conduct of surveys, until eventually a convention was signed to answer this series of questions (Bourne and McRae, 1976).

These questions were :

- what is intended as the point of commencement of the line ?;
- what channel is the Portland Channel ?; and
- what course should the line take from the point of commencement to the entrance to Portland Channel ?

The answers to these questions determine the boundary for part of the territorial sea of the United States and Canada in Portland Channel and out into Dixon Entrance. Both sides have agreed with the tribunal's decision on what constituted Portland Channel with the United States disagreeing on the beginning point and the line followed from there. This line is shown in Figure 8.2 as line A-B with point A located at the southern tip of Muzon Island. This line denies a portion of territorial sea to the south of Muzon Island. Thus, the largest item of concern is this line (A-B) from Cape Muzon (A) to the mouth of Tongass Passage (B) since a misunderstanding of what this line stands for has resulted in an ongoing dispute between Canada and the United States.

The full boundary within Dixon Entrance and Portland Channel, as delineated by a joint U.S.-Canada survey, is shown on sheets No. 1 and No. 2 of the "International Boundary Between United States and Canada From Cape Muzon to Mount St. Elias" series. These survey plans resulted from Article VI of the convention of 1903. After the delimitation of line A-B there still remained the question of whether this line was



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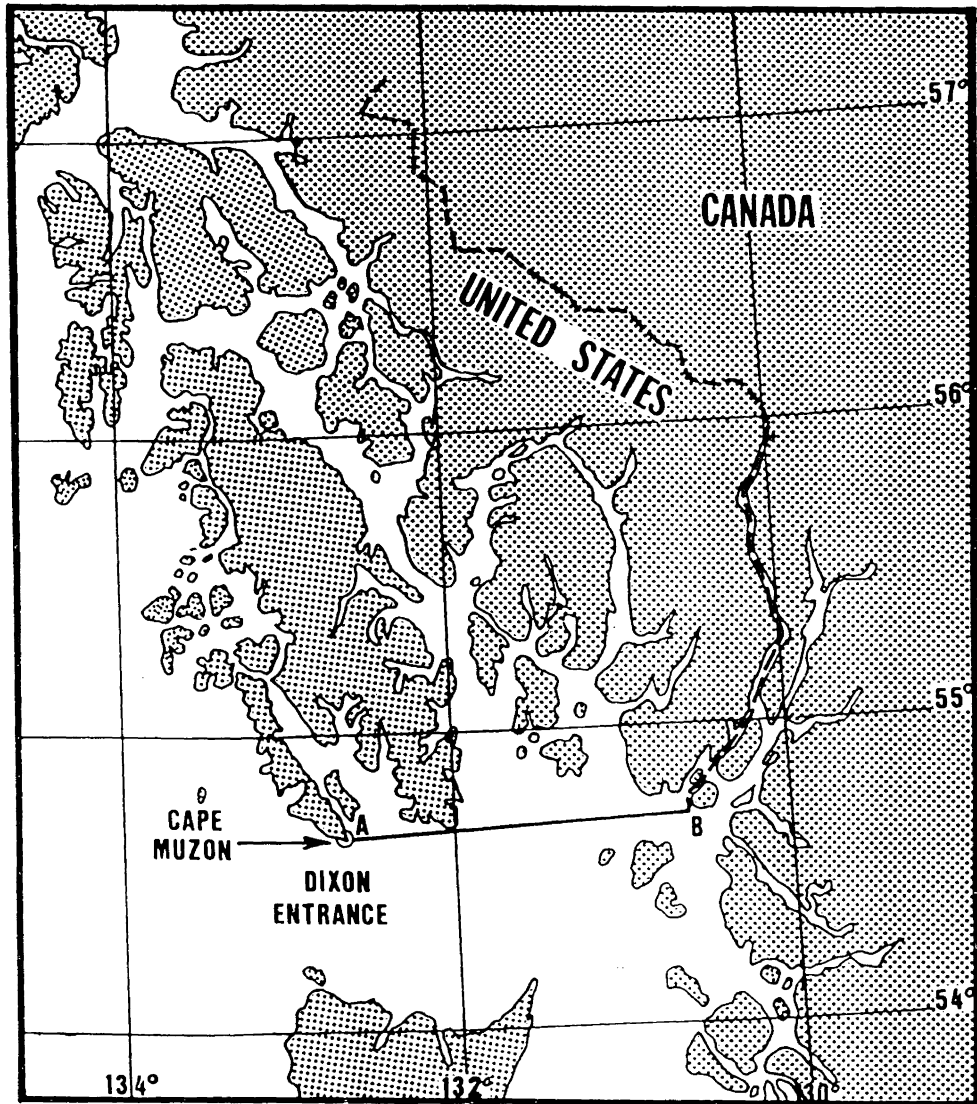


Figure 8.2 : U.S. - Canada Boundary in Dixon Entrance

intended as a maritime boundary, or whether it served simply to divide the land territories of the respective nations (Bourne and McRae, 1976).

