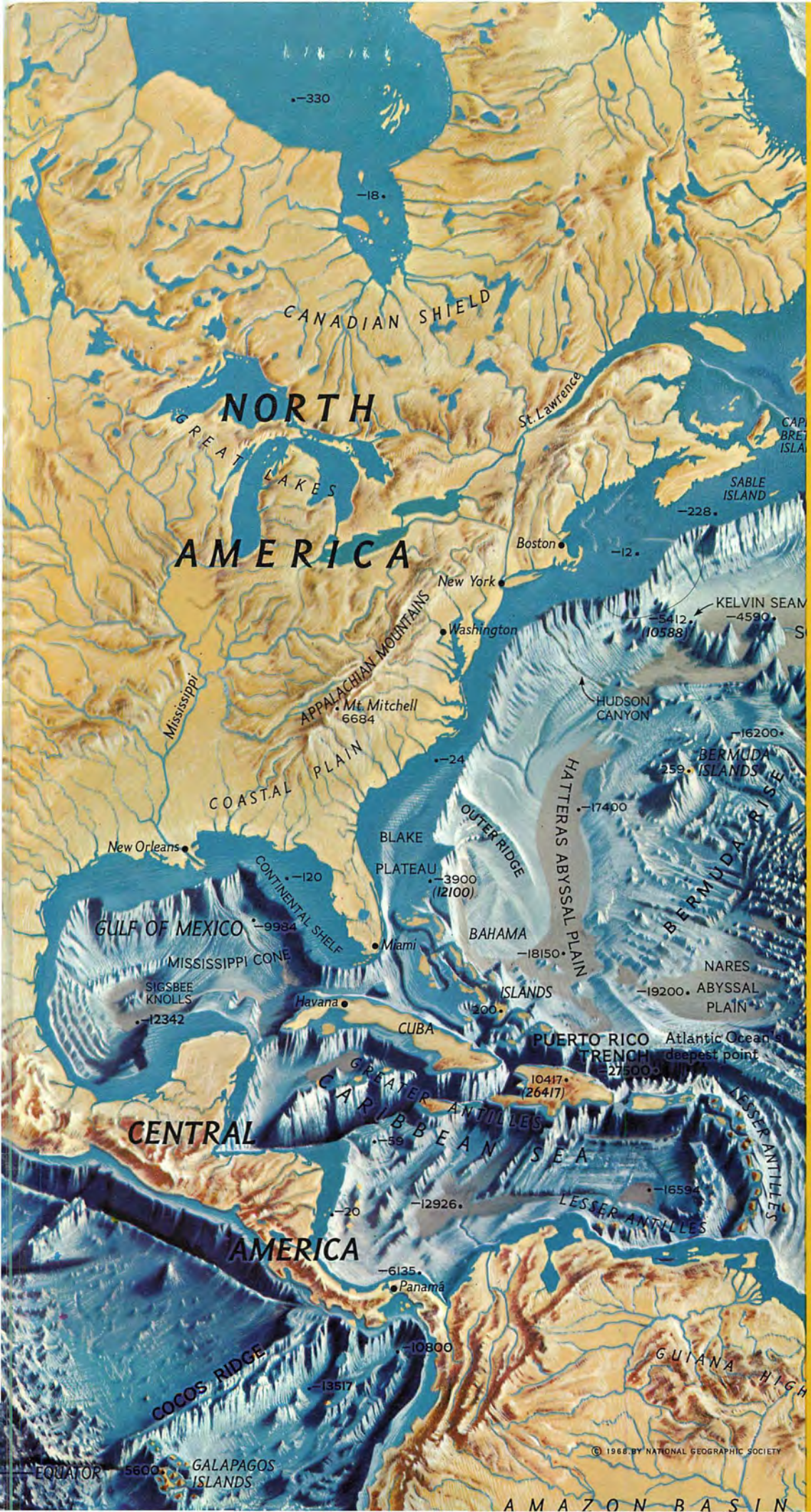

PETROLEUM RESOURCES UNDER THE OCEAN FLOOR

SUPPLEMENTAL REPORT OF THE NATIONAL PETROLEUM COUNCIL

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PETROLEUM RESOURCES UNDER THE OCEAN FLOOR

A Supplemental Report
Prepared by the
National Petroleum Council
in response to a request from the
Department of the Interior

NATIONAL PETROLEUM COUNCIL

E. D. Brockett, *Chairman*
H. A. True, Jr., *Vice-Chairman*
Vincent M. Brown, *Executive Director*

Petroleum Advisory Council
to the
U.S. DEPARTMENT OF THE INTERIOR

Rogers C. B. Morton, *Secretary*
Hollis M. Dole, *Asst. Secretary-Mineral Resources*
Gene P. Morrell, *Deputy Asst. Secretary-Mineral Resources*

and to the
OFFICE OF OIL AND GAS

PETROLEUM RESOURCES UNDER THE OCEAN FLOOR

SUPPLEMENTAL REPORT

OF

THE NATIONAL PETROLEUM COUNCIL

Prepared by

THE NATIONAL PETROLEUM COUNCIL'S COMMITTEE ON
PETROLEUM RESOURCES UNDER THE OCEAN FLOOR

E. D. Brockett, *Chairman*

with the assistance of

Technical Subcommittee on Petroleum Resources
Under the Ocean Floor

Dr. Hollis D. Hedberg, *Chairman*

March, 1971

PREFACE

The National Petroleum Council, an industry advisory body representing virtually all sections of the U.S. oil and gas industries, was established by the Secretary of the Interior on June 18, 1946, pursuant to a directive of the President of the United States. The purpose of the Council is to advise, inform and make recommendations to the Secretary of the Interior with respect to matters relating to petroleum or the petroleum industry submitted to it by the Secretary.

This report, supplemental to *Petroleum Resources Under the Ocean Floor* published in March 1969, expresses the consensus of the membership of the National Petroleum Council. Association of representatives of the Department of the Interior and other government agencies with the deliberations of the Council on this subject does not connote endorsement of the recommendations expressed by the Council in this report. The National Petroleum Council recognizes that the military establishment is highly dependent upon adequate petroleum supplies for its mobility, but beyond that aspect, has excluded from this report any discussion of military implications of seabed use. The views expressed in the report are those of the Council and do not necessarily reflect the views of the Department of the Interior or of the United States Government.

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TABLE OF CONTENTS

INTRODUCTION

A. Scope of Supplemental Report

By letter of August 5, 1970, addressed to Mr. E. D. Brockett, Chairman of the National Petroleum Council (NPC), the Assistant Secretary of the Interior-Mineral Resources, Mr. Hollis M. Dole, requested a careful study by NPC experts of the August 3, 1970 Draft of a proposed United Nations Convention on the International Seabed Area.[1] The Draft had been presented by the United States Government as a working paper for discussion purposes at the August 1970 meeting of the United Nations Sea-Bed Committee in Geneva, Switzerland. In his letter Mr. Dole points out, as did the cover sheet of the August 3 Draft, that the Draft does not necessarily represent the definitive views of the U.S. Government. He requested of the NPC

> . . . an article-by-article analysis of the draft treaty which would contain specific commen-

1. The letter is attached as Appendix A. The Draft Convention will be referred to herein as the "August 3 Draft" or "Draft." Complete text of the Draft Convention is attached as Appendix D.

tary as well as suggested alternative language if appropriate.

Mr. Dole also requested that particular attention be given to Articles 26 and 73 of the Draft. With respect to Article 26, he presented the following question:

> Article 26 leaves partially undefined the seaward edge of the trusteeship zone. In the interest of preserving for exclusive United States use all of the natural resources contained in the submerged land continent, would you suggest a means of defining that point on the submerged land continent beyond which the likelihood of finding petroleum and natural gas resources is highly remote?

With respect to Article 73, Mr. Dole refers to the Statement by the President on U.S. Oceans Policy [2] dated May 23, 1970, and concludes that implicit in the President's Statement was the desire that exploration and exploitation of natural resources beyond the 200-meter isobath should continue unabated pending ratification of a seabed treaty. In that regard Mr. Dole requests that the NPC

> . . . evaluate Article 73 and provide any suggestions you may have regarding revisions which would contribute to ensuring the President's desires concerning present and near future leasing on the outer continental shelf beyond 200 meters.

In responding to Mr. Dole's request, it is deemed useful as background to refer to the 1969 NPC Report dealing with sub-oceanic petroleum resources and to set forth certain relevant developments since the issuance of that report.[3] It then appears desirable to review the President's Statement of May 23, 1970; the explanation of the President's Statement given by Administration spokesmen on May 27, 1970, to the Special Subcommittee on Interior and Insular Affairs; and, finally, the Draft Treaty itself.

B. Conclusion of 1969 NPC Report

The 1969 NPC Report presented a comprehensive and detailed study of the energy outlook for the United States, the prospects of petroleum accumulations under the oceans, the technology and economics of offshore oil and gas exploration and production, and the law governing existing jurisdiction over petroleum resources of oceanic areas as it has developed both in customary international law as enunciated in the decision of the International Court of Justice in the *North Sea Continental Shelf Cases* (decided on February 20, 1969)[4] and conventional international law as contained in the 1958 Geneva Convention on the Continental Shelf.[5]

The conclusion reached in the 1969 NPC Report was as follows (p. 13):

> It is the firm and carefully considered conclusion of the National Petroleum Council, an industry advisory body to the Secretary of the Interior, representing virtually the entire American oil and gas industries, that the United States, in common with other coastal nations, now has exclusive jurisdiction over the natural resources of the submerged continental mass seaward to where the submerged portion of that mass meets the abyssal ocean floor and that it should declare its rights accordingly. We believe that this was the intent of the framers and delegates who composed the 1958 Geneva Convention on the Continental Shelf. We believe that this was the understanding of the Congress and of the President of the United States when this country ratified the Geneva Convention. We are convinced that this interpretation is in the best interests of this Nation, whether or not it is in the best interest of the American oil and gas industries.
>
> This matter is extremely vital and involves basic principles and long-range implications concerning the well-being of this Nation and of all its people. The National Petroleum Council feels that it has a continuing responsibility to emphasize, as it has from time to time in the past, that adequate petroleum resources are of major consequence to the economy and the security (in its broadest sense) of this Nation. The resources of this country, which do indeed include the resources of that part of our continent beneath the waters, are a great and priceless heritage. The oil and gas resources in these submerged portions of our continent may well prove to be larger than those remaining on the land. These strategic and valuable resources could well be the means of maintaining far into the fu-

2. Wkly. Comp. Presidential Docs., May 25, 1970, pp. 677-678. This Statement, a copy of which is attached hereto as Appendix B, will be referred to hereinafter as the "President's Statement."

3. *Petroleum Resources Under the Ocean Floor*, hereinafter called "1969 NPC Report."

4. I.C.J. Reports, 1969, p. 3.

5. U.N. Doc. No. A/Conf. 13/L.55 (1958). It is interesting to note that States continue to accede to the 1958 Geneva Convention. Five additional States have taken such action since publication of the 1969 NPC Report, namely, Canada (1970), Republic of China (1970), Kenya (1969), Mauritius (1970), and Swaziland (1970). A total of 44 States are now parties to this Convention.

ture this Nation's essential self-sufficiency and avoiding the vulnerability inherent in dependence on foreign energy sources.

C. Domestic Supply Developments Since the 1969 NPC Report

A number of significant developments emphasizing the importance of all domestic sources of oil and natural gas to the United States have taken place in the brief time span since the above Report was issued:

1. The statements of representatives of the United States on several occasions that the assurance that the United States Government has heretofore been able to give its European allies of significant emergency supplies from U.S. domestic sources to help meet their oil requirements in time of crisis, as in 1956-57 and again in 1967, is increasingly coming into question although the U.S. would continue to cooperate in any such emergency to the fullest extent possible.

2. A letter to the President of August 13, 1970, from General G. A. Lincoln, Director of the Office of Emergency Preparedness and Chairman of the Oil Policy Committee, which emphasizes the increasing problem of maintaining adequate domestic energy supplies for our Nation's security, closes with the following significant comments:

> I would be remiss if I did not express to you my concern about the long run and even mid-term outlook for assuring the achievement of the national security objectives on which the oil import program is based. . . . [W]e . . . face the growing danger of not having adequate supplies from reasonably secure sources—a vast problem which cannot be separated from our overall energy policy. National security must be a central consideration in working out that overall policy.[6]

3. The acknowledged shortage in the domestic supply of natural gas has recently reached the point where annual production exceeds discoveries, and many furnishers of natural gas must limit service to some customers and decline to supply potential new customers.

4. The steadily rising dependence of the U.S. on oil and gas from wells in the U.S. offshore areas. In 1968, as stated in the 1969 NPC Report (at p. 18), offshore wells accounted for about 12 percent of the oil and 10 percent of the natural gas production in the United States. These figures are estimated to have been 17 percent and 16 percent, respectively, in 1970. The long-range importance in this regard of the entire U.S. continental margin [7] is emphasized by the fact that the U.S. Geological Survey has estimated potential resources in place of 660 to 780 billion barrels of oil and 1,640 to 2,220 trillion cubic feet of natural gas in the U.S. offshore from the outer limits of the territorial sea to a depth of 200 meters, and has estimated potential resources in place between the 200- and 2500-meter isobaths as being of nearly the same magnitude.

D. United Nations Developments

In addition to the foregoing developments which relate to the adequacy of domestic oil and natural gas supplies, activities in the United Nations culminated on December 17, 1970, in the U.N. General Assembly adopting a resolution convening in 1973 a Conference on the Law of the Sea "which would deal with the establishment of an equitable international regime—including an international machinery—for the area and the resources of the sea-bed and the ocean floor and the subsoil thereof beyond the limits of national jurisdiction, a precise definition of the area, and a broad range of related issues. . . ." [8]

The convening of another Law of the Sea Conference emphasizes the need for a careful evaluation of the United States position for that Conference including careful analysis of the August 3 Draft and its relationship to the national interests of the U.S. Prior to detailed consideration of that Draft, we submit the following summary of the NPC's conclusions and recommendations.

6. The full text of the letter is attached as Appendix C hereto.

7. The term "continental margin" is used herein as it is defined in the Glossary to the 1969 NPC Report, i.e.:

> *Continental Margin*—This term is currently used with several different meanings. In a geomorphic sense it is generally used to indicate a zone separating the emergent continents from the deep-sea bottom, and as such generally includes the continental shelf, continental slope and continental rise (Heezen et al., 1959). However, Guilcher (1963) and others have used the term "margin," in a geomorphic sense, to include only the shelf and the slope. The U.S. Geological Survey has used the term in a geologic or 3-dimensional sense to indicate the submerged part of the continental block.
>
> Because of this diversity in usage we have chosen to use the term "continental margin" with a rather broad vernacular meaning, to indicate a geomorphic/geologic zone of rather indefinite extent at the edge of the continental block encompassing the transition from continent to ocean basin. Geomorphically, it would usually include the shelf, slope, and that *landward* portion of the rise which overlies continental crust. Geologically, it would include the transition zone from oceanic to continental crust. Where a more exact meaning is needed, we have used more specific terms such as continental slope, continental shelf, and continental rise.

8. U.N. Res. 2750 (XXV)—U.N. Press Release GA/4355, 17 Dec. 1970, Part II, pp. 55-58.

CHAPTER ONE–SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

A. It is the conclusion of the NPC that the August 3 Draft fails to provide appropriately for the interests either of coastal states or of the larger international community in three fundamental respects:

1. It would unnecessarily compel coastal states to yield their existing rights to the seabed resources of the submerged continent seaward of the 200-meter isobath,[1] for which they would receive in return under the treaty the uncertain and ill-defined status of "trustee" of those resources;

2. It calls for an interim or transitory arrangement lacking in necessary assurances to the potential investor of the integrity of his investment made during the period of negotiation preceding the conclusion of the treaty;

3. It would impose operating conditions and financial terms applicable to licenses which

1. The seabed and subsoil of the submerged continent (or island) oceanward of the 200-meter isobath or the outer limit of the territorial sea, whichever is farther from shore, will be referred to hereinafter as the "outer continental margin."

would deter rather than encourage the search for and development of seabed petroleum resources in both the area of the outer continental margin and the deep-ocean area beyond.

B. The NPC adheres to and reasserts the conclusion reached in its 1969 Report and quoted at page 3, above. However, the NPC, while opposed to the renunciation by the U.S. of its rights to the mineral resources of the seabed of the submerged continent beyond the 200-meter isobath, does endorse the following five principles enunciated in the President's Statement (hereinafter referred to as the President's five points):

> ". . . [1] the collection of substantial mineral royalties to be used for international community purposes, particularly economic assistance to developing countries . . . [and the establishment of] general rules [2] to prevent unreasonable interference with other uses of the ocean, [3] to protect the ocean from pollution, [4] to assure the integrity of the investment necessary for such exploitation, and [5] to provide for peaceful and compulsory settlement of disputes."

C. The NPC believes that those principles and objectives can be secured without endangering our Nation's continuing control and development of the vital and necessary oil and gas resources of its offshore continental margin and with this purpose in view recommends as follows:

> 1. *The U.S. and other coastal states should not renounce but rather should retain jurisdiction over the seabed and subsoil mineral resources to the outer edge of the submerged continent or island.*

International agreement to this jurisdictional provision could be linked with a provision that, as to the outer continental margin, coastal states would make reasonable contributions to the international community from the revenues derived from exploitation of the seabed and subsoil natural resources, and that seabed resources development in this area would be subject to internationally agreed upon rules dealing with multiple uses of the sea, protection against pollution, assurance of the integrity of investment (including safeguards against expropriation), and peaceful and compulsory settlement of disputes (the President's five points).