Since the Alaska tribunal determined line A-B as a boundary line, Canada has argued that this line is both a territorial sea and EEZ dividing line with all waters south of the line considered under Canadian jurisdiction. A fact that would seem to support this is that until 1931 at least, the International Boundary Commissioners concerned with fixing the Alaska boundary did not treat the A-B line differently from the other sections of the Alaska boundary. In particular, during the 1920s the American commissioner kept trying to persuade his Canadian counterpart to agree to request their governments to move the boundary line from Cape Muzon to the middle of Dixon Entrance (Bourne and McRae, 1976). Although discussions of the boundary commissioners are not government policy, it would seem that the United States commissioner realized the problems inherent in line A-B and its more suitable location in mid-channel. The U.S. commissioner thought line A-B to be anomalous since it indicated that there was no territorial sea located at Cape Muzon (Bourne and McRae, 1976). The Canadian position remained unchanged and at the end of the 1920s the U.S. argument was switched with a contention that line A-B was not a boundary line at all but merely one of allocation, with high seas to the north and south of it (Bourne and McRae, 1976).

A negotiated settlement that would have replaced line A-B with a median line in Dixon Entrance was almost reached in 1945. The Canadian cabinet actually approved a proposal that would have divided Dixon Entrance between Canada and the United States by a median line, but would have allowed each state the right to fish and to navigate on both sides of the line outside of the three-mile territorial sea (Bourne and McRae, 1976). The proposal was approved by the United States but not accepted by

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Canada because the government of British Columbia rejected it (Bourne and McRae, 1976). Recognition of the concerns of British Columbia by the Canadian federal government may have set a precedent for future negotiations on offshore boundaries where the provincial government concerned is also allowed input into the final boundary delimitation. A case in point is the present Franco-Canadian boundary dispute and what if any would be the Newfoundland provincial government's input to the negotiating process.

Over the last four decades, disputes have arisen between the United States and Canada that warrant a settlement to the entire boundary line in the area. These disputes are a direct result of both countries exerting their sovereignty within the disputed zone. Since 1964 the Canadian claim has received some recognition from the international community, specifically Russia and Japan. These two countries were warned in 1964 to keep their fishing activities outside of Dixon Entrance and Hecate Strait as these were Canadian waters. Both states heeded the warning and since then their fishing vessels, apart from two or three Japanese incursions, have not entered the waters (Bourne and McRae, 1976).

Under amendments to the Territorial Sea and Fishing Zones Act of 1970 the Canadian government created a specific fishing zone in 1971 that extended far beyond the twelve mile territorial sea baselines. In Dixon Entrance a line was drawn from point A at Cape Muzon to a point on the northern part of the Queen Charlotte Islands. This had the effect of enclosing the area within Dixon Entrance. This zone can only be established legally if the claim to Dixon Entrance is valid, for it goes up to the shore of another state (Bourne and McRae, 1976). So, although Canada was establishing this fishing zone, recognition of it was denied by the United States, especially in the area of Cape Muzon and its three mile limit. In 1969 the American authorities in Alaska

warned a research ship working for the Canadian government to leave waters within three miles of Cape Muzon, and in 1971 they seized a Canadian fishing vessel and its gear (Bourne and McRae, 1976).

Since the UNCLOS III agreement and previous international agreements recognize that all states are entitled to a territorial sea and EEZ that are equitably delimited with a neighbouring coastal state, there is now support for the United States position. Therefore, based on the inequity of line A-B the United States proposed in 1973 that the dispute over the significance of this line be submitted to the ICJ for arbitration. In 1974 Canada rejected the proposal (Bourne and McRae, 1976). So, although there were a number of incidents in the disputed area Canada still chose not to bring the dispute before the International Court of Justice.

Further laws passed by both states that extend the boundaries of their respective fisheries zones to 200 nm have brought this boundary dispute within sharp focus (Feldman and Colson, 1981). Canada's Territorial Sea and Fishing Zones Act of 1977 uses Cape Muzon as the initial turning point for the construction of an equidistant boundary west 200 nm over the continental shelf. The United States disputes both this line and its point of origin, with the United States Fishery Conservation and Management Act of the same year delimiting the 200 nm fisheries boundary beginning at a median point in Dixon Entrance, south of Cape Muzon.

The same approach has been kept by the United States in delimiting the line followed by its 1983 EEZ off Dixon Entrance. Both sides are holding to their arguments on line A-B and thus a solution has not yet been reached to this dispute. Next, possible solutions for the resolution of this boundary are presented.

### 8.3 BOUNDARY DELIMITATION SOLUTIONS

It has been shown that within the Dixon Entrance region the main cause for dispute is the line A-B and what exactly this line delimits. Offshore, the differences of the lines described by both Canada and the United States for their respective fisheries zones are not large. Since both states employ the equidistance principle to delimit these lines the discrepancies between them can be attributed to the point of origin of both lines. Thus prior to resolving the EEZ and continental shelf boundary, a solution to the dispute over line A-B must be found.

Whether line A-B is resolved through negotiation or arbitration, there would appear three possible solutions. These are :

- line A-B is held as the line delimiting the extent of Canadian jurisdiction as proposed by Canada with Cape Muzon used as the beginning point for further seaward boundary delimitation;
- line A-B is held as the line delimiting the internal waters of the United States and is thus a baseline for the further delimitation of the territorial sea for the United States. In this case a median point would have to be found to extend the EEZ and continental shelf boundaries; and
- line A-B is disregarded and a median line boundary established as was proposed in 1945 to divide Dixon Entrance.

Of these three solutions, the first is perhaps the most inequitable considering present international law and the definitions of UNCLOS III, Appendix A, that delimit the offshore zones. For, it is hard to justify a line that denies a part of a state any territorial sea especially when that line is beyond the territorial sea of the state concerned. Also, point A is located on the territory of the United States. Thus, with no Canadian land holdings on Dall Island there remains only the Alaska Tribunal's decision of 1903 to continue with this delineation.

This line could be found to be absolute, although it may be possible to negotiate a sharing agreement between the United States and Canada that would recognize the

## CANADA'S UNRESOLVED MARITIME BOUNDARIES

sovereignty of the two states in the region while allowing for joint resource exploitation. Outside of an ICJ decision that would designate the meaning of this line, it would seem that further dispute over the line remains certain.

The implementation of solutions two or three requires that either Canada relinquish its present stance and agree to a negotiated boundary or have the dispute submitted to the ICJ for arbitration. A possible boundary delimitation from the ICJ may recognize the waters of Dixon Entrance as too broad to be regarded automatically as territorial with each state entitled to the normal territorial sea (Bourne and McRae, 1976). In this case, there would be also an EEZ boundary requiring delimitation within Dixon Entrance with this line extending seaward to 200 nautical miles.

An adjudication of this dispute by the ICJ would depend on such concerns as security and defence of each nation and the socio-economic conditions in the region. The possibility of either state acquiescing to the other's claim would also have to be resolved; events reported by Bourne and McRae (1976) seem to indicate that past U.S. and Canadian actions speak loudly, thus negating an argument based on acquiescence. Bourne and McRae (1976) do suggest that the United States may be estopped from denying Canada's claim, although one of the requirements of estoppel seems to be missing, that is, Canada has not acted to its detriment based on statements of the United States.

The submittal of the dispute to arbitration before the ICJ need not require that both the inner and outer zones boundaries be adjudicated, it is possible that the ICJ may rule only on the Dixon Entrance dispute. This would allow for a negotiated settlement between the two states on a boundary over the EEZ and continental shelf.

Once the inner portion of the boundary is established then the two countries could be seen as using an equidistant line to divide the EEZ and continental shelf. As stated

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in section 7.3, both governments have endorsed the equidistant principle for the west coasts offshore boundaries. In fact, equidistant lines are presently used to delimit the fisheries zones off Dixon Entrance. Although these lines originate from different locations they terminate at approximately the same position. Thus, the final position of the outer line is dependent on the starting point in Dixon Entrance whether it be at Cape Muzon or a median point.

The final line in Dixon Entrance will determine the commencement of the northern boundary between the economic zones of Canada and the United States in the Northwest Pacific. There are obviously much greater expanses of water at stake in the boundary question than those in Dixon Entrance when a 200 nm limit is considered (Bourne and McRae, 1976). Yet, both countries remain in dispute over the inner line in Dixon Entrance with no resolution in sight. The urgency to resolving this boundary, in its entirety, is now discussed.

### 8.4 SETTLEMENT URGENCY

The inner boundary in Dixon Entrance has been disputed since it was arbitrated by the Alaska Boundary Tribunal in 1903. It has been shown in section 8.2 that a misunderstanding in wording has led to a number of conflicts between Canada and the United States that may have turned into incidents of violence. Thus there is an urgency in resolving this dispute before a violent conflict occurs that may cause harm to either party.