Under this recommendation coastal states would retain jurisdiction applicable solely to the exploration for and development of seabed mineral resources in the outer continental margin sufficient to enable them appropriately to safeguard their interests in such seabed mineral resources while assuring that matters of legitimate interest and concern to the international community be resolved by internationally agreed standards. Moreover, exploration and exploitation of vitally needed seabed resources beyond 200-meters water depth could continue uninterrupted during the negotiating of a treaty governing conduct in that area and the establishment of an international regime for the control of deep ocean seabed resources.

In advocating the foregoing approach the NPC wishes to make it unmistakably clear that the jurisdiction of coastal nations in the outer continental margin recommended in this Report should be strictly a seabed mineral resources jurisdiction applicable solely to the mineral resources of the seabed and subsoil thereof and should not relate to jurisdiction in or over the overlying waters or airspace, nor any jurisdiction concerning other seabed and subsoil uses except as may be reasonably necessary to implement the President's five points.

Adoption of the foregoing recommendation would avoid many difficult problems that otherwise would arise during the interim or transitory period while an international treaty is being negotiated.

> 2. *Leases, licenses or concessions issued by coastal states for mineral exploration or development in the area of the outer continental margin during the period of negotiation and conclusion of the treaty should remain unaffected by such a treaty when it becomes effective except to the extent of applicable agreed international standards implementing the President's five points.*

During such an interim period while a treaty is under negotiation and being concluded, coastal states should deal with the mineral resources of the outer continental margin according to their own policies and laws. The ensuing treaty would only affect coastal state licenses, leases or concessions for the outer continental margin to the extent of agreed provisions for prevention of pollution, prevention of unreasonable interference with other uses of the oceans, for peaceful and compulsory settlement of disputes, and for assuring the integrity of investment. The licensing coastal state would make such financial contributions to the international community out of revenues derived from operations in the outer continental margin as would be called for by the treaty, but the burden on the licensee should not be increased thereby.

3. *Seabed mineral resources of the oceans lying beyond the limits of coastal state jurisdiction should be subject to treaty provisions which would make these resources subject to agreed international arrangements.*

The treaty should make appropriate provision for the disposition of revenues from this area and should also amplify existing international law, as necessary, to deal with such matters as conflicting uses of the oceans, protection against pollution, settlement of disputes arising from uses of the seas and of the underlying seabed, and assurance of integrity of investment.

4. *The line of demarcation between the coastal state's area of mineral resource jurisdiction over the submerged continent or island and the international area beyond should be recognized as lying within an agreed reasonable zone oceanward of the base of the continental or insular slope. Precise boundaries should be determined promptly.*

5. *The treaty, while dealing specifically with the seabed mineral resources, should reaffirm and guarantee all other freedoms of the high seas.*

CHAPTER TWO—THE PRESIDENT'S STATEMENT OF MAY 23, 1970, ON U.S. OCEANS POLICY AND DEVELOPMENTS RELATING THERETO

A. The President's Statement

On May 23, 1970, the President announced his position on U.S. Oceans Policy. The essential points of this policy are as follows:

1. Adoption by all nations as soon as possible of a treaty under which they would renounce all national claims over the natural resources of the seabed beyond the point where the high seas reach a depth of 200 meters and agreement to regard these resources as "the common heritage of mankind."

2. Establishment of an international regime for the exploitation of these resources which would provide for (a) the collection of substantial mineral royalties to be used for international community purposes, particularly economic assistance to developing countries; and general rules (b) to prevent unreasonable interference with other uses

of the ocean, (c) to protect the ocean from pollution, (d) to assure the integrity of the investment necessary for such exploitation, and (e) to provide for peaceful and compulsory settlement of disputes.

3. Agreement that coastal nations act as trustees for the international community in an international trusteeship zone comprised of the "continental margins" beyond a depth of 200 meters off their coasts, in return for which each coastal state would receive a share of the international revenues from the zone in which it acts as trustee and could impose additional taxes if these were deemed desirable.

4. Agreement on international machinery to authorize and regulate exploration and use of seabed resources seaward of "the continental margins."

5. Acknowledgement that the negotiation of such a complex treaty may take some time. The President expressly stated his belief that it was neither necessary nor desirable to try to halt exploration and exploitation of the seabeds beyond a depth of 200 meters during the negotiating process. Instead, he called on other nations to join the United States in an interim policy under which:

a. All permits for exploration and exploitation of the seabeds beyond 200 meters would be issued subject to the international regime to be agreed upon, but the regime should accordingly include due protection for the integrity of investments made during the interim period.

b. A substantial portion of the revenues derived by a state from exploitation beyond 200 meters during this interim period should be turned over to an appropriate international development agency for assistance to developing countries. He planned to seek appropriate congressional action to make such funds available as soon as a sufficient number of other states also indicated their willingness to join in this interim policy.

6. While primarily of domestic interest, the President added the very important point that he would propose the necessary changes in the domestic import and tax laws and regulations of the United States to assure that they do not discriminate against U.S. nationals operating in the trusteeship zone off our coasts or under the authority of the international machinery to be established.

7. The President also referred to the equal importance of reaching agreement on the width of the territorial sea (12 miles being his proposal) and on the related questions of free transit through and over international straits and the accommodation of the problems of developing countries and other nations regarding the conservation and use of the living resources of the high seas.

B. Senate Subcommittee Hearings of May 27, 1970

The President's Statement was amplified by testimony given by the then Under Secretary of State, Mr. Elliott Richardson, on May 27, 1970, before the Subcommittee on Outer Continental Shelf (Senate Subcommittee under the Chairmanship of Senator Lee Metcalf) of the Senate Committee on Interior and Insular Affairs.[1] The key points of amplification were the following:

1. Revenues derived from seabed resources development would be significant only if the formulas and rules used do not discourage investment and exploitation. (p. 431)[2]

2. The depth of 200 meters proposed by the President as the limit of coastal state sovereign rights over the continental shelf beyond the territorial sea "represents the point out to which coastal state sovereign rights over the natural resources of the seabed are undisputed. . . . Its use maximized the area of the seabed which would be subject to a new international regime." (p. 430)

3. "The concept of an international trusteeship for coastal States is a new one [p. 430]. . . . Coastal nations would be authorized . . . by the international regime to act as trustees for the international community [p. 431]. . . . The coastal state would act pursuant to authority delegated to it under the treaty establishing the international regime and would be responsible for assuring adherence to general rules established by the treaty [p. 431]. . . . Within this framework it would, as trustee for the international community, authorize and regulate exploration and exploitation of seabed resources within the trusteeship zone pursuant to its own laws and regulations. It would decide on who would be granted leases and of how long. [p. 431]

"The conditions on which such leases would be granted . . . would be consistent with and in addition to the general rules specified in the regime treaty." (p. 432)

1. Hearings before the Special Committee on Outer Continental Shelf of the Committee on Interior and Insular Affairs of the U.S. Senate, 91st Cong., 2nd Sess., May 27, 1970, Part II.

2. Such references are to the Senate Subcommittee Hearings cited in prior footnote.

4. "The proposal combines narrow limits of national sovereign rights over seabed resources with a pragmatic division of royalties and administration of the resources of the continental margin [p. 430]. . . . For the United States to propose a concept of broad extension of national jurisdiction would have indirect, but serious, national security implications [3] and would impede the freedom of scientific research and other uses of the high seas. [p. 430]

"On the other hand, it is improbable that coastal States would be prepared to agree to a 200-meter limit if no international trusteeship zone with a division of royalties and administration were included." [4] (p. 430)

5. With respect to the protection of the integrity of investments made during the interim period, "[w]hat we have in mind are grandfather arrangements similar to those which were made with respect to areas in the Gulf of Mexico at a time when it was unclear whether particular areas were under the jurisdiction of the States or the Federal Government." (p. 432)

6. The rights and interests of the coastal state "would be safeguarded by treaty and not subject to revocation by the international regime." (p. 435)

7. The coastal states would not renounce their claims beyond 200 meters in the sense that "they would still, however, as trustees, exercise substantial rights and retain substantial interests, and . . . coastal States interest in a proposal like this is greater than their interest in proposals such as some that have been made that would exclude any right on the part of the coastal State even to regulate or to share in royalties." (p. 442)

8. "To put it another way around, I find it difficult to imagine that the United States is itself, or would be willing to enter into an international treaty which prevented us from excluding North Vietnamese [from] oil exploitation in the continental margin off California." (p. 457)

C. The August 3, 1970 Draft Treaty

At the opening of the August 1970 meeting of the U.N. Sea-Bed Committee in Geneva, Switzerland, the U.S. Delegation presented the August 3 Draft. This document is entitled "DRAFT UNITED NATIONS CONVENTION ON THE INTERNATIONAL SEABED AREA." It is designated as a "Working Paper" and states on its cover sheet that

> The draft Convention and its Appendices raise a number of questions with respect to which further detailed study is clearly necessary and do not necessarily represent the definitive views of the United States Government. The Appendices in particular are included solely by way of example.

In his letter of August 5, 1970, Mr. Dole asked the NPC to give an article-by-article analysis of the August 3 Draft. Because the NPC is of the view that, as this report indicates, there are a number of fundamental questions raised in the Draft, it is not felt that an article-by-article analysis at this time would be appropriate. It is believed, however, that a summary of the more significant features of the Draft would be helpful to place the comments of the NPC in perspective.

1. Basic Principles and General Rules

All areas of the seabed and subsoil of the high seas seaward of the 200-meter isobath are designated as the International Seabed Area (hereinafter called International Area), which is declared to be the "common heritage of all mankind" and is reserved exclusively for peaceful purposes.

Within the International Area there is the "International Trusteeship Area" (hereinafter called Trusteeship Area) which comprises the area between the 200-meter isobath and a line "beyond the base of the continental slope" where the downward inclination of the surface of the seabed declines to a gradient yet to be agreed upon. For convenience the portion of the International Area oceanward of the Trusteeship Area will be referred to herein as the Deep Ocean Area.

As to the entirety of the International Area, which, of course, includes both the Trusteeship Area and the Deep Ocean Area, the Draft provides (a) that no nation may claim or exercise sovereignty or sovereign rights over any part thereof or over its

3. But note his later statement (pp. 493-4) that "If that treaty [fixing a 12-mile limit for the territorial sea] were adopted, it would provide a major, and we would hope a sufficient degree of protection against the problem of creeping jurisdiction, even though we did not then also have a treaty on the seabeds in addition."

4. See U.N. Press Release GA/PS/1654 of 2 December 1970 reporting the comments of Mr. Peter S. Thacher of the United States delegation, as follows:

> "He said that in the United States draft convention, the concept of a trusteeship zone beyond a depth of 200 metres was envisaged under the international regime.
>
> "Kuwait and some 15 other States were 'shelf-locked', thus lacking access to waters beyond a depth of 200 metres, he stated. Such States, along with land-locked countries, had a strong interest in maximizing the area under international jurisdiction, he said.
>
> "However, there were many coastal States, including the United States, which today had rights beyond a 200-metre depth, he went on. It was necessary to have the concept envisaged in the United States draft convention, because if there was no support on the part of coastal States, the whole idea would be endangered, he added."

resources; and each party to the treaty would agree not to recognize any such claim or asserted right by any nation; and (b) no nation has, nor may it acquire, any right, title or interest in its resources except as provided in the Draft.

Only nations party to the treaty or those authorized or sponsored by such nations shall conduct exploration or exploitation activities in the International Area. The coastal nation is designated as Trustee for the international community for the Trusteeship Area off its coast. Such Trustee nation has only those rights in the Trusteeship Area that are conferred upon it by the treaty. The treaty establishes the term, work requirements and payments applicable to all licenses in the International Area with the proviso that within the Trusteeship Area the Trustee state may establish the period of the exploitation license and the conditions, if any, under which it may be renewed. Any such renewal must be subject to the condition applicable to the entire seabed area, that the continuance of the license beyond the first 15 years is contingent upon the attainment of commercial production. Regarding other payments, work requirements and size of areas, the Trustee nation is bound by provisions of the treaty but may impose additional requirements and payments.

Article 27, which is of major significance, states that except as provided for by the treaty "the coastal State shall have no greater rights in the International Trusteeship Area off its coast than any other Contracting Party." That Article then enumerates the rights and responsibilities of the coastal nation in the Trusteeship Area as follows:

> Issuing, suspending and revoking mineral exploration and exploitation licenses;
>
> Establishing work requirements for such licenses, provided they are not less than those specified in the treaty;
>
> Ensuring that its licensees comply with the treaty, with the right to impose higher standards than those set forth in the treaty if it sees fit;
>
> Supervising its licensees and exercising civil and criminal jurisdiction over them;
>
> Filing reports with the International Authority and transferring to it all payments required by the treaty;
>
> Enacting such laws and regulations as are necessary to perform the above functions.

In performing the foregoing functions the Trustee Party may: establish procedures for issuing licenses; decide whether a license shall be issued; decide to whom a license shall be issued; retain between one-third and one-half of all fees and payments required by the treaty; collect and retain additional license and rental fees to defray its administrative expenses, and collect and retain between one-third and one-half of other additional fees and payments related to the issuance or retention of a license.

2. The Agencies Which the Draft Treaty Would Establish

Chapter IV (Articles 31-65) of the Draft provides for the establishment of various administrative agencies. The International Seabed Resource Authority would be established with an Assembly, Council, and Tribunal. In addition, the Draft would establish and define the duties of a Rules and Recommended Practices Commission, an Operations Commission, an International Seabed Boundary Review Commission and a Secretariat.

The Assembly would be composed of all states parties to the treaty.

The Council appears to be the organ which would have responsibility for carrying out the provisions of the treaty. It would be composed of 24 states parties to the treaty, six of which would be the most industrially advanced of such parties, with the remaining 18 to be elected by the Assembly, at least 12 to be developing countries, and at least two to be land-locked or shelf-locked countries.

The Tribunal would be composed of five, seven, or nine judges elected by the Council from a list of nominees submitted by the parties to the treaty. If a party to the treaty or a licensee were charged with failing to fulfill any of its obligations under the treaty, the matter would be referred first to the Operations Commission and then to the Tribunal. If the Tribunal were to find that a party to the treaty or its licensee had failed to fulfill its obligations under the treaty, it could order that a fine of not more than $1,000 for each day of the offense be paid to the Authority, or that damages be paid to the other party concerned, or both. And if the Tribunal should decide that "a licensee has committed a gross and persistent violation" of the provisions of the treaty, and has not remedied such violation within a reasonable time, the Council might revoke the license or request the Trustee Party to revoke it. But a license might not be revoked if the licensee's actions "were directed by a Trustee or Sponsoring Party" (Ch. IV, Art. 52). The Tribunal would be given the authority to make final and binding decisions with respect to the interpretation and application of the treaty.

If a party to the treaty fails to perform the obligations incumbent upon it by a judgment of the Tribunal, the other party to the case may take the matter before the Council. And, "when appropriate, the Council may decide to suspend temporarily, in whole or in part, the rights under this Convention of the Party failing to perform its obligations, without impairing the rights of licensees who have not contributed to the failure to perform such obligations" (Ch. IV, Art. 58).

3. **The Interim or Transition Period**

Article 73 of the Draft Treaty, which is of utmost importance, deals with the situation during the interim period while the treaty is under negotiation. It provides:

a. That there shall be "due protection" for the integrity of investments made in the International Seabed Area prior to the coming into force of the treaty.

b. Any authorization by a party to the treaty to exploit the mineral resources of the International Seabed Area granted *prior to July 1, 1970,* shall remain in force without change after the treaty comes into force provided that:

i. "Activities" pursuant to such authorizations "shall, to the extent possible," be conducted in accordance with the provisions of the treaty; and

ii. "New activities" which are undertaken under such authorizations after the treaty comes into force shall be subject to the provisions of the treaty "regarding protection of human life and safety and of the marine environment and the avoidance of unjustifiable interference with other uses of the marine environment."

iii. Parties to the treaty shall pay to the International Authority "production payments" provided for by the treaty.

c. As to mineral exploitation authorizations (e.g., oil and gas leases) granted *on or after July 1, 1970,* the granting nation shall, at the request of the grantee, either issue a new license under the treaty in its capacity as a Trustee Party, or sponsor such grantee's application for a license from the International Authority. Such new license "shall not be inconsistent with" the treaty. The nation that granted the license "shall itself be responsible for complying with the increased obligations" resulting from the application of the treaty, including fees and other payments required by the treaty.

d. The lessee or licensee of a lease or license issued *on or after July 1, 1970,* must apply for the new licenses described in "c" above within a period of time one to five years after entry into force of the treaty under penalty of the lease or license becoming *null and void five years after the entry into force of the treaty.*

e. Any party to the treaty which authorizes activities within the International Seabed Area *after July 1, 1970,* but before the treaty comes into force, "shall compensate the licensee for any investment losses resulting from the application of" the treaty.

4. **Amendment and Withdrawal**

In order to amend the treaty, including any of its appendices, the proposed amendment must be approved by the Council and by a two-thirds vote of the Assembly and ratified by two-thirds of the nations which are then parties to the treaty, including each of the six nations constituting the industrially-advanced-nation group of the Council.

Any party to the treaty may withdraw therefrom by giving one year's written notice to the Secretary-General.

The Draft is silent as to the rights, if any, of a withdrawing nation and its licensees in the International Seabed Area.

5. **Fees, Payments and Work Requirements**

These are described later in Chapter Five of this report.

CHAPTER THREE–ANALYSIS OF AUGUST 3 DRAFT TREATY

A. Fundamental Objections

1. Coastal State Mineral Resource Rights and Control Are Unduly Restricted

The NPC is convinced that the Draft's basic approach is wrong, namely, the relinquishment by the coastal state of its existing mineral resource rights in the outer continental margin and receipt back of only such rights as those agreed to in the final text of the treaty with the residual authority and jurisdiction remaining in a new international organization.