The present Canadian claim within Dixon Entrance provides for Canadian fishing within three miles of the United States coastline. Thus although the depth of the Dixon

Entrance Channel should restrict Canadian fishing to the southern area of Dixon Entrance this is not the case. In this way there is a need by the fishing community to resolve this boundary both for effective management and a resolution of resource ownership.

Offshore there has been a moratorium on energy exploration imposed by the Canadian government since the middle of the 1970s. This negates any sense of urgency on behalf of the energy industry within Canada, although once this moratorium is lifted, there may be pressure applied to resolve the offshore continental shelf boundary. Since the EEZ and continental shelf boundaries are both dependent on the Dixon Entrance dispute being settled, then any pressure toward resolving these bears directly on the present boundary dispute over line A-B. Bourne and McRae (1976) conclude that pressure for the settlement of this dispute is most likely to come as a result of the friction and conflict over fishing and continental shelf rights.

## **8.5 GULF OF MAINE COMPARISON**

The present boundary dispute within the Dixon Entrance region shares many similarities with the Gulf of Maine adjudicated boundary. First, there appears that a portion of the Dixon Entrance boundary will only be resolved through arbitration. As with the Gulf of Maine, Canada and the United States would only submit a specific portion of the boundary to third party arbitration. In this case it would be the boundary within the Dixon Entrance and possibly the meaning of line A-B. This differs from the Gulf of Maine decision where an offshore boundary over the EEZ and continental shelf was delimited; here one is examining an inshore boundary.



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The use of a single line to delimit both the EEZ and continental shelf should also be employed for this area. As with the Gulf of Maine single boundary line, an equitable delimitation off Dixon Entrance would require a single line since no special circumstances exist to justify two boundary solutions.

The coastal configuration for the construction of offshore boundaries outside of Dixon Entrance is rather simplistic, Figure 8.1, and thus different than the Gulf of Maine. Within Dixon Entrance the coastline is similar to that of the Gulf of Maine but at a reduced scale. The need for proportioning coastlines as was done by the ICJ in the Gulf of Maine does not seem to be required in this area.

As with the Gulf of Maine, there are sufficient charts for both basepoint identification and boundary construction. Although these charts are at a smaller scale, Appendix B, than those available in the Gulf of Maine, the delineation of boundaries on these charts is not restricted.

## 9.0 CONCLUSIONS

Rather than attempting to delimit each boundary as the author feels it should be delineated within the conclusions, this section will attempt a general summary of certain points brought out in the paper. Also, general conclusions will be drawn on certain aspects of the boundary delimitation process. This will be done before giving individual conclusions for each boundary presented.

The final delimitation of all of Canada's offshore boundaries lies well into the future as Canada and the states concerned attempt to find a settlement through negotiation rather than arbitration. The choice between negotiation and litigation cannot be made in the abstract. Each case must be considered on its own terms. Litigation, however, is generally an option that is considered only where, for a variety of reasons, an acceptable negotiated settlement is barred and an early resolution of the dispute is essential (Legault, 1984/5). This is now the case for at least one of Canada's unresolved boundaries, with France and Canada considering the submission of Saint Pierre and Miquelon's offshore boundary to the ICJ.

In examining each of Canada's offshore boundaries there appears to be a certain criteria required before any sense of urgency is attached to finding a boundary settlement. It appears that the solution to a boundary dispute may be delayed as long as the area of dispute does not contain :

- a large area of territory such that the conflicting claims result in a large disputed zone;

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- resources sought by both states (i.e. fisheries, energy or minerals) that result in open and hostile confrontation;
- sharing agreements to cooperate in exploiting the resources; or
- boundary positions that are in close agreement although not exactly the same.

The comparisons made with the Gulf of Maine decision showed that many similarities exist between the circumstances encountered within the Gulf of Maine and those found for individual boundaries. Yet, it appears that for the remaining three Canada - United States boundaries neither government is trying to establish a link with the ICJ decision. This is in keeping with a statement by Johnson and Zacher (1977) indicating a separation of the Gulf of Maine decision and the other outstanding disputes.

### **Beaufort Sea**

The recent announcement by the United States that it will begin issuing offshore exploration permits east of the 141<sup>st</sup> meridian beginning in 1988 has forced this particular Canada - United States boundary issue to the forefront. The United States has clearly stated its position that an equidistant line and not the 141<sup>st</sup> meridian, as claimed by Canada, is the proper boundary delimitation. The positions held by the two countries may finally dictate that an arbitrated solution to this dispute be found. At the very least this announcement requires that negotiations be held prior to 1988 over this particular boundary.