The United States should retain, not relinquish, the "inherent rights" which it possesses and has always possessed "ab initio" and "ipso facto" over the mineral resources of the submarine areas which are the "prolongation of its land territories." The quoted phrases are those of the International Court of Justice in the *North Sea Continental Shelf Cases*. Those rights do not stop at the 200-meter line, but, as the Convention on the Continental Shelf aptly puts it, constitute "exclusive sovereign rights" which

extend to the submarine areas adjacent to the coast "beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas." And, as that Convention also says—expressing customary as well as conventional law—these rights are exclusive, in the sense that if the coastal state does not exercise them, no one else may do so. It is the view of the NPC that the United States should do no more than that which was proposed in the President's five points, that is, as to the outer continental margin, to offer to restrict its own exercise of these exclusive powers in the outer continental margin in five respects. These five points were (1) dedication of part of its revenues to international community purposes, and agreement to establish general rules, (2) to prevent unreasonable interference with other uses of the ocean, (3) to protect the ocean from pollution, (4) to assure the integrity of investments, and (5) to provide for the peaceful settlement of disputes. The United States already recognizes responsibilities with respect to all but the first of these points.

There is a vast difference in legal effect between the acceptance of restrictions on existing national powers, on the one hand, and, on the other hand, the cession of these powers in exchange for the provisions of a new treaty which establishes a new international authority to hold the residuum of the powers so ceded, which is what the Draft proposes. The new substitute rights of the United States would be derived from an international grouping of nations whose interests could well be adverse to those of the United States, and would be evidenced only by a contract or treaty whose terms are subject to binding interpretation by a new international tribunal. These provisions would not give the U.S. the stability and certainty which it now enjoys under conventional and customary international law governing the jurisdiction of coastal states over the mineral resources of the continental margin.

As long as the foundation of the Draft remains unchanged—that is, the relinquishment of existing national powers to an international regime and the receipt back of limited rights under a treaty—it is impossible to correct the Draft by mere rewording or minor revision which does not change the basic concept. Shoring up inadequacies such as the fact that the Draft does not even enable the Trustee State to protect the Trusteeship Area from trespassers nor provide for the situation that would result if a Trustee State were to withdraw from the treaty, would not rectify the basic deficiency of renouncing all rights in the outer continental margin and vesting residual powers as to that area in an international agency.

2. The Work Requirements Are Unrealistic

The appendices to the Draft Treaty which serve to define the powers of the regime affect each and every aspect of petroleum resources development within the Trusteeship Area as well as in the deep ocean area beyond. Each signatory is bound to adjust its rules and regulations to conform. Moreover, these appendices are without support of any practical experience to date in deep ocean mineral development and appear to have little relevance to the conditions that will probably be met in the course of such development. Yet they could be subsequently amended only by an excessively elaborate procedure which virtually precludes experimentation to determine the optimum rules and regulations to attract significant investment in deeper waters. As drafted, many of the provisions of the appendices would tend to discourage rather than encourage exploration and exploitation of seabed resources.

3. Operations During Interim Period Are Subject to Grave Uncertainties

Critical national interests of the United States would be placed in an uncertain status during the interim period between July 1, 1970, and the unknown future date upon which a treaty would come into effect. It is most improbable that any treaty gaining a broad international consensus can be negotiated and brought into force for many years. In the interim, the President has stated that it is his Administration's policy to encourage investment in the future development of U.S. continental margin resources and those of the deep sea beyond and that, while interim investments should be subject to the provisions of the treaty, the integrity of those investments should be protected by its terms.

But, in the August 3 Draft it is clearly stated that such investments must conform in time to the elaborate appendices to the treaty; moreover, even activities pursuant to authorizations granted prior to July 1, 1970, if in waters deeper than 200 meters, must, "to the extent possible," be conducted in accordance with the treaty. In order to encourage continued investment and development of petroleum resources of the outer continental margin it is the firm opinion of the NPC that leases issued by the United States and other coastal states for areas of their continental margin must be maintained according to their terms, notwithstanding the provisions of any treaty on that subject that might be later concluded. The President's five points could all be achieved consistently with this proposal.

B. Other Objections

1. The August 3 Draft Would Deny Security to Operations of U.S. Nationals on the Continental Margins of Non-Contracting States

Article 2(1) of the August 3 Draft obligates Contracting Parties not to recognize any claim or exercise of sovereignty or sovereign rights over any part of the International Seabed Area or its resources. If the Trusteeship Area concept is retained, this applies to the entire high seas area seaward of the 200-meter isobath. Article 11(2) requires each Contracting Party to make it an offense for those conducting activities under its authority or sponsorship in the International Seabed Area to violate the provisions of the Convention. The Administration has advised the Senate Subcommittee that it is tentatively thinking of the treaty's coming into effect when it has 40 adherents, including the most industrially advanced states. As there are more than 40 landlocked and shelf-locked countries, or virtually so, this could bring about a situation in which the United States is party to a treaty to which a substantial majority of the nations with important continental margins may not have adhered.

The NPC could understand the willingness of the United States to allow a treaty containing Article 2(1) to come into effect under such circumstances if the outer edge of the continental margin were the general landward boundary line of the International Seabed Area. It is at a loss to understand this where the 200-meter isobath is the boundary, in the light of the obvious rights of the coastal states beyond that isobath under present customary and conventional international law. What would be the status under Article 11(1) and (2) of U.S. nationals having leases or concessions on the continental margins of nonparticipating states at depths greater than 200 meters? Also, would Article 75(4) require the United States Government to prevent U.S. geophysical and drilling vessels from operating in such waters? It seems to the NPC that it is essential that these matters be clarified in a manner consistent with our presently outstanding treaty obligations.

2. Article 2(1) of the August 3 Draft Would Commit the United States to a Violation of Its Obligations Under International Law to Non-Contracting States

It is clear that any attempt by the United States to terminate its treaty relations with parties to the 1958 Geneva Convention would be ineffective unless such other parties gave their consent either by adhering to a later treaty along the lines of the August 3 Draft, or otherwise.

The legal position has been codified in the Vienna Convention on the Law of Treaties.[1] Article 30 of the Vienna Convention provides that, when a party to an earlier treaty fails to become a party to a later treaty covering the same subject matter, that party's rights and obligations *vis-à-vis* other parties to the earlier treaty are governed by the provisions of that treaty, no matter how many of them may have become parties to the later treaty. Stated otherwise, this means that a state may not unilaterally modify its treaty obligations no matter how many other states may share its desire to do so. Thus, if the United States, which is a party to the 1958 Convention on the Continental Shelf, were to become a party to a later treaty along the lines of the August 3 Draft, the mutual rights and obligations among the United States and those parties to the 1958 Convention which did not become parties to the later treaty would be governed by the 1958 Convention and not by the later treaty. As to such states, the United States would, therefore, be obligated to recognize their sovereign rights over seabed and subsoil resources adjacent to their coasts seaward of the 200-meter isobath as provided in the 1958 Convention. The provisions of Article 2(1) of the August 3 Draft would appear to put the United States in direct violation of this obligation, which the NPC doubts was intended. And in such eventuality, the position of U.S. nationals holding mineral licenses from such other states in the area of their continental margin seaward of the 200-meter isobath would be seriously jeopardized.

Article 2(1) would similarly appear to put the United States in direct conflict with established rights under customary international law, as expounded in the *North Sea Continental Shelf Cases,* of states not parties to the proposed new treaty.

3. Article 68(1)(i) Could Be Construed to Authorize International Production Controls for Economic Reasons

The NPC naturally favors sound production practices, but it would be opposed to vesting the International Seabed Resource Authority with power to impose commodity-agreement type production controls for oil and natural gas even in the deep seabed area, and, *a fortiori,* in the outer continental margin area.

1. *International Legal Materials,* Vol. 8, No. 3 (Washington, D.C., American Society of International Law, 1969), p. 674.

C. Miscellaneous Comments

1. **It Is Essential to the Avoidance of Misunderstanding That the Interrelationship of the Proposed Treaty and the Geneva Convention on the Continental Shelf Be Precisely Spelled Out**

It should be noted in this connection that several of the provisions of the August 3 Draft are similar to, but not quite identical with, comparable provisions of the Geneva Convention. For example, compare Article 21(3) of the August 3 Draft with Article 5(6) of the Geneva Convention; and compare Article 30 of the August 3 Draft with Article 6 of the Geneva Convention. Also, there is nothing in the August 3 Draft comparable with the 500-meter safety zone provided by Article 5(3) of the Geneva Convention. It would seem that differences without a clear justification should be avoided, in the interest of minimizing the possibility of misunderstandings and disputes.

2. **Specifically the NPC Favors the Boundary Criteria of Article 6 of the Convention on the Continental Shelf, as Compared with the Absence of Criteria in Article 30 of the August 3 Draft, and Strongly Recommends That the Boundary Criteria of That Convention Be Included in Any New Treaty**

Article 6 of the 1958 Convention, it will be recalled, states that, in the absence of agreement or special circumstances, the median line shall constitute the boundary between opposite coasts, and the equidistance line the boundary between states occupying adjacent portions of the same coast.

3. **The Administrative Structure That Would Be Established Under the August 3 Draft Should Be Seriously Reconsidered in the Interest of Economy and Efficiency**

The first and most important step in this direction should be to limit international regime responsibilities for the outer continental margin area to the President's five points and leave the other responsibilities for this area to the coastal states. It is difficult at this stage to foresee the requirements which might arise from commercial scale petroleum activity beyond the continental margin. This suggests to the NPC the desirability of a far more simplified organizational structure than that proposed in the August 3 Draft.

4. **The Proposal to Eliminate All Coastal State Control Over Scientific Research Beyond the 200-Meter Isobath Requires Reconsideration**

With the expanding capabilities of scientific research vessels, one can no longer assume that they pose no threat to the marine environment or to other users of the sea and shore.[2] The August 3 Draft recognizes the propriety of coastal states imposing restrictions on commercial operators in the International Trusteeship Area over and above those imposed by the international regime; yet, it denies the coastal states any control whatever over scientific research activities. While the NPC is strongly in favor of encouraging research activities on the ocean bottoms, it believes that these should naturally be subject to the same regulations with respect to pollution, safety and interference with other uses of the seabed as would apply to commercial operations.

2. The *Glomar Challenger*, with its latest reentry drilling gear, has now demonstrated a capability of penetrating several thousand feet into the deep ocean floor, but it still has no capability of blowout control in the event that it should strike oil or gas under high pressure. It is understood that the choice of drilling locations is being made with this limitation carefully in mind, but one may reasonably ask if the August 3 Draft is on sound ground in denying the coastal state any authority whatever over drilling decisions of this type on its continental margin beyond the 200-meter isobath.

CHAPTER FOUR–COMMENTS ON THE SPECIFIC ARTICLES REQUESTED BY THE DEPARTMENT OF THE INTERIOR

Secretary Dole's letter of August 5, 1970, requested specific comments on the following points:

> "In your analysis of the draft treaty would you kindly pay particular attention to Articles 26 and 73. Article 26 leaves partially undefined the seaward edge of the trusteeship zone. In the interest of preserving for exclusive United States use all of the natural resources contained in the submerged land continent, would you suggest a means of defining that point on the submerged land continent beyond which the likelihood of finding petroleum and natural gas resources is highly remote?"

A. Comments on Article 73

If the NPC's recommendation that coastal states retain rather than renounce mineral resources jurisdiction over the outer continental margin is adopted, the questions regarding the interim period would not arise except as regards the President's five points

to which international standards would apply and as regards mineral resources development in the area beyond that margin. However, with specific reference to the Draft in its present terms, the provisions relating to the interim or transitory period would provide unsatisfactory assurance of the integrity of investments.

Article 73(1) of the Draft states that there shall be due protection for the integrity of investments in the interim period, but succeeding clauses of Article 73(3-5) would subject all leases granted on or after July 1, 1970, pursuant to provisions of the Outer Continental Shelf Lands Act (OCSLA) for areas in greater water depths than 200 meters, to all of the requirements of the Draft, under penalty of forfeiture five years after the coming into effect of the treaty. While the United States as a Contracting Party under Article 73(3) would be responsible for any increased financial obligations under the treaty, apparently other obligations imposed under the treaty and applicable to prior issued outer continental shelf leases would be compensable under Article 73(b) only if they qualified as "investment losses resulting from the application of this Convention." Even as to increased financial obligations under Article 73(3), the treaty fails to preclude expressly a Contracting Party from increasing the burden on its licensee to fund such increased financial obligations. For investments running into the tens of millions of dollars in operations as risky as offshore searches for oil and gas, the provision for compensation for possible investment losses caused by the adverse application of the treaty falls far short of giving that assurance necessary for the positive encouragement of investment, as contemplated by the President.

In the view of the NPC, the most effective statement of this type that could be made for the encouragement of the continuing search for oil and natural gas in progressively deeper waters would be one that would recognize that rights acquired under leases, licenses and concessions on the continental margin granted prior to the coming into effect of the treaty would not be affected by the treaty.

If the Administration accepts the NPC's recommendation to limit any international regulation of activity on the outer continental margin to the President's five points, and the Draft is revised accordingly, only two things would be needed to protect the integrity of oil and natural gas investments for the present and near-term future:

1. Assurance that any additional financial obligations under the terms of the treaty would be those of the coastal state and not of the lessee or concessionaire.

2. Assurance of the reasonableness of the international standards established on the other four points enumerated by the President.

B. Comments on Article 26

The principal NPC objection to this Article is the procedure for delineating the precise boundary of the seaward limits of coastal state controls by a line based on changes in bottom gradient beyond the base of the slope. Some reasons for this objection are as follows:

- Changes in gradient of the very mild nature to be encountered beyond the base of the slope would be very difficult to determine in practice, and in many places would be very controversial. (In what direction should the gradient be measured? What should be the length of the base line used to determine the gradient?)
- Such a boundary would have no natural basis and no consistent relation to any natural seabed feature. It would be purely arbitrary.
- It would take the nearly flat central portions of deep semi-enclosed seas away from the adjacent states, e.g., Gulf of Mexico, Mediterranean Sea.
- It would create an immensely complicated boundary situation in the case of archipelagic areas such as Indonesia or the Philippines.
- It would narrowly restrict coastal states with narrow shelves and steep slopes, e.g., Chile, Peru, some parts of the U.S. Alaskan coast.
- The choice of a specific gradient figure would be very difficult to agree upon.
- The use of gradient as a boundary would create numerous unnatural inequities not only in areas adjacent to continental coasts, but also in areas adjacent to islands located beyond the continental platforms.

The NPC strongly urges that a boundary formula for demarcation between coastal state and international control be agreed upon promptly and implemented accordingly, before specific mineral resource discoveries make this infinitely more difficult. However, rather than the plan proposed in Article 26, the NPC would favor the arrangement suggested in its 1969 Report whereby each coastal state would draw its own outer boundary, defined by straight lines connecting coordinates of latitude and longitude, *within a boundary zone* of prescribed width extending oceanward from the base of the continental or insular slope. The width of the boundary zone would be a prescribed number of kilometers to be agreed

upon in the course of the treaty negotiating process at a Law of the Sea Conference. The *base of the slope* represents the outer limit of the natural geomorphic prolongation of a continent or island beneath the sea, but since it generally cannot be defined with sufficient exactitude to serve as a boundary itself, the concept of a *boundary zone* related to the base of the slope is suggested instead. (See Figures 1 and 2, pp. 22-25.) This has the advantage in practice that no precise definition of the base of the slope nor any precise measurement of distances from the base of the slope would necessarily be required. It would only require that the exact boundary drawn by the coastal state lie oceanward from the most landward reasonable position which might be assigned to the base of the slope in the judgment of an international commission of experts, at a distance not greater than the prescribed width of the boundary zone. (Figure 2 illustrates for a hypothetical continental margin the relations of the boundary zone and the exact surveyed boundary to the base of the continental slope.)

Some advantages of the proposed boundary procedure are:

- It is based on a single, simple rule which could be applied uniformly to continents and islands (although the width of the boundary zone could also be varied for islands or to meet other special situations).
- It is based on the most prominent and widespread geomorphic feature of the ocean bottoms —the base of the continental (or insular) slope.
- It satisfies the dual needs of the coastal state for mineral resource bottom jurisdiction over (1) areas in close proximity to its coast, and (2) areas comprising the natural prolongation of its territory beneath the sea. (These are not always the same.)
- The width of the boundary zone could be established to eliminate complications regarding jurisdiction in the vicinity of archipelagic states, e.g., Indonesia, Philippines.
- The width of the boundary zone could be established to allow the mineral resources of the bottoms of virtually all enclosed and semi-enclosed seas to pertain to the adjacent countries, e.g., Gulf of Mexico, Black Sea.
- The width of the boundary zone could be established to allow countries with narrow shelves and steep slopes to have an adequate zone of mineral resource jurisdiction regarding the bottoms adjacent to their coasts, e.g., Chile, Peru, some parts of the U.S. Alaskan coast.
- The width of the boundary zone could be established to encompass the transitional zone of change from oceanic to continental crust.
- The width of the boundary zone could be established to allow for difficulties in picking an exact base of the slope, or for overlap of rise sediments on a buried slope.
- The width of the boundary zone could be so established as to allow the precise boundary to be drawn in the form of long straight lines connecting points of latitude and longitude rather than being complicated by a great number of small segments.

It should be recognized that any boundary on the sea bottom (whether related to distance, water depth, gradient, or natural sea-bottom features) is only a general concept, which can be expressed practically as a precise boundary only through reference to lines connecting fixed points of latitude and longitude. Relation to the natural seaward limit of the submerged continent or island—the base of the continental or insular slope—provides a far more natural, logical, equitable and philosophically sound concept for a boundary between international and coastal state control over bottom resources than any other. *Any* boundary serving such a purpose must have its position approved by an international commission of qualified technical experts to assure that it fits the concept. The requirement that the precise boundary be drawn within an internationally approved boundary zone allows each coastal state to draw its own boundary in detail but assures unbiased international control over its general position. It also allows for local uncertainties in the defining of the location of the base of the slope and for the need to use a reasonable projection in areas where the slope is not developed, or is covered at the base by continental rise sediment.