The considerable area under dispute off the Yukon and Alaska coastlines together with both countries firm stances on their respective offshore boundary claims seem to indicate that this is a boundary requiring litigation. As with the Gulf of Maine dispute, arbitration would be performed by the ICJ. Although in this instance, the terms of reference may not indicate the use of a single boundary line to delimit both the EEZ and continental shelf.

In presenting this boundary to the ICJ for settlement, the court would have to rule on the validity of the sector principle for delimiting maritime boundaries. Therefore, this is seen as a precedent setting case should it go to adjudication.

#### **Labrador Sea and Lincoln Sea**

With the majority of the maritime boundary already delimited between Denmark and Canada through negotiation, the remainder of this boundary will, in all likelihood, find a negotiated settlement. There are no disputes in the areas requiring further delimitation and thus no urgency to further extend the ends of the boundary. Should both nations decide to finish the boundary delimitation then an equidistant line would be used.

#### **Saint Pierre and Miquelon and Newfoundland**

After the extension of offshore boundaries during the last few decades, Canada and France were able to successfully negotiate sharing agreements for the fisheries within the disputed zone while conducting talks on the offshore boundary delimitation. These agreements have begun to undergo stress as Canada claims French overfishing within the disputed zone and the two countries remain at odds to the proper delineation of the offshore boundary. For this reason Canada has been placed in a position where it wishes to submit the dispute to arbitration before the World Court. Both countries have been shown to have telling arguments (Beauchamp, et al., 1973) should the dispute go to arbitration and thus the court's decision on an equitable boundary will be, at the least, a difficult one.

Overall, it is Canada that would have the most to gain by an ICJ decision on the boundary as this would allow for controlled management of the fisheries. Concerning the peoples of Saint Pierre and Miquelon, the boundary should be most equitable if consideration is given to their historic fishing rights, whereas for the French

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continental fishing fleet, an equitable boundary solution could restrict their present fishing area on the Grand Banks considerably.

A solution by the ICJ may find that two boundaries are required in order to recognize the historic rights of France on the Grand Banks and thus an enlarged French EEZ beyond the 12 nm limit may be deemed appropriate. But, the court may also recognize the natural prolongation of the continental shelf as being Canadian. However the boundary is delineated, the Grand Banks have already been recognized by the court as being of a large enough area to redress any inequities. Finally, the hesitation by France to either negotiate a settlement or submit this dispute to arbitration may result from a decision in her favour concerning the offshore areas appertaining to the Channel Isles, which have a geographical analogy to that of Saint Pierre and Miquelon (Gault, 1985).

### **Outer Georges Bank and Marchias Seal Island**

The establishment of a boundary between the United States and Canada over the remainder of the continental margin off Georges Bank will only come with time. First, both nations must register their coordinates and method of delineating the continental shelf with the United Nations. After this, a period of negotiation will precede any agreement on the final boundary. At this point, these negotiations should be completed by the U.S. - Canada International Boundary Commission. With the ICJ decision in place, this delimitation is simplified as the basepoints and construction method are readily available. If ever the 1984 decision was used as a precedent, this is the region to which it would be applied.

The boundary in the Bay of Fundy surrounding Marchias Seal Island is another story. This boundary is complicated by the ownership question of Marchias Seal Island itself and is hotly contested by both countries. This disputed area will in all

likelihood require third party arbitration to resolve not only the boundary, but the land ownership question. It has been shown that this is an area of 'special circumstances' requiring a solution recognizing the rights of both nations within the region.

By not including this section of the Gulf of Maine boundary for arbitration to the ICJ in 1979, both nations were making a statement. This could be taken in two ways. First, this dispute may not be of such importance that the two states warrant its submittal to third party arbitration. Or, there exists a definite dispute here, only the arguments by each state are different and neither state wished to submit this dispute at the same time as the earlier EEZ and continental shelf dispute.

### **Juan de Fuca Strait Region**

The EEZ and continental shelf off Juan de Fuca Strait offer an area that should be delimited through negotiation. With both countries agreeing to the equidistance principle and the absence of special circumstances that would negate its use, this region is ready for an agreement. Whether the two countries will delimit an offshore boundary over the continental margin past 200 nm remains as a question. Should the United States and Canada file their claims on the continental shelf before the United Nations for this area, prior to pursuing an agreement, then an extension of the boundary to cover all of the zones is possible. It must be recognized that the possible presence of offshore mineral deposits on the Juan de Fuca Ridge may in the future act as a catalyst toward negotiation.

### **Dixon Entrance Region**

Although the entirety of this boundary from Portland Channel seaward is unresolved, there is a definite division between the region within Dixon Entrance and the offshore EEZ and continental shelf zones. It would appear that third party arbitration is again required to delimit the boundary within the Dixon Entrance. It has

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been shown that opposing views are held by Canada and the United States on the meaning of the 1903 Alaska Boundary Tribunal wording, specifically the meaning of line A-B. In submitting this dispute to the ICJ it is recognized that only the inner portion under dispute requires arbitration and a delimitation of the outer zones would be pursued following settlement on the line A-B question.

As with each of the other boundaries, particularly the disputed boundaries, specific concerns and facts exist to differentiate each unresolved boundary. In finding equitable delimitations the states must address each boundary on an individual basis; this has been shown to be the case. Finally, Canada has both time and space on its hands in resolving each boundary and thus should never rush into an agreement, although to avoid any hostile conflict, agreements over the most disputed zones should be pursued actively.

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## APPENDIX A

The articles of the UNCLOS III Convention that are pertinent to the delimitation of a boundary between opposite or adjacent states over the EEZ and continental shelf are contained in this appendix. All of the material presented here is taken from United Nations, 1983.

### Part V

#### EXCLUSIVE ECONOMIC ZONE

##### Article 55

###### Specific legal regime of the exclusive economic zone

The exclusive economic zone is an area beyond and adjacent to the territorial sea, subject to the specific legal regime established in this part, under which the rights and jurisdiction of the coastal State and the rights and freedoms of other States are governed by the relevant provisions of this Convention.

##### Article 56

###### Rights, jurisdiction and duties of the coastal state in the exclusive economic zone

1. In the exclusive economic zone, the coastal state has :
  - (a) sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superadjacent to the sea-bed and of the sea-bed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds;
  - (b) jurisdiction as provided for in the relevant provisions of this Convention with regard to:
    - (i) the establishment and use of artificial islands, installations and structures;
    - (ii) marine scientific research;
    - (iii) the protection and preservation of the marine environment;
  - (c) other rights and duties provided for in this Convention.

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2. In exercising its rights and performing its duties under this Convention in the exclusive economic zone, the coastal state shall have due regard to the rights and duties of other states and shall act in a manner compatible with the provisions of this Convention.

3. The rights set out in this article with respect to the sea-bed and subsoil shall be exercised in accordance with Part VI.

### Article 74

#### Delimitation of the exclusive economic zone between States with opposite or adjacent coasts

1. The delimitation of the exclusive economic zone 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 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 agreements 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 States concerned, questions relating to the delimitation of the exclusive economic zone shall be determined in accordance with the provisions of that agreement.

### Article 75

#### Charts and lists of geographical co-ordinates

1. Subject to this part, the outer limit lines of the exclusive economic zone and the lines of delimitation drawn in accordance with article 74 shall be shown on charts of a scale or scales adequate for ascertaining their position. Where appropriate, lists of geographical co-ordinates of points, specifying the geodetic datum, may be substituted for such outer limit lines of delimitation.

2. The coastal State shall give due publicity to such charts or lists of geographical co-ordinates and shall deposit a copy of each such chart or list with the Secretary-General of the United Nations.

**PART VI**  
**CONTINENTAL SHELF**

Article 76

Definition of the continental shelf

1. The continental shelf of a coastal State comprises the sea-bed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance.

2. The continental shelf of a coastal State shall not extend beyond the limits provided for in paragraphs 4 to 6.

3. The continental margin comprises the submerged prolongation of the land mass of the coastal State, and consists of the sea-bed and subsoil of the shelf, the slope and the rise. It does not include the deep ocean floor with its oceanic ridges or the subsoil thereof.

4. (a) For the purposes of this convention, the coastal State shall establish the outer edge of the continental margin wherever the margin extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, by either:

(i) a line delimited in accordance with paragraph 7 by reference to the outermost fixed points at each of which the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from such point to the foot of the continental slope; or

(ii) a line delineated in accordance with paragraph 7 by reference to fixed points not more than 60 nautical miles from the foot of the continental slope.

(b) In the absence of evidence to the contrary, the foot of the continental slope shall be determined as the point of the maximum change in the gradient at its base.

5. The fixed points comprising the line of the outer limits of the continental shelf on the sea-bed, 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 2500 metre isobath, which is a line connecting the depth of 2500 metres.

6. Notwithstanding the provisions of paragraph 5, on submarine ridges, the outer limit of the continental shelf shall not exceed 350 nautical from the baselines from which the breadth of the territorial sea is measured. This paragraph does not apply to submarine elevations that are natural components of the continental margin, such as its plateaux, rises, caps, banks and spurs.