No figure is given here for the breadth of the prescribed boundary zone and this would be a matter for the judgment of an appropriate international body. However, the zone should generally extend oceanward from the most landward reasonable position of the base of the slope a sufficient distance to allow for inaccuracies in determination and for overlap of the base of the slope by the rise. It should be broad enough to allow the drawing of a simple precise boundary of long straight lines without encroaching on the submerged continent. It would also appear desirable to make it wide enough to allow elimination of the problems mentioned above such as semi-enclosed seas, archipelagoes and narrow margins.

Figure 1. Representative profiles across the Atlantic continental margins of North America, Europe and Africa. Adapted from "The Floors of the Oceans: I, The North Atlantic," by B. C. Heezen, M. Ewing and M. Tharp, Spec. Paper 65 (Geological Society of America, 1959), with interpretation added. Water depths in fathoms. Distances in nautical miles. Vertical exaggeration 1:40.

Segments of profiles here interpreted as definitely landward of the base of the continental slope, and hence unquestionably belonging to the continental block, are shown in black. Segments of profiles here interpreted as definitely belonging to the deep-oceanic realm are shown with vertical hatching. Between definitely continental and definitely deep-oceanic parts of the profiles there is commonly an intermediate segment consisting principally of landward continental rise and ill-defined continental slope, which may less clearly be assigned to either continental or oceanic realm.

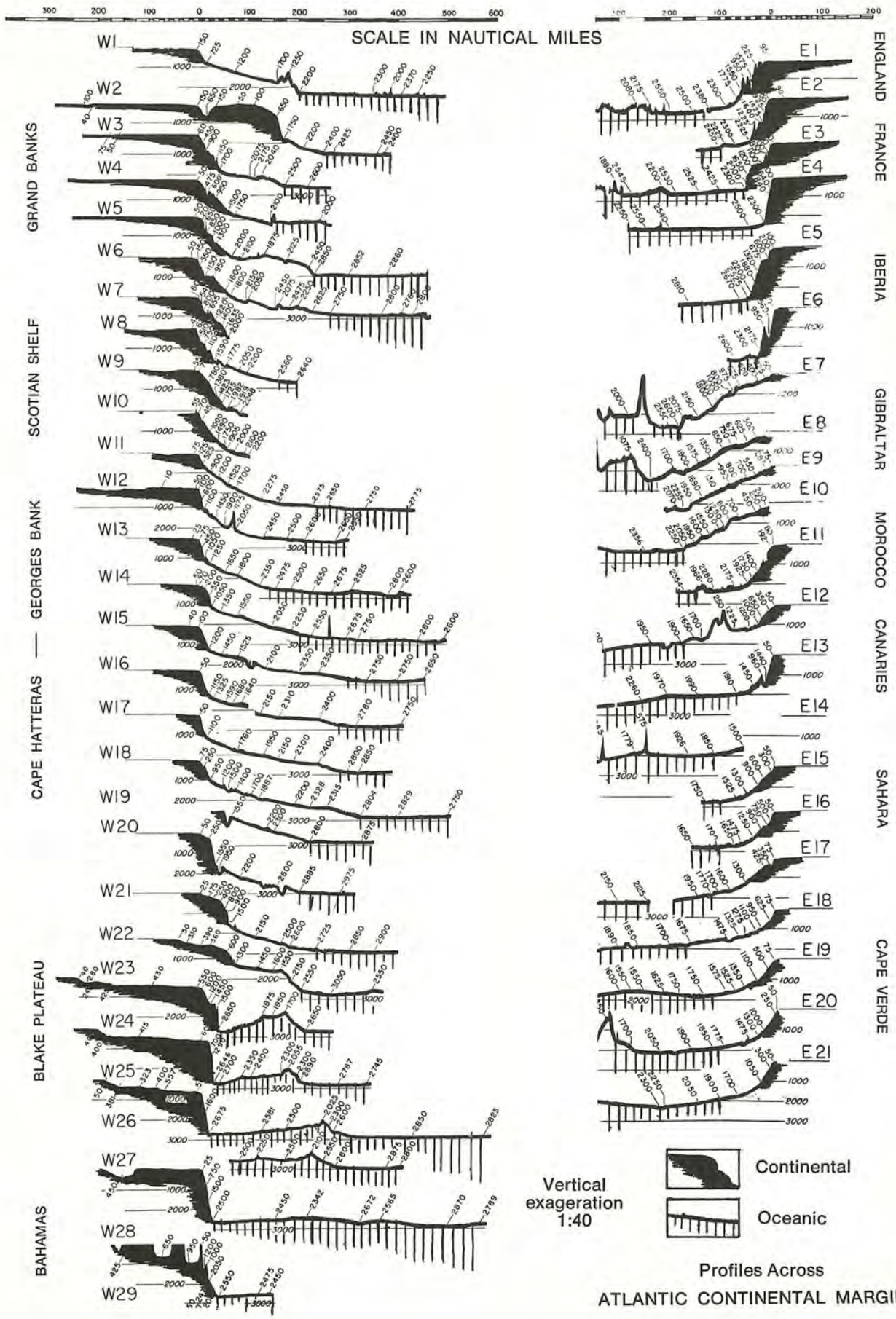
The boundary between coastal-state and international jurisdiction over mineral resources beneath the ocean floor most naturally lies at the outer edge of the submerged continent. However, because of the common presence of an intermediate segment between the deep-ocean floor and the most conservative (most landward) estimate of the position of the base of the continental slope, and because of the commonly, somewhat transitional nature of the change from continental to oceanic crust, the exact boundary appears best drawn *within* a broad boundary *zone* of standard, internationally agreed-upon width extending oceanward from the most landward position which might reasonably be assigned to the base of the slope, or to its projection, in the judgment of an international commission of experts.

The use of such a boundary *zone* as a guide would allow positioning of an exact surveyed boundary by each coastal state, consisting of straight lines connecting relatively few points fixed by coordinates of latitude and longitude, subject only to the requirement that the exact boundary line be not farther oceanward from the base of the continental slope than the standard, internationally agreed-upon width of the zone. Such a boundary could be precisely located, and yet would be appropriately related to the fundamental geologic and geomorphic change from continents to ocean basins.

WEST

Figure 1

EAST



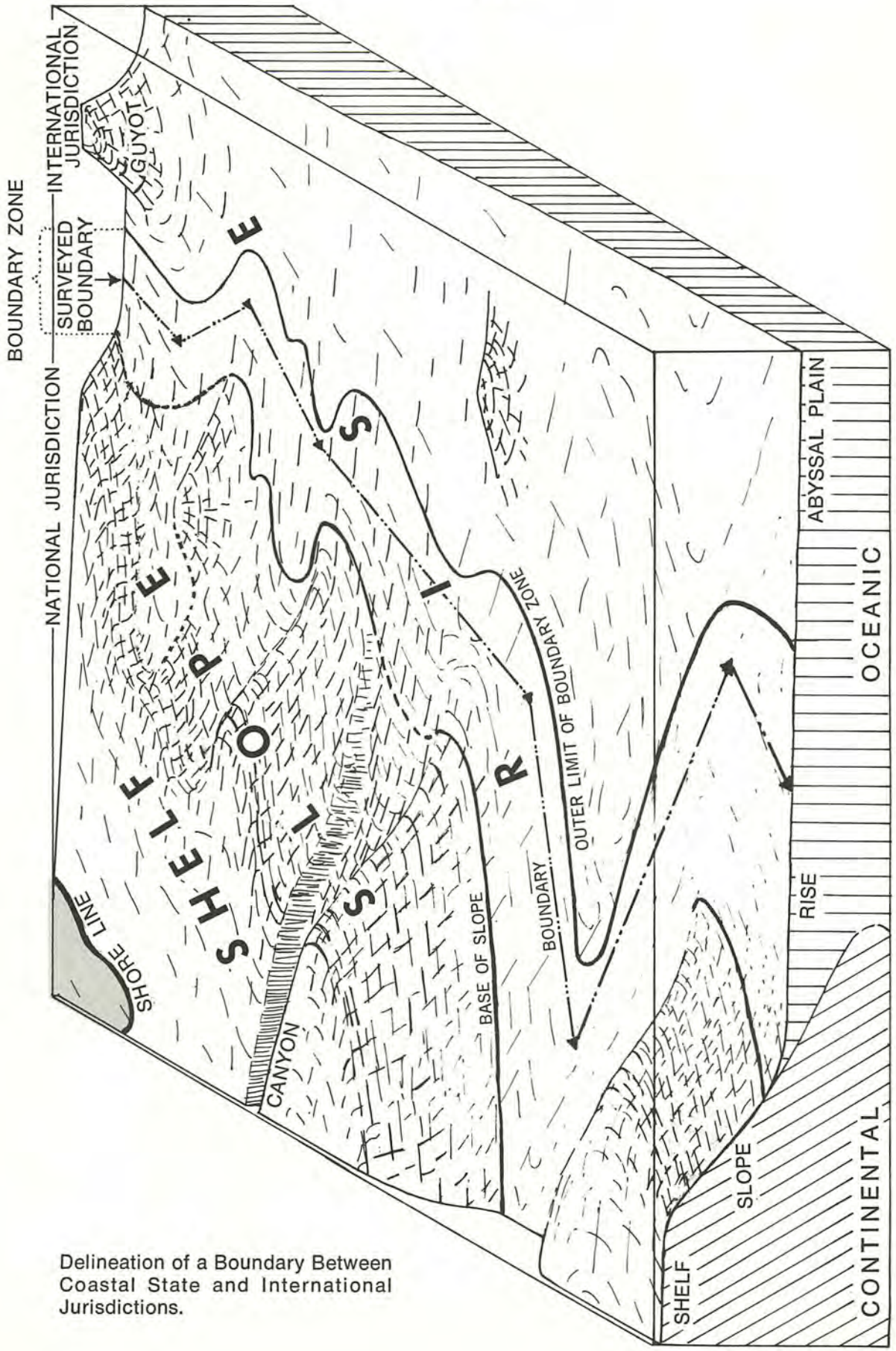
Profiles Across
ATLANTIC CONTINENTAL MARGIN

Figure 2. This sketch shows a proposed scheme for drawing a boundary between coastal-state and international jurisdiction over natural seabed resources, related to the outer edge of the submerged continent by the requirement that it lie within a boundary *zone* of agreed-upon standard width extending oceanward from the approximate base of the continental slope (or its projection across reentrants or areas of uncertainty). The exact surveyed boundary would be drawn, as shown on the sketch, by means of straight lines connecting fixed points defined by latitude and longitude within the zone.

Such a boundary would not only coincide approximately with the geomorphic division between the continental platform and the ocean basins but also would roughly coincide with the geologic boundary between continental and oceanic crustal rocks. The use of a boundary *zone* would (1) allow for uncertainty in the exact location of the base of the slope, (2) allow for local overlap of the continental crust by sediments of the continental rise, and (3) permit the use of simple straight-line boundaries between points fixed by geodetic coordinates. International agreement on a standard prescribed width for the boundary zone would be required, but the exact positioning of the zone limits on the sea floor would rarely if ever be necessary since it could be supposed that each coastal state would draw its exact boundary at a distance out from the approximate position of the base of the slope no greater than could safely be assumed to be approved by an international commission of experts as falling within the limits agreed upon for the zone width. In the hypothetical area shown on the sketch, the exact surveyed boundary would fall in the middle of the sedimentary apron of the continental rise.

The vertical scale of the sketch is, of course, greatly exaggerated.

Figure 2



Delineation of a Boundary Between Coastal State and International Jurisdictions.

In answer to the question posed by Secretary Dole, there is no point on the submerged continent beyond which it can be consistently generalized that the likelihood of finding petroleum and natural gas resources is highly remote. Reasonable prospects of oil and gas accumulations in many places extend out to the edge of the submerged continent and for long distances beyond.

There are many factors which affect the likelihood of the existence of oil and gas accumulations. The oceanward change in conditions which would probably be most effective in reducing the likelihood of petroleum and natural gas accumulations is the general tendency to a lesser thickness of sediments away from the continents and toward the ocean deeps. Areas with less than one kilometer of sediments above basement are generally considered to have negligible prospects of oil and gas generation in commercial quantities. Therefore the large areas of the deep oceans where less than one kilometer of sediments exist would appear to have very meager prospects. On the other hand, there are some areas of the deep ocean floor beyond the edge of the submerged continents which have thicknesses of sediments considerably greater than one kilometer and reasonable petroleum prospects, and some areas of the shelf and slope of the submerged continent which have less than one kilometer of sediments and very poor petroleum prospects. On the basis of thickness of sediments, areas where the existence of petroleum and natural gas accumulations would be very remote might be those with sediment thicknesses less than one kilometer, but such areas would show little relation to the edge of the submerged continent or any other recognizable feature. Prospects of finding and producing economically such petroleum accumulations as exist, of course, become generally more remote with distance from shore and with increasing depth of water.

The NPC believes that the only natural and logical outer boundary to coastal state jurisdiction over mineral resources is a boundary based on the outer limits of the submerged continent (or island). It further believes that this boundary approach should be applicable without regard to mineral resources potential. This boundary would indeed leave large thicknesses of potentially petroleum-bearing sediments oceanward of the boundary and would also often leave very unpromising areas landward of the boundary, but it should be adhered to as the natural and logical outer boundary of coastal state jurisdiction without regard to petroleum prospects. It would preserve to each coastal state seabed natural resource jurisdiction over (1) its adjacent sea floor area and (2) its natural prolongation under the sea.

CHAPTER FIVE—COMMENTS ON LICENSE TERMS APPENDED TO DRAFT TREATY

A. Major Revisions of License Terms and Work Obligations Needed to Encourage Development of Resources of Deep Ocean Area

Acceptance of the NPC's fundamental recommendations that coastal states retain mineral resources jurisdiction in the outer continental margin area would, of course, eliminate in essential respects the problem of international work rules for that area.

As they stand, however, Appendices A, B and C to the Draft contain numerous specifications of the minimum terms to be applied in the granting of licenses in both parts of the International Seabed Area—the deep sea area and the Trusteeship Area.

The NPC is concerned about the inconsistency of the entire concept of these Appendices, particularly as they apply to the potential development of petroleum resources under the seabed. On the one hand, the desire is expressed that these resources be developed for the benefit of mankind, which presumably means that, within reasonable limits and subject to

appropriate safeguards, such development is to be encouraged. On the other hand, however, the Appendices contain a number of requirements that would place unreasonable burdens upon those who might undertake oil exploration operations. Thus the Appendices go far beyond what is presently required generally for offshore oil and gas operations. To make this contradiction the more troublesome, those requirements are proposed in respect to areas which, by nature, are subject to greater risk and much greater expense than the close-to-shore and dry-land areas to which less onerous obligations apply almost universally. If the desired development is to be achieved, these requirements should be brought reasonably into line with the realities of present oil and gas operations.

These difficulties can be best understood by some representative examples drawn from the Appendices and reviewed:

1. *Relinquishment*—75 percent of each block or group of contiguous blocks must be relinquished "when production begins." "Commercial production" shall be deemed to have commenced "when the value at the site of minerals exploited is not less than $100,000 per annum." This mixed set of concepts apparently means that if a licensee produced, say, 50,000 barrels of crude oil in one ten-day period in the fourth year of its license, it would be deemed to have commenced commercial production and immediately would be required to give up three-quarters of its area. This is foreign to the usual relinquishment obligations calling for giving up, e.g., 25 percent after 5 years; a second 25 percent after 10 years; and a third 25 percent at a later date with an ultimate retention of 25 percent of the original area for the balance of a 20- or 30-year term. A related problem of this requirement is that oil may be found in one part of the block before exploration of the remainder is complete. Arbitrarily to force relinquishment as soon as a relatively modest quantity has been produced is inconsistent with customary practice and would deter interest in areas subject to such a provision.

2. *Work Obligations*—The minimum annual expenditure obligation for each block of not more than 500 square kilometers is: 1-5 years $20,000; 6-10 years $180,000; 11-15 years $200,000. These amounts are quite substantial but the unusual requirement is that each year the licensee must deposit an amount equal to the expenditure obligation (or post a bond therefor), the deposit being refunded on proof of expenditure. Normally work obligations are contractual undertakings made by persons who have established their financial responsibility and it seems an unnecessary penalty to call for a deposit or bond as well, thus doubling the amount committed.

3. *Production Bonuses*—On commercial production, a cash bonus of $500,000 to $2,000,000 per block is payable. Thus, on achieving $100,000 worth of crude production, up to $2,000,000 must be paid. This type of payment, when required, is normally made after production reaches an average level of 50,000 to 100,000 barrels per *day* for three to six months.

It should be noted here that Appendices A and C to the Draft make provision on each occasion where the Trustee collects payments of any kind—other than certain fees for its administrative expenses—for the payment over to the International Seabed Resource Authority of between one-half and two-thirds of all its receipts from its licensees. While this division of funds may not appear at first to concern the licensee, it will immediately be seen that if (1) Appendix A payments are a minimum and (2) one-half or more of these and any additional amounts collectible under Appendix C are turned over to the Authority, the pressure on Trustee States to raise their requirements above those stated in Appendix A, in order to gain additional revenue, will be strong indeed.

B. Detailed Analysis of Provisions of the Appendices to August 3 Draft Treaty

The Table below reviews selected significant provisions of the Appendices to the Draft Treaty and compares them with many petroleum laws and regulations currently in force in representative countries throughout the world.

Appendix A relates to both the Trusteeship Area and to the deep seabed beyond. Appendix C contains further specifications for the Trusteeship Area alone and Appendix B for operations in the deep seabed alone. The various substantive points have been summarized below, their source in the applicable Appendix being identified by paragraph numbers. While the Draft Treaty Appendices refer to exploitation of all minerals, only those provisions relating to petroleum are analyzed below.