7. The coastal State shall delineate the outer limits of its continental shelf, where that shelf extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, by straight lines not exceeding 60 nautical miles in length, connecting fixed points, defined by co-ordinates of latitude and longitude.

8. Information on the limits of the continental shelf beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured shall be submitted by the coastal State to the Commission on the Limits of the Continental Shelf set up under Annex II on the basis of equitable geographical representation. The Commission shall make recommendations to coastal states on matters related to the establishment of the outer limits of their continental shelf. The limits of the shelf

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established by a coastal State on the basis of these recommendations shall be final and binding.

9. The coastal State shall deposit with the Secretary-General of the United Nations charts and relevant information, including geodetic data, permanently describing the outer limits of its continental shelf. The Secretary-General shall give due publicity thereto.

10. 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 77

#### Rights of the coastal State over the continental shelf

1. The coastal State exercises over the continental shelf sovereign rights for the purpose of exploring it and exploiting its natural resources.

2. The rights referred to in paragraph 1 are exclusive in the sense that if the coastal State does not explore the continental shelf or exploit its natural resources, no one may undertake these activities without the express consent of the coastal State.

3. The rights of the coastal State over the continental shelf do not depend on occupation, effective or notional, or on any express proclamation.

4. The natural resources referred to in this Part consist of the mineral and other non-living resources of the sea-bed and subsoil together with living organisms belonging to sedentary species, that is to say, organisms which, at the harvestable stage, either are immobile or are under the sea-bed or are unable to move except in constant physical contact with the sea-bed or the subsoil.

### Article 83

#### Delimitation of the continental shelf between States with opposite or adjacent coasts

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 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 agreements 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 States concerned, questions relating to the delimitation of the continental shelf shall be determined in accordance with the provisions of that agreement.

Article 84

Charts and lists of geographical co-ordinates

1. Subject to this part, the outer limit lines of the continental shelf and the lines of delimitation drawn in accordance with article 74 shall be shown on charts of a scale or scales adequate for ascertaining their position. Where appropriate, lists of geographical co-ordinates of points, specifying the geodetic datum, may be substituted for such outer limit lines of delimitation.

2. The coastal State shall give due publicity to such charts or lists of geographical co-ordinates and shall deposit a copy of each such chart or list with the Secretary-General of the United Nations and, in the case of those showing the outer lines of the continental shelf, with the Secretary-General of the Authority



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## APPENDIX B

This section details the charts relevant to each of Canada's maritime boundary areas (CHS, 1986a); (CHS, 1986b); (CHS, 1986c). The charts are listed according to the boundary area, the nationality of the chart, the chart number, chart title, and scale.

**Table B.1 Relevant Boundary Delimitation Charts**

Chart NO.	CHART NAME	SCALE
<b>U.S.-Canada Boundary : Beaufort Sea</b>		
<b>(Canadian Charts)</b>		
N/A	International Boundary Along the 141st Meridian (Sheet 1)	62 500
7650	Barter Island to Toker Point (Navigation Chart)	500 000
7601	Siku Point to Kay Point (Navigation Chart)	150 000
7000	Arctic Archipelago ( Territorial Sea - 200 Mile Limit)	5 000 000
<b>Greenland - Canada Boundary : Davis Strait</b>		
<b>(Canadian Charts)</b>		
430	Kane Basin to Lincoln Sea (Chart shows the dividing line established between Canada and Greenland pursuant to the agreement between Canada and Denmark dated December 17, 1973.)	500 000
431	Cape Norton Shaw to Cape M'Clintock (Chart shows the dividing line established between Canada and Greenland pursuant to the agreement between Canada and Denmark dated December 17, 1973.)	500 000
432	Davis Strait and Baffin Bay (Chart shows the dividing line established between Canada and Greenland pursuant to the agreement between Canada and Denmark dated December 17, 1973.)	2 000 000
5300	Ungava Bay (Navigation Chart)	500 000
7010	Davis Strait and Baffin Bay ( Territorial Sea - 200 Mile Limit)	2 000 000
7050	Resolution Island to Cape Mercy (Navigation Chart)	500 000
7052	Cape Mercy to Kangeek Point (Navigation Chart)	500 000
7053	Padloping Island to Clyde Inlet (Navigation Chart)	500 000
7071	Cape Norton Shaw to Cape M'Clintock (Navigation Chart)	500 000
7072	Kane Basin to Lincoln Sea (Navigation Chart)	500 000
7217	Scott Inlet to Pond Inlet (Navigation Chart)	350 000
7220	Lancaster Sound, Eastern Approaches (Navigation Chart)	500 000
7302	Lady Ann Strait to Smith Sound (Navigation Chart)	500 000
7304	Lincoln Sea (Navigation Chart)	500 000

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**Table B.1 Relevant Boundary Delimitation Charts(con't)**

Chart		SCALE
NO.	CHART NAME	
<b>Greenland-Canada Boundary : Davis Straight</b>		
<b>(Danish Charts)</b>		
	1200	
	1300	
	1400	
	1500	
	1600	
	1700	
	3100	
	3200	
<b>St. Pierre et Miquelon-Newfoundland Boundary : Atlantic Coast</b>		
<b>(Canadian Charts)</b>		
401	Nova Scotia (Territorial Sea and Fishing Zone Chart)	1 000 000
402	Island of Newfoundland (Territorial Sea and Fishing Zone Chart)	720 200
404	Gulf of Maine to Strait of Belle Isle (International Chart)	3 500 000
405	Saint Pierre et Miquelon (Chart shows the dividing line between Canada and Saint Pierre and Miquelon pursuant to the agreement between Canada and France dated March 27, 1972)	125 000
415	Cape Ray to Saint Pierre (Territorial Sea and Fishing Zone Chart)	350 000
416	Saint-Pierre to St. John's (Territorial Sea and Fishing Zone Chart)	350 000
405	Saint-Pierre and Miquelon (March 27, 1972 Fishing Boundary)	125 000
4000	Gulf of Maine to Baffin Bay (General Chart)	4 500 000
4015	Sydney to Saint Pierre (Loran C Coastal and General Chart)	350 000
4625	Burin Peninsula to St. Pierre ( Loran C Coastal Chart)	75 000
4626	Saint Pierre and Miquelon (France) ; (D2 Coastal Chart)	75 000
<b>U.S.-Canada Boundary : Gulf of Maine Boundary</b>		
<b>(Canadian Charts)</b>		
4010	Bay of Fundy (Inner Portion) ; (Loran C Coastal and General Chart)	200 000
4324	Yarmouth to Petit Passage (Small Craft Chart)	63 400
4326	Pubnico to Yarmouth (Small Craft Chart)	63 400
4216	Cape Sable to Pubnico (Small Craft Chart)	37 500
4330	Baccara Point to Pubnico Harbour (Small Craft Chart)	63 500
8005	Georges Bank (Loran C Fisheries Chart)*	300 000
<b>(U.S. Charts)</b>		
13241	Nantucket Island	1 : 40 000
13248	Chatham Harbour and Pleasant Bay	1 : 20 000
13246	Cape Cod Bay	1 : 80 000
13279	Ipswich Bay to Gloucester Hbr.	1 : 20 000
13290	Casco Bay	1 : 40 000
13325	Quoddy Narrows to Petit Manan I. **	1 : 80 000

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**Table B.1 Relevant Boundary Delimitation Charts (con't)**

Chart		
NO.	CHART NAME	SCALE
<b>U.S.-Canada Boundary : Juan de Fuca Strait</b>		
<b>(Canadian Charts)</b>		
N/A	Joint Chart of the International Boundary Between United States and Canada From the Forty-Ninth Parallel to the Pacific Ocean (April 11, 1908 Treaty Boundary)	200 000
391	Vancouver Island (Territorial Sea and Fishing Zone Chart)	525 000
3000	Juan de Fuca Strait to Dixon Entrance (Loran C General Chart)	1 250 000
3001	Vancouver Island, Juan de Fuca Strait to Queen Charlotte Sound (Loran C General Chart)	525 000
3602	Approaches to Juan de Fuca Strait (Loran C Navigation Chart)	150 000
<b>U.S. Canada Boundary : Dixon Entrance</b>		
<b>(Canadian Charts)</b>		
392	Queen Charlotte Sound to Dixon Entrance (Territorial Sea and Fishing Zone Chart)	525 000
399	Fishing Zone 3/Zone de peche no 3, Queen Charlotte Sound, Hecate Strait and Dixon Entrance (Territorial Sea and Fishing Zone Chart)	525 000
3000	Juan de Fuca Strait to Dixon Entrance (Loran C General Chart)	1 250 000
3002	Queen Charlotte Sound to Dixon Entrance (Loran C General)	525 000
3802	Dixon Entrance (Loran C Navigation Chart)	200 000
3868	Port Louis to Langara Island (Navigation Chart)	72 900
*	Beazley (1984) uses this chart to delimit the line crossing Georges Bank.	
**	This chart was not used in the ICJ court decision but would be used for the resolution of the territorial sea in Fundy Bay.	

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