In the absence of petroleum operating experience in the deeper waters of the outer continental margin and the deep ocean area, it is not possible to recommend precise terms, size, payments, work obligations and other provisions which will encourage development in these areas. The NPC is convinced, how-

ANALYSIS OF PROVISIONS OF APPENDICES TO THE DRAFT TREATY

Subject	*Appendices**	*Illustrative Current Provisions*
1. Term		
a. Exclusive Exploration †	Up to 15 years (B 4.1; C 5.1).	10-20 years.
b. Exploitation	20 years from commercial production (B 4.1) plus 20 years on *new* terms (B 4.2). No limit mandated for Trusteeship Area (C 5.1).	20-40 years.
2. Area		
Per block	500 km² (A 5.3).	10,000-25,000 km².
3. Relinquishment (Mandatory)	75% "when production begins" (A 5.3). (N.B. "Commercial production" is commenced or maintained when "value at site" is at least $100,000 per annum [A 5.8].)	25% of original area at end of 5th, 10th and 15th years, retaining balance plus any productive area otherwise relinquishable. ("Commercial production" rarely ever defined in terms of fixed cash value.)
4. License Application Fee	$5,000-$15,000 *per block* (A 4.1) plus up to $30,000 (A 4.4).	Nominal—*e.g.*, 10¢/km² or NONE.
5. Rents (N.B. Purpose of rents is to encourage work and subsequent relinquishment — revenue is a secondary consideration.)	$2-$10/km², plus 10% per annum for 3rd thru 13th years plus 20% for last two years (A 6.1; 6.2). After commercial production $5,000-$25,000 per block (A 6.3). (Foregoing amounts may be doubled by Trustee or Sponsor [A 6.4].)	Nil to $3/km² dependent on length of time area held and, frequently, offset by expenditure for work.
6. Work Obligations	*Per Block, Per Annum* 1-5 years $20,000 ‡; 6-10 years $180,000 ‡; 11-15 years $200,000 ‡ (A 6.6—Note: Here called a "fee," the obligatory amount must be "deposited" in advance or a bond posted.) "Off-site" costs apply only 75% to satisfy obligation (A 6.7).‡	1-5 years $10/km²/yr.; 6-10 years $50/km²/yr.; 11-15 years $100/km²/yr. (Since the work obligation is normally included in an agreement and the nongovernmental party has otherwise established its responsibility, "deposits" for work are rarely required.) Normally all costs incurred apply against obligation.
7. Production Bonuses	$500,000 to $2,000,000 payable when commercial production begins (A 10.1).	*Never payable when production begins* but after high daily rates of production are achieved for three to six months, *e.g.*, $2,000,000 after 100,000 b/d for 180 days.
8. Payments "Proportional to Production" Deemed to refer to a) Royalty and b) Taxes	5% to 40% of gross value at site of oil and gas (A 10.2). (NOTE: This language allows for imposition, in addition to rents, fees and other charges, of a combined tax and royalty of 40% of gross value even though this may be more than 100% of net after costs.)	a) Royalty—6 to 12½% of gross value. b) Income tax of 50% of net income, with royalty treated as an expense.
9. Work Plans and Information	Licensee must submit plans, changes proposed and reports (A 7.1-7.5). Trustee and Authority may require change "to meet requirements of this Convention" (A 8.2).	Plans and reports submitted to prove fulfillment of obligations. No further permissions customarily required.
10. Competitive Bidding in Deep Ocean Area	After notice of intent, competitive bidding on cash bonus basis.	Where competitive bidding is required, it may be on bonus, work obligation or other competitive terms.
11. Miscellaneous		
a. Transfer of License	On consent of Authority with $250,000 fee if transferred to third party (B 3.10).	Such consent normally required but without any such fee.
b. Liability	Absolute liability contemplated under incomplete provision (A 12.1).	Liability only for fault including negligence.

* Alphabetical citations refe to Appendix A, B or C of the Draft Treaty; numerical citations refer to sections and subsections of designated Appendix.

† Non-exclusive exploration licenses having successive two-year terms are provided for (A 3.1).

‡ Above stated amounts are minima. Trustee to fix maxima in Trusteeship Area and maxima three times minima in deep ocean area (B 5.1).

ever, that because of the hostility of the environment, the greater water depths, and the farther distances from shore, the cost and risk of operating in these areas will be substantially greater than in shallower waters and on land. Therefore, the requirements imposed upon licensees in the deeper water areas should be substantially less onerous than those now applicable on land and in shallower water areas.

While the NPC does not believe it should, in view of the very limited experience that has taken place to the present, recommend precise requirements and other provisions which would be reasonable for the outer continental margin and the deep ocean area, it is suggested that provisions for the deep ocean area must be substantially more favorable for licenses than those shown as the illustrative current provisions indicated in the third column of the above Table.

The NPC urges that before any further specific terms are presented, there be full discussion of their appropriateness not only with representatives of governments concerned with mineral licensing but also with individuals experienced in the related practices of the international petroleum industry.

CONCLUSION

It is the carefully considered judgment of the NPC that the August 3 Draft Treaty does not provide the necessary assurance of effective national jurisdiction over the mineral resources of the submerged continental margin of the United States and to which it is rightfully entitled. The seabed area beyond the 200-meter isobath and extending to the outer limits of the submerged continent (or island), which would be ceded by the U.S. to international control by the terms of the Draft Treaty, includes areas which may be among the most promising for future national supplies of oil and gas. Surely recent events have strongly reemphasized, if further emphasis were necessary, the great importance to the U.S. of maintaining a strong and dependable energy base. Any treaty which fails to assure effective national jurisdiction over the entire seabed pertaining to the U.S. would be placing in jeopardy a vital national interest of this country.

Any acceptable international treaty on the ocean beds should confirm the jurisdiction of coastal states over seabed mineral resources of the entire submerged continent (or island) adjacent to their lands. Such an agreement would provide much needed stability on a matter which has currently become unnecessarily confused by the uncertainties resulting from innumerable conflicting claims and proposals to the extent that development for the common good of the potential resources of areas may be seriously impeded. It would also encourage the acceptance by all coastal states of the five-point principles regarding international interests in this area set forth in the President's Statement of May 23, 1970. Widespread acceptance by coastal states of the President's five points will depend almost entirely upon the reasonableness of the implementing standards and procedures. Such acceptance could well be deterred by the addition of further obligations and restrictions imposed upon coastal state authority with respect to the mineral resources of their continental margins. Specifically, it is both unnecessary and potentially a deterrent to the possibility of widespread coastal state agreement to the President's proposal to add the highly detailed control by an international regime of resources development on the outer continental margin that is inherent in the August 3 Draft.

Jurisdiction over areas within which the adjacent coastal states have rights not shared by other states, coastal or non-coastal, should not be renounced by coastal states and cannot realistically be regarded as the "common heritage of all mankind." Any use of the latter term should therefore be limited to that portion of the seabed where coastal states have no special rights, namely, the portion beyond the submerged continent (or island).

The views presented by the NPC in this report are believed to be in the strong U.S. national interest and presumably in the interest of other coastal states. It is thus believed that their acceptance by the U.S. would greatly facilitate the broad negotiability of any international seabed treaty.

APPENDIX A

United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

August 5, 1970

Dear Mr. Brockett:

Thank you for your letter of July 17 in response to our request for comments on a draft treaty pertaining to the seabeds.

The comments contained in your letter were extremely helpful to us and a careful review of the enclosed redraft will reveal that many of the changes you suggested have been incorporated in it.

The attached draft treaty will be circulated as a working paper by the U.S. delegation meeting in Geneva. You will note the legend accompanying it makes explicit that the draft Convention and its Appendices raise a number of questions with respect to which further detailed study is clearly necessary, and that the draft treaty does not necessarily represent the definitive views of the United States Government. In your letter of July 17 you offered to be of further assistance to this Department with respect to a more detailed study which would have been impossible under the strictures of confidentiality which were imposed upon you at the time of our earlier request. Presently, however, the attached redraft may be freely circulated. In this regard, this Department would be most appreciative of your reconvening your group of experts to carefully study the new draft. In undertaking this project would you kindly arrange for an article-by-article analysis of the draft treaty which would contain specific commentary as well as suggested alternative language if appropriate.

In your analysis of the draft treaty would you kindly pay particular attention to Articles 26 and 73. Article 26 leaves partially undefined the seaward edge of the trusteeship zone. In the interest of preserving for exclusive United States use all of the natural resources contained in the submerged land continent, would you suggest a means of defining that point on the submerged land continent beyond which the likelihood of finding petroleum and natural gas resources is highly remote?

Regarding Article 73, you will recall that implicit in the President's statement was his desire that prior to U. S. ratification of a seabeds treaty, exploration and exploitation of natural resources beyond the 200 meter depth limit should continue unabated. Article 73 pertains to the future status of all leases beyond the 200 meter depth limit on our outer continental shelf issued prior to the date a future seabeds treaty would enter into force. While Article 73 is intended to be retroactive from the date the treaty enters into force, you can plainly see that its terms, when viewed in light of present leasing policy, could have a prospective effect. Accordingly, would you kindly evaluate Article 73 and provide any suggestions you may have regarding revisions which would contribute to ensuring the President's desires concerning present and near future leasing on the outer continental shelf beyond 200 meters.

Again, we were most pleased with your timely and very helpful response to our earlier request. We look forward to your continuing assistance in this matter.

Sincerely yours,

/s/ Hollis M. Dole
Assistant Secretary of the Interior

Mr. E. D. Brockett, Chairman
National Petroleum Council
1625 K Street, N. W.
Washington, D. C. 20006

APPENDIX B

COPY

FOR IMMEDIATE RELEASE

MAY 23, 1970

Office of the White House Press Secretary

THE WHITE HOUSE

STATEMENT BY THE PRESIDENT ON U.S. OCEANS POLICY

The nations of the world are now facing decisions of momentous importance to man's use of the oceans for decades ahead. At issue is whether the oceans will be used rationally and equitably and for the benefit of mankind or whether they will become an arena of unrestrained exploitation and conflicting jurisdictional claims in which even the most advantaged states will be losers.

The issue arises now—and with urgency—because nations have grown increasingly conscious of the wealth to be exploited from the seabeds and throughout the waters above, and because they are also becoming apprehensive about ecological hazards of unregulated use of the oceans and seabeds. The stark fact is that the law of the sea is inadequate to meet the needs of modern technology and the concerns of the international community. If it is not modernized multilaterally, unilateral action and international conflict are inevitable.

This is the time, then, for all nations to set about resolving the basic issues of the future regime for the oceans—and to resolve it in a way that redounds to the general benefit in the era of intensive exploitation that lies ahead. The United States as a major maritime power and a leader in ocean technology to unlock the riches of the ocean has a special responsibility to move this effort forward.

Therefore, I am today proposing that all nations adopt as soon as possible a treaty under which they would renounce all national claims over the natural resources of the seabed beyond the point where the high seas reach a depth of 200 meters (218.8 yards) and would agree to regard these resources as the common heritage of mankind.

The treaty should establish an international regime for the exploitation of seabed resources beyond this limit. The regime should provide for the collection of substantial mineral royalties to be used for international community purposes, particularly economic assistance to developing countries. It should also establish general rules to prevent unreasonable interference with other uses of the ocean, to protect the ocean from pollution, to assure the integrity of the investment necessary for such exploitation, and to provide for peaceful and compulsory settlement of disputes.

I propose two types of machinery for authorizing exploitation of seabed resources beyond a depth of 200 meters.

First, I propose that coastal nations act as trustees for the international community in an international trusteeship zone comprised of the continental margins beyond a depth of 200 meters off their coasts. In return, each coastal state would receive a share of the international revenues from the zone in which it acts as trustee and could impose additional taxes if these were deemed desirable.

As a second step, agreed international machinery would authorize and regulate exploration and use of seabed resources beyond the continental margins. The United States will introduce specific proposals at the next meeting of the United Nations Seabeds Committee to carry out these objectives.

Although I hope agreement on such steps can be reached quickly, the negotiation of such a complex treaty may take some time. I do not, however, believe it is either necessary or desirable to try to halt exploration and exploitation of the seabeds beyond a depth of 200 meters during the negotiating process.

Accordingly, I call on other nations to join the United States in an interim policy. I suggest that all permits for exploration and exploitation of the seabeds beyond 200 meters be issued subject to the international regime to be agreed upon. The regime should accordingly include due protection for the integrity of investments made in the interim period. A substantial portion of the revenues derived by a state from exploitation beyond 200 meters during this interim period should be turned over to an appropriate international development agency for assistance to developing countries. I would plan to seek appropriate Congressional action to make such funds available as soon as a sufficient number of other states also indicate their willingness to join this interim policy.

I will propose necessary changes in the domestic import and tax laws and regulations of the United States to assure that our own laws and regulations do not discriminate against U.S. nationals operating in the trusteeship zone off our coast or under the authority of the international machinery to be established.

It is equally important to assure unfettered and harmonious use of the oceans as an avenue of commerce and transportation, and as a source of food. For this reason the United States is currently engaged with other states in an effort to obtain a new law of the sea treaty. This treaty would establish a 12-mile limit for territorial seas and provide for free transit through international straits. It would also accommodate the problems of developing countries and other nations regarding the conservation and use of the living resources of the high seas.

I believe that these proposals are essential to the interests of all nations, rich and poor, coastal and landlocked, regardless of their political systems. If they result in international agreements, we can save over two-thirds of the earth's surface from national conflict and rivalry, protect it from pollution, and put it to use for the benefit of all. This would be a fitting achievement for this 25th anniversary year of the United Nations.

APPENDIX C

COPY

Executive Office of the President
OFFICE OF EMERGENCY PREPAREDNESS
Washington, D.C. 20504

Office of the Director

August 13, 1970

The President
The White House
Washington, D. C.

Dear Mr. President:

Approximately six months ago you established a new management system for the Oil Import Program. That system has been proceeding, in accordance with your instructions, with interim actions directed to improving the program. Actions have included proclamation changes by you on my recommendation and regulatory changes by the Secretary of the Interior with my concurrence. These actions have been taken with the advice of the Oil Policy Committee.

The greater part of historical allocation stemming from the voluntary program which ended in 1959 will be eliminated at the end of the year. The anomaly of shipment of Mexican oil imports out of, and then back into, the United States will also be eliminated. A formal regulatory system has been instituted for Canadian imports at a considerably expanded level of imports over 1969.

With the advice of the Oil Policy Committee that the action will not adversely affect national security, the level of foreign imports of crude oil has been raised for 1970. A program of importation of No. 2 heating oil has been instituted for the East Coast. The Oil Import Appeals Board has been given authority to allow increased importation of residual fuel oil for the mid-continent area to alleviate hardship and reduce pollution, and to permit increased importation of asphalt for the East Coast.

Arrangements have been made for the Oil Import Appeals Board to provide relief for hardship cases, by authorizing imports of crude oil from Canada above the level of the Canadian quota but within the overall quota. Also, a recent action will permit those refineries which receive Canadian allocations and which prove a hardship situation to use their offshore quota allocations for imports from Canada.

The Oil Policy Committee has concurred in my recommending to you that exchange of quota allocations be permitted through sale of quota tickets or of imported oil. The need for this reform, which strengthens the free market aspect of the program, has been emphasized by the current disruption in the international oil and tanker markets.

The type of international disruption mentioned above raises a potential management problem of major proportions. Other problems have become more evident since last February when you established the new management system for the oil import program. These include the increasingly apparent effect of the environmental programs and the effect of the coal and gas supply situation on the requirements for oil and on the composition of these requirements. Undoubtedly, these factors will be considered in the study of the national energy situation which you have recently directed the Domestic Council to undertake.

Six months ago, I joined with other members of the Cabinet Task Force in recommending that we should proceed at the beginning of the next year to a transition to a tariff system. I did not consider that this change would necessarily result in any significant decrease in costs to the consumer. I hoped the system, while continuing to provide the needed support to national security, could provide a freer market for oil, and be made simpler and more easily understood.

Recent developments have increased misgivings about moving to a tariff system at this time and about a tariff system as a feasible method of controlling oil imports.

The recent interruption in the flow of oil to Europe, while comparatively small in quantity, has caused significant disruption of the international oil situation.

Two other considerations are at least as important to me. First, it appears that our country will be in a transitional situation for some time with regard to oil, if only because of the uncertainty as to the date Alaskan oil will be available and the effects of the environmental programs. Secondly, new estimates indicate we have a more severe problem than we estimated six months ago in preventing an unwise dependence on relatively insecure sources of supply by even as early as 1975.

The individual members of the Oil Policy Committee are impressed in varying ways by each of the three considerations mentioned above. All of us recognize that the method of control is a means to the national security end, which includes limiting U.S. dependence.

Because of these factors, the Oil Policy Committee concurs with my judgment that we discontinue consideration of moving to a tariff system of control, but rather continue with our efforts to improve the current program. I provide this advice to you now since planning for the next oil allocation year must soon get under way.

I would be remiss if I did not express to you my concern about the long run and even mid-term outlook for assuring the achievement of the national security objectives on which the oil import program is based. From a management viewpoint the program faces the danger of being gravely weakened by special actions and exceptions urged by both critics and supporters of the current system. More importantly, we also face the growing danger of not having adequate supplies from reasonably secure sources—a vast problem which cannot be separated from our overall energy policy. National security must be a central consideration in working out that overall policy.

We look to the further definition of policy, which you are now seeking, in the overall energy area to give a more reliable base for our national security oil import program.

Respectfully,

/s/ G. A. Lincoln
Director

APPENDIX D

August 3, 1970*

DRAFT UNITED NATIONS CONVENTION ON THE INTERNATIONAL SEABED AREA

Working Paper

The attached draft of a United Nations Convention on the International Seabed Area is submitted by the United States Government as a working paper for discussion purposes.

The draft Convention and its Appendices raise a number of questions with respect to which further detailed study is clearly necessary and do not necessarily represent the definitive views of the United States Government. The Appendices in particular are included solely by way of example.

CHAPTER I

BASIC PRINCIPLES

ARTICLE 1

1. The International Seabed Area shall be the common heritage of all mankind.

2. The International Seabed Area shall comprise all areas of the seabed and subsoil of the high seas [1] seaward of the 200 meter isobath adjacent to the coast of continents and islands.

3. Each Contracting Party shall permanently delineate the precise boundary of the International Seabed Area off its coast by straight lines not exceeding 60 nautical miles in length, following the general direction of the limit specified in paragraph 2. Such lines shall connect fixed points at the limit specified in paragraph 2, defined permanently by coordinates of latitude and longtiude. Areas between or landward of such points may be deeper than 200 meters. Where a trench or trough deeper than 200 meters transects an area less than 200 meters in depth, a straight boundary line more than 60 nautical miles in length, but not exceeding the lesser of one fourth of the length of that part of the trench or trough transecting the area 200 meters in depth or 120 nautical miles, may be drawn across the trench or trough.

4. Each Contracting Party shall submit the description of the boundary to the International Seabed Boundary Review Commission within five years of the entry into force of this Convention for such Contracting Party. Boundaries not accepted by the Commission and not resolved by negotiation between the Commission and the Contracting Party within one year shall be submitted by the Commission to the Tribunal in accordance with Section E of Chapter IV.

5. Nothing in this Article shall affect any agreement or prejudice the position of any Contracting Party with respect to the delimitation of boundaries between opposite or adjacent States in seabed areas landward of the International Seabed Area, or with respect to any delimitation pursuant to Article 30.

ARTICLE 2 [2]

1. No State may claim or exercise sovereignty or sovereign rights over any part of the International Seabed Area or its resources. Each Contracting Party agrees not to recognize any such claim or exercise of sovereignty or sovereign rights.

2. No State has, nor may it acquire, any right, title, or interest in the International Seabed Area or its resources except as provided in this Convention.

ARTICLE 3

The International Seabed Area shall be open to use by all States, without discrimination, except as otherwise provided in this Convention.

ARTICLE 4

The International Seabed Area shall be reserved exclusively for peaceful purposes.

ARTICLE 5

1. The International Seabed Resource Authority shall use revenues it derives from the exploration and exploitation of the mineral resources of the International Seabed Area for the benefit of all mankind, particularly to promote the economic advancement of developing States Parties to this Convention, irrespective of their geographic location. Payments to the Authority shall be established at levels designed to ensure that they make a continuing and substantial contribution to such economic advancement, bearing in mind the need to encourage investment in exploration and exploitation and to foster efficient development of mineral resources.

---

1. *NOTE:* The United States has simultaneously proposed an international Convention which would, *inter alia,* fix the boundary between the territorial sea and the high seas at a maximum distance of 12 nautical miles from the coast.

2. *NOTE:* The preceding Article is not intended to imply that States do not currently have rights under, or consistent with, the 1958 Geneva Convention on the Continental Shelf.

2. A portion of these revenues shall be used, through or in cooperation with other international or regional organizations, to promote efficient, safe and economic exploitation of mineral resources of the seabed; to promote research on means to protect the marine environment; to advance other international efforts designed to promote safe and efficient use of the marine environment; to promote development of knowledge of the International Seabed Area; and to provide technical assistance to Contracting Parties or their nationals for these purposes, without discrimination.

ARTICLE 6

Neither this Convention nor any rights granted or exercised pursuant thereto shall affect the legal status of the superjacent waters as high seas, or that of the air space above those waters.

ARTICLE 7

All activities in the marine environment shall be conducted with reasonable regard for exploration and exploitation of the natural resources of the International Seabed Area.

ARTICLE 8

Exploration and exploitation of the natural resources of the International Seabed Area must not result in any unjustifiable interference with other activities in the marine environment.

ARTICLE 9

All activities in the International Seabed Area shall be conducted with strict and adequate safeguards for the protection of human life and safety and of the marine environment.

ARTICLE 10

All exploration and exploitation activities in the International Seabed Area shall be conducted by a Contracting Party or group of Contracting Parties or natural or juridical persons under its or their authority or sponsorship.

ARTICLE 11

1. Each Contracting Party shall take appropriate measures to ensure that those conducting activities under its authority or sponsorship comply with this Convention.

2. Each Contracting Party shall make it an offense for those conducting activities under its authority or sponsorship in the International Seabed Area to violate the provisions of this Convention. Such offenses shall be punishable in accordance with administrative or judicial procedures established by the Authorizing or Sponsoring Party.

3. Each Contracting Party shall be responsible for maintaining public order on manned installations and equipment operated by those authorized or sponsored by it.

4. Each Contracting Party shall be responsible for damages caused by activities which it authorizes or sponsors to any other Contracting Party or its nationals.

5. A group of States acting together, pursuant to agreement among them or through an international organization, shall be jointly and severally responsible under this Convention.

ARTICLE 12

All disputes arising out of the interpretation or application of this Convention shall be settled in accordance with provisions of Section E of Chapter IV.

CHAPTER II
GENERAL RULES

A. Mineral Resources

ARTICLE 13

1. All exploration and exploitation of the mineral deposits of the International Seabed Area shall be licensed by the International Seabed Resource Authority or the appropriate Trustee Party. All licenses shall be subject to the provisions of this Convention.

2. Detailed rules to implement this Chapter are contained in Appendices A, B and C.

ARTICLE 14

1. There shall be fees for licenses for mineral exploration and exploitation.

2. The fees referred to in paragraph 1 shall be reasonable and be designed to defray the administrative expenses of the International Seabed Resource Authority and of the Contracting Parties in discharging their responsibilities in the International Seabed Area.

ARTICLE 15

1. An exploitation license shall specify the minerals or categories of minerals and the precise area to which it applies. The categories established shall be those which will best promote simultaneous and efficient exploitation of different minerals.

2. Two or more licensees to whom licenses have been issued for different materials in the same or overlapping areas shall not unjustifiably interfere with each other's activities.

ARTICLE 16

The size of the area to which an exploitation license shall apply and the duration of the license

shall not exceed the limits provided for in this Convention.

ARTICLE 17

Licensees must meet work requirements specified in this Convention as a condition of retaining an exploitation license prior to and after commercial production is achieved.

ARTICLE 18

Licensees shall submit work plans and production plans, as well as reports and technical data acquired under an exploitation license, to the Trustee Party or the Sponsoring Party, as appropriate, and, to the extent specified by this Convention, to the International Seabed Resource Authority.

ARTICLE 19

1. Each Contracting Party shall be responsible for inspecting, at regular intervals, the activities of licensees authorized or sponsored by it. Inspection reports shall be submitted to the International Seabed Resource Authority.

2. The International Seabed Resource Authority, on its own initiative or at the request of any interested Contracting Party, may inspect any licensed activity in cooperation with the Trustee Party or Sponsoring Party, as appropriate, in order to ascertain that the licensed operation is being conducted in accordance with this Convention. In the event the International Seabed Resource Authority believes that a violation of this Convention has occurred, it shall inform the Trustee Party or Sponsoring Party, as appropriate, and request that suitable action be taken. If, after a reasonable period of time, the alleged violation continues, the International Seabed Resource Authority may bring the matter before the Tribunal in accordance with Section E of Chapter IV.

ARTICLE 20

1. Licenses issued pursuant to this Convention may be revoked only for cause in accordance with the provisions of this Convention.

2. Expropriation of investments made, or unjustifiable interference with operations conducted, pursuant to a license is prohibited.

ARTICLE 21

1. Due notice must be given, by Notices to Mariners or other recognized means of notification, of the construction or deployment of any installations or devices for the exploration or exploitation of mineral deposits, and permanent means for giving warning of their presence must be maintained. Any installations or devices extending into the superjacent waters which are abandoned or disused must be entirely removed.

2. Such installations and devices shall not possess the status of islands and shall have no territorial sea of their own.

3. Installations or devices may not be established where interference with the use of recognized sea lanes or airways is likely to occur.

B. Living Resources of the Seabed

ARTICLE 22

Subject to the provisions of Chapter III, each Contracting Party may explore and exploit the seabed living resources of the International Seabed Area in accordance with such conservation measures as are necessary to protect the living resources of the International Seabed Area and to maximize their growth and utilization.

C. Protection of the Marine Environment, Life and Property

ARTICLE 23

1. In the International Seabed Area, the International Seabed Resource Authority shall prescribe Rules and Recommended Practices, in accordance with Chapter V of this Convention, to ensure:

a. The protection of the marine environment against pollution arising from exploration and exploitation activities such as drilling, dredging, excavation, disposal of waste, construction and operation or maintenance of installations and pipelines and other devices;

b. The prevention of injury to persons, property and marine resources arising from the aforementioned activities;

c. The prevention of any unjustifiable interference with other activities in the marine environment arising from the aforementioned activities.

2. Deep drilling in the International Seabed Area shall be undertaken only in accordance with the provisions of this Convention.

D. Scientific Research

ARTICLE 24

1. Each Contracting Party agrees to encourage, and to obviate interference with, scientific research.

2. The Contracting Parties shall promote international cooperation in scientific research concerning the International Seabed Area:

a. By participating in international programs and by encouraging cooperation in scientific research by personnel of different countries;

b. Through effective publication of research programs and the results of research through international channels;

c. By cooperation in measures to strengthen the research capabilities of developing countries, including the participation of their nationals in research programs.

E. International Marine Parks and Preserves

ARTICLE 25

In consultation with the appropriate international organizations or agencies, the International Seabed Resource Authority may designate as international marine parks and preserves specific portions of the International Seabed Area that have unusual educational, scientific or recreational value. The establishment of such a park or preserve in the International Trusteeship Area shall require the approval of the appropriate Trustee Party.

CHAPTER III
THE INTERNATIONAL TRUSTEESHIP

ARTICLE 26

1. The International Trusteeship Area is that part of the International Seabed Area comprising the continental or island margin between the boundary described in Article 1 and a line, beyond the base of the continental slope, or beyond the base of the slope of an island situated beyond the continental slope, where the downward inclination of the surface of the seabed declines to a gradient of 1:_____.[1]

2. Each Trustee Party shall permanently delineate the precise seaward boundary of the International Trusteeship Area off its coast by straight lines not exceeding 60 nautical miles in length, following the general direction of the limits specified in paragraph 1. Such lines shall connect fixed points at the limit specified in paragraph 1, defined permanently by coordinates of latitude and longitude. Areas between or landward of such points may have a surface gradient of less than 1:_____. Where an elongate basin or plain having a surface gradient of less than 1:_____ transects an area having a gradient of more than 1:_____, a straight boundary line more than 60 nautical miles in length, but not exceeding the lesser of one-fourth of the length of that part of the basin or plain transecting the area having a gradient of more than 1:_____ or 120 nautical miles, may be drawn across the basin or plain.

3. Each Trustee Party shall submit the description of its boundary to the International Seabed Boundary Review Commission within five years of the entry into force of this Convention for that Party. Boundaries not accepted by that Commission and not resolved by negotiation between the Commission and the Trustee Party within one year shall be submitted by the Commission to the Tribunal for adjudication in accordance with Section E of Chapter IV.[2]

ARTICLE 27

1. Except as specifically provided for in this Chapter, the coastal State shall have no greater rights in the International Trusteeship Area off its coast than any other Contracting Party.

2. With respect to exploration and exploitation of the natural resources of that part of the internatioal Trusteeship Area in which it acts as trustee for the international community, each coastal State, subject to the provisions of this Convention, shall be responsible for:

a. Issuing, suspending and revoking mineral exploration and exploitation licenses;

b. Establishing work requirements, provided that such requirements shall not be less than those specified in Appendix A;

c. Ensuring that its licensees comply with this Convention, and, if it deems it necessary, applying standards to its licensees higher than or in addition to those required under this Convention, provided such standards are promptly communicated to the International Seabed Resource Authority;

d. Supervising its licensees and their activities;

e. Exercising civil and criminal jurisdiction over its licensees, and persons acting on their behalf, while engaged in exploration or exploitation;

f. Filing reports with the International Seabed Resource Authority;

g. Collecting and transferring to the International Seabed Resource Authority all payments required by this Convention;

h. Determining the allowable catch of the living resources of the seabed and prescribing other conservation measures regarding them;

i. Enacting such laws and regulations as are necessary to perform the above functions.

3. Detailed rules to implement this Chapter are contained in Appendix C.

ARTICLE 28

In performing the functions referred to in Article 27, the Trustee Party may, in its discretion:

a. Establish the procedures for issuing licenses;

b. Decide whether a license shall be issued;

c. Decide to whom a license shall be issued, without regard to the provisions of Article 3;

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1. The precise gradient should be determined by technical experts, taking into account, among other factors, ease of determination, the need to avoid dual administration of single mineral deposits, and the avoidance of including excessively large areas in the International Trusteeship Area.

2. *NOTE:* Additional consideration will be given to problems raised by enclosed and semi-enclosed seas.

d. Retain [a figure between 33⅓% and 50% will be inserted here] of all fees and payments required by this Convention;

e. Collect and retain additional license and rental fees to defray its administrative expenses, and collect, and retain [a figure between 33⅓% and 50% will be inserted here] of, other additional fees and payments related to the issuance or retention of a license, with annual notification to the International Seabed Resource Authority of the total amount collected;

f. Decide whether and by whom the living resources of the seabed shall be exploited, without regard to the provisions of Article 3.

ARTICLE 29

The Trustee Party may enter into an agreement with the International Seabed Resource Authority under which the International Seabed Resource Authority will perform some or all of the trusteeship supervisory and administrative functions provided for in this Chapter in return for an appropriate part of the Trustee Party's share of international fees and royalties.

ARTICLE 30

Where a part of the International Trusteeship Area is off the coast of two or more Contracting Parties, such Parties shall, by agreement, precisely delimit the boundary separating the areas in which they shall respectively perform their trusteeship functions and inform the International Seabed Boundary Review Commission of such delimitation. If agreement is not reached within three years after negotiations have commenced, the International Seabed Boundary Review Commission shall be requested to make recommendations to the Contracting Parties concerned regarding such delimitation. If agreement is not reached within one year after such recommendations are made, the delimitation recommended by the Commission shall take effect unless either Party, within 90 days thereafter, brings the matter before the Tribunal in accordance with Section E of Chapter IV.

CHAPTER IV
THE INTERNATIONAL SEABED RESOURCE AUTHORITY

A. General

ARTICLE 31

1. The International Seabed Resource Authority is hereby established.

2. The principal organs of the Authority shall be the Assembly, the Council, and the Tribunal.

ARTICLE 32

The permanent seat of the Authority shall be at _____.

ARTICLE 33

Each Contracting Party shall recognize the juridical personality of the Authority. The legal capacity, privileges and immunities of the Authority shall be the same as those defined in the Convention on the Privileges and Immunities of the Specialized Agencies of the United Nations.

B. The Assembly

ARTICLE 34

1. The Assembly shall be composed of all Contracting Parties.

2. The first session of the Assembly shall be convened _____. The Assembly shall thereafter be convened by the Council at least once every three years at a suitable time and place. Extraordinary sessions of the Assembly shall be convened at any time on the call of the Council, or the Secretary-General of the Authority at the request of one-fifth of the Contracting Parties.

3. At meetings of the Assembly a majority of the Contracting Parties is required to constitute a quorum.

4. In the Assembly each Contracting Party shall exercise one vote.

5. Decisions of the Assembly shall be taken by a majority of the members present and voting, except as otherwise provided in this Convention.

ARTICLE 35

The powers and duties of the Assembly shall be to:

a. Elect its President and other officers;

b. Elect members of the Council in accordance with Article 36;

c. Determine its rules of procedure and constitute such subsidiary organs as it considers necessary or desirable;

d. Require the submission of reports from the Council;

e. Take action on any matter referred to it by the Council;

f. Approve proposed budgets for the Authority, or return them to the Council for reconsideration and resubmission;

g. Approve proposals by the Council for changes in the allocation of the net income of the Authority within the limits prescribed in Appendix D, or return them to the Council for reconsideration and resubmission;

h. Consider any matter within the scope of this Convention and make recommendations to the Council or Contracting Parties as appropriate;

i. Delegate such of its powers as it deems necessary or desirable to the Council and revoke or modify such delegation at any time;

j. Consider proposals for amendments of this Convention in accordance with Article 76.

C. The Council

ARTICLE 36

1. The Council shall be composed of twenty-four Contracting Parties and shall meet as often as necessary.

2. Members of the Council shall be designated or elected in the following categories:

a. The six most industrially advanced Contracting Parties shall be designated in accordance with Appendix E;

b. Eighteen additional Contracting Parties, of which at least twelve shall be developing countries, shall be elected by the Assembly, taking into account the need for equitable geographical distribution.

3. At least two of the twenty-four members of the Council shall be landlocked or shelf-locked countries.

4. Elected members of the Council shall hold office for three years following the last day of the Assembly at which they are elected and thereafter until their successors are elected.

Designated members of the Council shall hold office until replaced in accordance with Appendix E.

5. Representatives on the Council shall not be employees of the Authority.

ARTICLE 37

1. The Council shall elect its President for a term of three years.

2. The President of the Council may be a national of any Contracting Party, but may not serve during his term of office as its representative in the Assembly or on the Council.

3. The President shall have no vote.

4. The President shall:

a. Convene and conduct meetings of the Council;

b. Carry out the functions assigned to him by the Council.

ARTICLE 38

Decisions by the Council shall require approval by a majority of all its members, including a majority of members in each of the two categories referred to in paragraph 2 of Article 36.

ARTICLE 39

Any Contracting Party not represented on the Council may participate, without a vote, in the consideration by the Council or any of the subsidiary organs, of any question which is of particular interest to it.

ARTICLE 40

The powers and duties of the Council shall be to:

a. Submit annual reports to the Contracting Parties;

b. Carry out the duties specified in this Convention and any duties delegated to it by the Assembly;

c. Determine its rules of procedure;

d. Appoint and supervise the Commissions provided for in this Chapter, establish procedures for the coordination of their activities, and determine the terms of office of their members;

e. Establish other subsidiary organs, as may be necessary or desirable, and define their duties;

f. Appoint the Secretary-General of the Authority and establish general guidelines for the appointment of such other personnel as may be necessary;

g. Submit proposed budgets to the Assembly for its approval, and supervise their execution;

h. Submit proposals to the Assembly for changes in the allocation of the net income of the Authority within the limits prescribed in Appendix D;

i. Adopt and amend Rules and Recommended Practices in accordance with Chapter V, upon the recommendation of the Rules and Recommended Practices Commission;

j. Issue emergency orders, at the request of any Contracting Party, to prevent serious harm to the marine environment arising out of any exploration or exploitation activity and communicate them immediately to licensees, and Authorizing or Sponsoring Parties, as appropriate;

k. Establish a fund to provide emergency relief and assistance in the event of a disaster to the marine environment resulting from exploration or exploitation activities;

l. Establish procedures for coordination between the International Seabed Resource Authority, and the United Nations, its specialized agencies and other international or regional organizations concerned with the marine environment;

m. Establish or support such international or regional centers, through or in cooperation with other international and regional organizations, as may be appropriate to promote study and research of the natural resourecs of the seabed and to train nationals of any Contracting Party in related science and the technology of seabed exploration and exploitation, taking into account the special needs of developing States Parties to this Convention;

n. Authorize and approve agreements with a Trustee Party, pursuant to Article 29, under which the International Seabed Resource Authority will perform some or all of the Trustee Party's functions.

ARTICLE 41

In furtherance of Article 5, paragraph 2, of this Convention, the Council may, at the request of any Contracting Party and taking into account the special needs of developing States Parties to this Convention:

a. Provide technical assistance to any Contracting Party to further the objectives of this Convention;

b. Provide technical assistance to any Contracting Party to help it to meet its responsibilities and obligations under this Convention;

c. Assist any Contracting Party to augment its capability to derive maximum benefit from the efficient administration of the International Trusteeship Area.

D. The Commissions

ARTICLE 42

1. There shall be a Rules and Recommended Practices Commission, an Operations Commission, and an International Seabed Boundary Review Commission.

2. Each Commission shall be composed of five to nine members appointed by the Council from among persons nominated by Contracting Parties. The Council shall invite all Contracting Parties to submit nominations.

3. No two members of a Commission may be nationals of the same State.

4. A member of each Commission shall be elected its President by a majority of the members of the Commission.

5. Each Commission shall perform the functions specified in this Convention and such other functions as the Council may specify from time to time.

ARTICLE 43

1. Members of the Rules and Recommended Practices Commission shall have suitable qualifications and experience in seabed resources management, ocean sciences, maritime safety, ocean and marine engineering, and mining and mineral technology and practices. They shall not be full-time employees of the Authority.

2. The Rules and Recommended Practices Commission shall:

a. Consider, and recommend to the Council for adoption, Annexes to this Convention in accordance with Chapter V;

b. Collect from and communicate to Contracting Parties information which the Commission considers necessary and useful in carrying out its functions.

ARTICLE 44

1. Members of the Operations Commission shall have suitable qualifications and experience in the management of seabed resources, and operation of marine installations, equipment and devices.

2. The Operations Commission shall:

a. Issue licenses for seabed mineral exploration and exploitation, except in the International Trusteeship Area;

b. Supervise the operations of licensees in cooperation with the Trustee or Sponsoring Party, as appropriate, but shall not itself engage in exploration or exploitation;

c. Perform such functions with respect to disputes between Contracting Parties as are specified in Section E of this Chapter;

d. Initiate proceedings pursuant to Section E of this Chapter for alleged violations of this Convention, including but not limited to proceedings for revocation or suspension of licenses;

e. Arrange for and review the collection of international fees and other forms of payment;

f. Arrange for the collection and dissemination of information relating to licensed operations;

g. Supervise the performance of the functions of the Authority pursuant to any agreement between a Trustee Party and the Authority under Article 29;

h. Issue deep drilling permits.

ARTICLE 45

1. Members of the International Seabed Boundary Review Commission shall have suitable qualifications and experience in marine hydrography, bathymetry, geodesy and geology. They shall not be full-time employees of the Authority.

2. The International Seabed Boundary Review Commission shall:

a. Review the delineation of boundaries submitted by Contracting Parties in accordance with Articles 1 and 26 to see that they conform to the provisions of this Convention, negotiate any differences with Contracting Parties, and if these differences are not resolved initiate proceedings before the Tribunal in accordance with Section E of this Chapter;

b. Make recommendations to the Contracting Parties in accordance with Article 30;

c. At the request of any Contracting Party, render advice on any boundary question arising under this Convention.

E. The Tribunal

ARTICLE 46

1. The Tribunal shall decide all disputes and advise on all questions relating to the interpretation and application of this Convention which have been submitted to it in accordance with the provisions of this Convention. In its decisions and advisory opinions the Tribunal shall also apply relevant principles of international law.

2. Subject to an authorization under Article 96 of the Charter of the United Nations, the Tribunal may request the International Court of Justice to give an advisory opinion on any question of international law.

ARTICLE 47

1. The Tribunal shall be composed of five, seven, or nine independent judges, who shall possess the qualifications required in their respective countries for appointment to the highest judicial offices, or shall be lawyers especially competent in matters within the scope of this Convention. In the Tribunal as a whole the representation of the principal legal systems of the world shall be assured.

2. No two of the members of the Tribunal may be nationals of the same State.

ARTICLE 48

1. Each Contracting Party shall be entitled to nominate candidates for membership on the Tribunal. The Council shall elect the Tribunal from a list of these nominations.

2. The members of the Tribunal shall be elected for nine years and may be re-elected, provided, however, that the Council may establish procedures for staggered terms. Should such procedures be established, the judges whose terms are to expire in less than nine years shall be chosen by lots drawn by the Secretary-General.

3. The members of the Tribunal shall continue to discharge their duties until their places have been filled. Though replaced, they shall finish any cases which they may have begun.

4. A member of the Tribunal unable to perform his duties may be dismissed by the Council on the unanimous recommendation of the other members of the Tribunal.

5. In case of a vacancy, the Council shall elect a successor who shall hold office for the remainder of his predecessor's term.

ARTICLE 49

The Tribunal shall establish its rules of procedure; elect its President; appoint its Registrar and determine his duties and terms of service; and adopt regulations for the appointment of the remainder of its staff.

ARTICLE 50

1. Any Contracting Party which considers that another Contracting Party has failed to fulfill any of its obligations under this Convention may bring its complaint before the Tribunal.

2. Before a Contracting Party institutes such proceedings before the Tribunal it shall bring the matter before the Operations Commission.

3. The Operations Commission shall deliver a reasoned opinion in writing after the Contracting Parties concerned have been given the opportunity both to submit their own cases and to reply to each other's case.

4. If the Contracting Party accused of a violation does not comply with the terms of such opinion within the period laid down by the Commission, the other Party concerned may bring the matter before the Tribunal.

5. If the Commission has not given an opinion within a period of three months from the date when the matter was brought before it, either Party concerned may bring the matter before the Tribunal without waiting further for the opinion of the Commission.

ARTICLE 51

1. Whenever the Operations Commission, acting on its own initiative or at the request of any licensee, considers that a Contracting Party or a licensee has failed to fulfill any of its obligations under this Convention, it shall issue a reasoned opinion in writing on the matter after giving such party the opportunity to submit its comments.

2. If the Party concerned does not comply with the terms of such opinion within the period laid down by the Commission, the latter may bring a complaint before the Tribunal.

ARTICLE 52

1. If the Tribunal finds that a Contracting Party or a licensee has failed to fulfill any of its obligations under this Convention, such party shall take the measures required for the implementation of the judgment of the Tribunal.

2. When appropriate, the Tribunal may decide that the Contracting Party or the licensee who has failed to fulfill its obligations under this Convention shall pay to the Authority a fine of not more than $1,000 for each day of the offense, or shall pay damages to the other party concerned, or both.

3. In the event the Tribunal determines that a licensee has committed a gross and persistent violation of the provisions of this Convention and has not within a reasonable time brought his operations into compliance with them, the Council may, as appropriate, either revoke his license or request that the Trustee Party revoke it. The licensee shall not, however, be deprived of his license if his actions were directed by a Trustee or Sponsoring Party.

ARTICLE 53

If disputes under Articles 1, 26 and 30 have not been resolved by the time and methods specified in those Articles, the International Seabed Boundary Review Commission shall bring the matter before the Tribunal.

ARTICLE 54

1. Any Contracting Party, which questions the legality of measures taken by the Council, the Rules

and Recommended Practices Commission, the Operations Commission, or the International Seabed Boundary Review Commission on the grounds of a violation of this Convention, lack of jurisdiction, infringement of important procedural rules, unreasonableness, or misuse of powers, may bring the matter before the Tribunal.

2. Any person may, subject to the same conditions, bring a complaint to the Tribunal with regard to a decision directed to that person, or a decision which, although in the form of a rule or a decision directed to another person, is of direct concern to the complainant.

3. The proceedings provided for in this Article shall be instituted within a period of two months, dating, as the case may be, either from the publication of the measure concerned or from its notification to the complainant, or, in default thereof, from the day on which the latter learned of it.

4. If the Tribunal considers the appeal well-founded, it should declare the measure concerned to be null and void, and shall decide to what extent the annulment shall have retroactive application.

ARTICLE 55

1. The organ responsible for a measure declared null and void by the Tribunal shall be required to take the necessary steps to comply with the Tribunal's judgment.

2. When appropriate, the Tribunal may require that the Authority repair or pay for any damage caused by its organs or by its officials in the performance of their duties.

ARTICLE 56

When a case pending before a court or tribunal of one of the Contracting Parties raises a question of the interpretation of this Convention or of the validity or interpretation of measures taken by an organ of the Authority, the court or tribunal concerned may request the Tribunal to give its advice thereon.

ARTICLE 57

The Tribunal shall also be competent to decide any dispute connected with the subject matter of this Convention submitted to it pursuant to an agreement, license, or contract.

ARTICLE 58

If a Contracting Party fails to perform the obligations incumbent upon it under a judgment rendered by the Tribunal, the other Party to the case may have recourse to the Council, which shall decide upon measures to be taken to give effect to the judgment. When appropriate, the Council may decide to suspend temporarily, in whole or in part, the rights under this Convention of the Party failing to perform its obligations, without impairing the rights of licensees who have not contributed to the failure to perform such obligations. The extent of such a suspension should be related to the extent and seriousness of the violation.

ARTICLE 59

In any case in which the Council issues an order in emergency circumstances to prevent serious harm to the marine environment, any directly affected Contracting Party may request immediate review by the Tribunal, which shall promptly either confirm or suspend the application of the emergency order pending the decision of the case.

ARTICLE 60

Any organ of the International Seabed Resource Authority may request the Tribunal to give an advisory opinion on any legal question connected with the subject matter of this Convention.

F. The Secretariat

ARTICLE 61

The Secretariat shall comprise a Secretary-General and such staff as the International Seabed Resource Authority may require. The Secretary-General shall be appointed by the Council from among persons nominated by Contracting Parties. He shall serve for a term of six years, and may be reappointed.

ARTICLE 62

The Secretary-General shall:

a. Be the chief administrative officer of the International Seabed Resource Authority, and act in that capacity in all meetings of the Assembly and the Council;

b. Report to the Assembly and the Council on the work of the International Seabed Resource Authority;

c. Collect, publish and disseminate information which will contribute to mankind's knowledge of the seabed and its resources;

d. Perform such other functions as are entrusted to him by the Assembly or the Council.

ARTICLE 63

1. In the performance of their duties the Secretary-General and the staff shall not seek or receive instructions from any government or from any other external authority. They shall refrain from any action which might reflect on their position as international officials responsible only to the International Seabed Resource Authority.

2. Each Contracting Party shall respect the exclusively international character of the responsibilities of the Secretary-General and the staff and shall not seek to influence them in the discharge of their responsibilities.

ARTICLE 64

1. The staff of the International Seabed Resource Authority shall be appointed by the Secretary-General under the general guidelines established by the Council.

2. Appropriate staffs shall be assigned to the various organs of the Authority as required.

3. The paramount consideration in the employment of the staff and in the determination of the conditions of service shall be the necessity of securing the highest standards of efficiency, competence, and integrity. Due regard shall be paid to the importance of recruiting the staff on as wide a geographical basis as possible.

G. Conflicts of Interest

ARTICLE 65

No representative to the Assembly or the Council nor any member of the Tribunal, Commissions, subsidiary organs (other than advisory bodies or consultants), or the Secretariat, shall, while serving as such a representative or member, be actively associated with or financially interested in any of the operations of any enterprise concerned with exploration or exploitation of the natural resources of the International Seabed Area.

CHAPTER V
RULES AND RECOMMENDED PRACTICES

ARTICLE 66

1. Rules and Recommended Practices are contained in Annexes to this Convention.

2. Annexes shall be consistent with this Convention, its Appendices, and any amendments thereto. Any Contracting Party may challenge an Annex, an amendment to an Annex, or any of their provisions, on the grounds that it is unnecessary, unreasonable or constitutes a misuse of powers, by bringing the matter before the Tribunal in accordance with Article 54.

3. Annexes shall be adopted and amended in accordance with Article 67. Those Annexes adopted along with this Convention, if any, may be amended in accordance with Article 67.

ARTICLE 67

The Annexes to this Convention and amendments to such Annexes shall be adopted in accordance with the following procedure:

a. They shall be prepared by the Rules and Recommended Practices Commission and submitted to the Contracting Parties for comments;

b. After receiving the comments, the Commission shall prepare a revised text of the Annex or amendments thereto;

c. The text shall then be submitted to the Council which shall adopt it or return it to the Commission for further study;

d. If the Council adopts the text, it shall submit it to the Contracting Parties;

e. The Annex or an amendment thereto shall become effective within three months after its submission to the Contracting Parties, or at the end of such longer period of time as the Council may prescribe, unless in the meantime more than one-third of the Contracting Parties register their disapproval with the Authority;

f. The Secretary-General shall immediately notify all Contracting States of the coming into force of any Annex or amendment thereto.

ARTICLE 68

1. Annexes shall be limited to the Rules and Recommended Practices necessary to:

a. Fix the level, basis, and accounting procedures for determining international fees and other forms of payment, within the ranges specified in Appendix A;

b. Establish work requirements within the ranges specified in Appendices A and B;

c. Establish criteria for defining the technical and financial competence of applicants for licenses;

d. Assure that all exploration and exploitation activities, and all deep drilling, are conducted with strict and adequate safeguards for the protection of human life and safety and of the marine environment;

e. Protect living marine organisms from damage arising from exploration and exploitation activities;

f. Prevent or reduce to acceptable limits interference arising from exploration and exploitation activities with other uses and users of the marine environment;

g. Assure safe design and construction of fixed exploration and exploitation installations and equipment;

h. Facilitate search and rescue services, including assistance to aquanauts, and the reporting of accidents;

i. Prevent unnecessary waste in the extraction of minerals from the seabed;

j. Standardize the measurement of water depth and the definition of other natural features pertinent to the determination of the precise location of International Seabed Area boundaries;

k. Prescribe the form in which Contracting Parties shall describe their boundaries and the kinds of information to be submitted in support of them;

l. Encourage uniformity in seabed mapping and charting;

m. Facilitate the management of a part of the International Trusteeship Area pursuant to any

agreement between a Trustee Party and the Authority under Article 29;

n. Establish and prescribe conditions for the use of international marine parks and preserves.

2. Application of any Rule or Recommended Practice may be limited as to duration or geographic area, but without discrimination against any Contracting Party or licensee.

ARTICLE 69

The Contracting Parties agree to collaborate with each other and the appropriate Commission in securing the highest practicable degree of uniformity in regulations, standards, procedures and organizations in relation to the matters covered by Article 68 in order to facilitate and improve seabed resources exploration and exploitation.

ARTICLE 70

Annexes and amendments thereto shall take into account existing international agreements and, where appropriate, shall be prepared in collaboration with other competent international organizations. In particular, existing international agreements and regulations relating to safety of life at sea shall be respected.

ARTICLE 71

1. Except as otherwise provided in this Convention, the Annexes and amendments thereto adopted by the Council shall be binding on all Contracting Parties.

2. Recommended Practices shall have no binding effect.

ARTICLE 72

Any Contracting Party believing that a provision of an Annex or an amendment thereto cannot be reasonably applied because of special circumstances may seek a waiver from the Operations Commission and if such waiver is not granted within three months, it may appeal to the Tribunal within an additional period of two months.

CHAPTER VI
TRANSITION

ARTICLE 73

1. There shall be due protection for the integrity of investments made in the International Seabed Area prior to the coming into force of this Convention.

2. All authorizations by a Contracting Party to exploit the mineral resources of the International Seabed Area granted prior to July 1, 1970, shall be continued without change after the coming into force of this Convention provided that:

a. Activities pursuant to such authorizations shall, to the extent possible, be conducted in accordance with the provisions of this Convention;

b. New activities under such previous authorizations which are begun after the coming into force of this Convention shall be subject to the regulatory provisions of this Convention regarding the protection of human life and safety and of the marine environment and the avoidance of unjustifiable interference with other uses of the marine environment;

c. Upon the expiration or relinquishment of such authorizations, or upon their revocation by the authorizing Party, the provisions of this Convention shall become fully applicable to any exploration or exploitation of resources remaining in the areas included in such authorizations;

d. Contracting Parties shall pay to the International Seabed Resource Authority, with respect to such authorizations, the production payments provided for under this Convention.

3. A Contracting Party which has authorized exploitation of the mineral resources of the International Seabed Area on or after July 1, 1970, shall be bound, at the request of the person so authorized, either to issue new licenses under this Convention in its capacity as a Trustee Party, or to sponsor the application of the person so authorized to receive new licenses from the International Seabed Resource Authority. Such new license issued by a Trustee Party shall include the same terms and conditions as its previous authorization, provided that such license shall not be inconsistent with this Convention, and provided further that the Trustee Party shall itself be responsible for complying with increased obligations resulting from the application of this Convention, including fees and other payments required by this Convention.

4. The provisions of paragraph 3 shall apply within one year after this Convention enters into force for the Contracting Party concerned, but in no event more than five years after the entry into force of this Convention.

5. Until converted into new licenses under paragraph 3, all authorizations issued on or after July 1, 1970, to exploit the mineral resources of the International Seabed Area shall have the same status as authorizations under paragraph 2. Five years after the entry into force of this Convention all such authorizations not converted into new licenses under paragraph 3 shall be null and void.

6. Any Contracting Party that has authorized activities within the International Seabed Area after July 1, 1970, but before this Convention has entered into force for such Party, shall compensate its licensees for any investment losses resulting from the application of this Convention.

ARTICLE 74

1. The membership of the Tribunal, the Commissions, and the Secretariat shall be maintained at

a level commensurate with the tasks being performed.

2. In the period before the International Seabed Resource Authority acquires income sufficient for the payment of its administrative expenses, the Authority may borrow funds for the payment of those expenses. The Contracting Parties agree to give sympathetic consideration to requests by the Authority for such loans.

CHAPTER VII
DEFINITIONS

ARTICLE 75

Unless another meaning results from the context of a particular provision, the following definitions shall apply:

1. "Convention" refers to all provisions of and amendments to this Convention, its Appendices, and its Annexes.

2. "Trustee Party" refers to the Contracting Party exercising trusteeship functions in that part of the International Trusteeship Area off its coast in accordance with Chapter III.

3. "Sponsoring Party" refers to a Contracting Party which sponsors an application for a license or permit before the International Seabed Resource Authority. The term "sponsor" is used in this context.

4. "Authorizing Party" refers to a Contracting Party authorizing any activity in the International Seabed Area, including a Trustee Party issuing exploration or exploitation licenses. The term "authorize" is used in this context. In the case of a vessel, the term "Authorizing Party" shall be deemed to refer to the State of its nationality.

5. "Operating Party" refers to a Contracting Party which itself explores or exploits the natural resources of the International Seabed Area.

6. "Licensee" refers to a State, group of States, or natural or juridical person holding a license for exploration or exploitation of the natural resources of the International Seabed Area.

7. "Exploration" refers to any operation in the International Seabed Area which has as its principal or ultimate purpose the discovery and appraisal, or exploitation, of mineral deposits, and does not refer to scientific research. The term does not refer to similar activities when undertaken pursuant to an exploitation license.

8. "Deep drilling" refers to any form of drilling or excavation in the International Seabed Area deeper than 300 meters below the surface of the seabed.

9. "Landlocked or shelf-locked country" refers to a Contracting Party which is not a Trustee Party.

CHAPTER VIII
AMENDMENT AND WITHDRAWAL

ARTICLE 76

Any proposed amendment to this Convention or the appendices thereto which has been approved by the Council and a two-thirds vote of the Assembly shall be submitted by the Secretary-General to the Contracting Parties for ratification in accordance with their respective constitutional processes. It shall come into force when ratified by two-thirds of the Contracting Parties, including each of the six States designated pursuant to subparagraph 2(a) of Article 36 at the time the Council approved the amendments. Amendments shall not apply retroactively.

ARTICLE 77

1. Any Contracting Party may withdraw from this Convention by a written notification addressed to the Secretary-General. The Secretary-General shall promptly inform the other Contracting Parties of any such withdrawal.

2. The withdrawal shall take effect one year from the date of the receipt by the Secretary-General of the notification.

CHAPTER IX
FINAL CLAUSES

ARTICLE 78

APPENDIX A

TERMS AND PROCEDURES APPLYING TO ALL LICENSES IN THE INTERNATIONAL SEABED AREA

1. Activities Requiring a License or a Permit

1.1. Pursuant to Article 13 of this Convention, all exploration and exploitation operations in the International Seabed Area which have as their principal or ultimate purpose the discovery or appraisal, and exploitation, of mineral deposits shall be licensed.

1.2. There shall be two categories of licenses:

(a) A non-exclusive license shall authorize geophysical and geochemical measurements, and bottom sampling, for the purposes of exploration. This license shall not be restricted as to area and shall grant no exclusive right to exploration nor any preferential right in applying for an exploitation license. It shall be valid for two years following the date of its issuance and shall be renewable for successive two-year periods.

(b) An exploitation license shall authorize exploration and exploitation of one of the groups of minerals described in Section 5 of this Appendix in a specified area. The exploitation license shall include the exclusive right to undertake deep drilling and other forms of subsurface entry for the purpose of exploration and exploitation of minerals described in paragraphs 5.1(a) and 5.1(c). The license shall be for a limited period and shall expire at the end of fifteen years if no commercial production is achieved.

1.3. The right to undertake deep drilling for exploration or exploitation shall be granted only under an exploitation license.

1.4. Deep drilling for purposes other than exploration or exploitation of seabed minerals shall be authorized under a deep-drilling permit issued at no charge by the International Seabed Resource Authority, provided that:

(a) The application is accompanied by a statement from the Sponsoring Party certifying as to the applicant's technical competence and accepting liability for any damages that may result from such drilling;

(b) The application for such a permit is accompanied by a description of the location proposed for such holes, by seismograms and other pertinent information on the geology in the vicinity of the proposed drilling sites, and by a description of the equipment and procedures to be utilized;

(c) The proposed drilling, including the methods and equipment to be utilized, complies with the requirements of this Convention and is judged by the Authority not to pose an uncontrollable hazard to human safety, property, and the environment;

(d) The proposed drilling is either not within an area already under an exploitation license or is not objected to by the holder of such a license;

(e) The applicant agrees to make available promptly the geologic information obtained from such drilling to the Authority and the public.

2. General License Procedures

2.1. An Authorizing or Sponsoring Party shall certify the operator's financial and technical competence and shall require the operator to conform to the rules, provisions and procedures specified under the terms of the license.

2.2. Each Authorizing or Sponsoring Party shall formulate procedures to ensure that applications for licenses are handled expeditiously and fairly.

2.3. Any Authorizing or Sponsoring Party which considers that it is unable to exercise appropriate supervision over operators authorized or sponsored by it in accordance with this Convention shall be permitted to authorize or sponsor operators only if their operations are supervised by the International Seabed Resource Authority pursuant to an agreement between the Authorizing or Sponsoring Party and the International Seabed Resource Authority. In such event fees and rentals normally payable to the International Seabed Resource Authority will be increased appropriately to offset its supervisory costs.

3. Exploration Licenses—Procedures

3.1. All applications for exploration licenses and for their renewal shall be accompanied by a fee of from $500 to $1,500 as specified in an Annex and a description of the location of the general area to be investigated and the kinds of activities to be undertaken. A portion [a figure between 50% and 66⅔% will be inserted here] of the fee shall be forwarded by the Authorizing or Sponsoring Party to the Authority together with a copy of the application.

3.2. The Authorizing or Sponsoring Party shall transmit to the Authority the description referred to in paragraph 3.1 and its assurance that the activities will not be harmful to the marine environment.

3.3. The Authorizing or Sponsoring Party may require the operator to pay, and may retain, an additional license fee not to exceed $3,000, to help cover the administrative expenses of that Party.

3.4. Exploration licenses shall not be renewed

in the event the operator has failed to conform his activities under the prior license to the provisions of this Convention or to the conditions of the license.

4. Exploitation Licenses—Procedures

4.1. All applications for exploitation licenses shall be accompanied by a fee of from $5,000 to $15,000, per block, as specified in an Annex. A portion [a figure between 50% and 66⅔% will be inserted here] of the fee shall be forwarded by the Authorizing or Sponsoring Party to the Authority together with a copy of the application.

4.2. Pursuant to Section 5 of this Appendix, applications shall identify the category of minerals in the specific area for which a license is sought.

4.3. When a license is granted to an applicant for more than one block at the same time, only a single certificate need be issued.

4.4. The Authorizing or Sponsoring Party may require the operator to pay, and may retain, an additional license fee not to exceed $30,000, to help cover the administrative expenses of that Party.

4.5. The license fee described in paragraph 4.1 shall satisfy the first two years' rental fee.

5. Exploitation Rights—Categories and Size of Blocks

5.1. Licenses to exploit shall be limited to one of the following categories of minerals:

(a) Fluids or minerals extracted in a fluid state, such as oil, gas, helium, nitrogen, carbon dioxide, water, geothermal energy, sulfur and saline minerals.

(b) Manganese-oxide nodules and other minerals at the surface of the seabed.

(c) Other minerals, including category (b) minerals that occur beneath the surface of the seabed and metalliferous muds.

5.2. An exploitation license shall be issued for a specific area of the seabed and subsoil vertically below it, hereinafter referred to as a "block". The methods for defining the boundaries of blocks, and of portions thereof, shall be specified in an Annex.

5.3. In the category described in paragraph 5.1(a) the block shall be approximately 500 square kilometers, which shall be reduced to a quarter of a block when production begins. Each exploitation license shall apply to not more than one block, but exploitation licenses to a rectangle containing as many as 16 contiguous blocks may be taken out under a single certificate and reduced by three quarters to a number of blocks, a single block, or a portion of a single block when production begins. The relinquishment requirement shall not apply to licenses issued for areas of one quarter of a block or less.

5.4. In the category described in paragraph 5.1(b) the block shall be approximately 40,000 square kilometers, which shall be reduced to a quarter of a block when production begins. Each exploitation license shall apply to not more than one block, but exploitation licenses to a rectangle containing as many as four contiguous blocks may be taken out under a single certificate and reduced to a single block, or to a portion of a single block, comprising one-fourth their total area, when production begins. The relinquishment requirement shall not apply to licenses issued for areas of one quarter of a block or less.

5.5. In the category described in paragraph 5.1(c) the block shall be approximately 500 square kilometers, which shall be reduced to one eighth of a block when production begins. Each license shall apply to not more than one block, but exploitation licenses to as many as 8 contiguous blocks may be taken out under a single certificate and reduced to a single block, or to a portion of a single block, comprising one eighth their total area, when production begins. The relinquishment shall not apply to licenses issued for one eighth of a block or less.

5.6. Applications for exploitation licenses may be for areas smaller than the maximum stated above.

5.7. Operators may at any time relinquish rights to all or part of the licensed area.

5.8. Commercial production shall be deemed to have commenced or to be maintained when the value at the site of minerals exploited is not less than $100,000 per annum. The required minimum and the method of ascertaining this value shall be determined by the Authority.

5.9. If the commercial production is not maintained, the exploitation license shall expire within five years of its cessation, but when production is interrupted or suspended for reasons beyond the operator's control, the duration of the license shall be extended by a time equal to the period in which production has been suspended for reasons beyond the operator's control.

6. Rental Fees and Work Requirements

Rental Fees

6.1. Prior to attaining commercial production the following annual rental fees shall be paid beginning in the third year after the license has been issued:

(a) $2-$10 per square kilometer, as specified in an appropriate Annex, for the category of minerals described in paragraph 5.1(a) above;

(b) $2-$10 per 100 square kilometers for the category of minerals described in paragraph 5.1(b) above, and

(c) $2-$10 per square kilometer for the category of minerals described in paragraph 5.1(c) above.

6.2. The rates in paragraph 6.1 shall increase at the rate of 10% per annum, calculated on the original base rental fee, for the first ten years after the third year, and shall increase 20% per annum, calculated on the original base rental fee, for the following two years.

6.3. After commercial production begins, the annual rental fee shall be $5,000-$25,000 per block, regardless of block size.

6.4. The rental fee shall be payable annually in advance to the Authorizing or Sponsoring Party which shall forward a portion [a figure between 50% and 66⅔% will be inserted here] of the fees to the Authority. The Authorizing or Sponsoring Party may require the operator to pay, and may retain, an additional rental fee, not to exceed an amount equal to the amount paid pursuant to paragraph 6.1 through 6.3, to help cover the administration expenses of that Party.

Work Requirements

6.5. Prior to attaining commercial production, the operator shall deposit a work requirement fee, or post a sufficient bond for that amount, for each license at the beginning of each year.

6.6. The minimum annual work requirement fee for each block shall increase in accordance with the following schedule:

Para. 5.1(a) and (c) minerals

Years	Amount per annum
1-5	$ 20,000
6-10	180,000
11-15	200,000
Total	$2,000,000

Para. 5.1(b) minerals

Years	Amount per annum
1-2	$ 20,000
3-10	120,000
11-15	200,000
Total	$2,000,000

The minimum annual work requirement fee for a portion of a block shall be an appropriate fraction of the above, to be specified in an Annex.

6.7. The work requirement fee shall be refunded to the operator upon receipt of proof by the Authorising Party or Sponsoring Party that the amount equivalent to the fee has been expended in actual operations. Expenditures for on-land design or process research and equipment purchase or off-site construction cost directly related to the licensed block or group of blocks shall be considered to apply toward work requirements up to 75% of the amount required.

6.8. Expenditures in excess of the required amount for any given year shall be credited to the requirement for the subsequent year or years.

6.9. In the absence of satisfactory proof that the required expenditure has been made in accordance with the foregoing provisions of this section, the deposit will be forfeited.

6.10. If cumulative work requirement expenditures are not met at the end of the initial five-year period, the exploitation license shall be forfeited.

6.11. After commercial production begins the operator shall make an annual deposit of at least $100,000 at the beginning of each year; or shall post a sufficient bond for that amount, which shall be refunded in an amount equivalent to expenditures on or related to the block and the value of production at the site.

6.12. If production is suspended or delayed for reasons beyond the operator's control, the operator shall not be required to make the deposit or post the bond required in paragraph 6.11.

7. Submission of Work Plans and Data Under Exploitation Licenses Prior to Commencement of Commercial Production

7.1. Exploitation license applications shall be accompanied by a general description of the work to be done and the equipment and methods to be used. The licensee shall submit subsequent changes in his work plan to the Sponsoring or Authorizing Party for review.

7.2. The licensee shall furnish reports at specified intervals to the Authorizing or Sponsoring Party supplying proof that he has fulfilled the specified work requirements. Copies of such reports shall be forwarded to the Authority.

7.3. The licensee shall maintain records of drill logs, geophysical data and other data acquired in the area to which his license refers, and shall provide access to them to the Authorizing or Sponsoring Party on request.

7.4. At intervals of five years, or when he relinquishes his rights to all or part of the area or when he submits a production plan as described in Section 8 of this Appendix, the operator shall transmit to the Authorizing or Sponsoring Party such maps, seismic sections, logs, assays, or reports, as are specified in an Annex to this Convention. The Authorizing or Sponsoring Party shall hold such data in confidence for ten years after receipt, but shall make the data available on request to the Authority for its confidential use in the inspection of operations.

7.5. The data referred to in paragraph 7.4 shall be transmitted to the Authority ten years after receipt by the Authorizing or Sponsoring Party, and made available by the Authority for public inspection. Such data shall be transmitted to the Authority immediately upon revocation of a license.

8. Production Plan and Producing Operations

8.1. Prior to beginning commercial production the licensee shall submit a production plan to the Authorizing or Sponsoring Party and through such Party to the Authority.

8.2. The Authorizing or Sponsoring Party and the Authority shall require such modifications in the plan as may be necessary for it to meet the requirements of this Convention.

8.3. Any change in the licensee's production plan shall be submitted to the Authorizing or Spon-

soring Party and through such Party to the Authority for their review and approval.

8.4. Not later than three months after the end of each year from the issuance of the license the licensee shall transmit to the Authorizing or Sponsoring Party for forwarding to the Authority production reports and such other data as may be specified in an Annex to this Convention.

8.5. The operator shall maintain geologic, geophysical and engineering records and shall provide access to them to the Authorizing or Sponsoring Party on its request. In addition, the operator shall submit annually such maps, sections, and summary reports, as are specified in Annexes to this Convention.

8.6. The Sponsoring or Authorizing Party shall hold such maps and reports in confidence for ten years from the time received but shall make them available on request to the Authority for its confidential use in the inspection of operations.

8.7. Such maps and reports shall be transmitted to the Authority and shall be made available by it for public inspection not later than ten years after receipt by the Sponsoring or Authorizing Party.

9. Unit Operations

9.1. Accumulations of fluids and other minerals that can be made to migrate from one block to another and that would be most rationally mined by an operation under the control of a single operator but that lie astride the boundary of adjacent blocks licensed to different operators shall be brought into unit management and production.

9.2. With respect to deposits lying astride the seaward boundary of the International Trusteeship Area, the Operations Commission shall assure unit management and production, giving the Trustee and Sponsoring Parties and their licensees a reasonable time to reach agreement on an operation plan.

10. Payments on Production

10.1. When commercial production begins under an exploitation license, the operator shall pay a cash production bonus of $500,000 to $2,000,000 per block, as specified in an Annex to this Convention, to the Authorizing or Sponsoring Party.

10.2. Thereafter, the operator shall make payments to the Authorizing or Sponsoring Party which are proportional to production, in the nature of total payments ordinarily made to governments under similar conditions. Such payments shall be equivalent to 5 to 40 percent of the gross value at the site of oil and gas, and 2 to 20 percent of the gross value at the site of other minerals, as specified in an Annex to this Convention. The total annual payment shall not be less than the annual rental fee under paragraph 6.3.

10.3. The Sponsoring Party shall forward all payments under this section to the Authority. The Authorizing Party shall forward a portion [a figure between 50% and 66⅔% will be inserted here] of such payments to the Authority.

11. Graduation of Payments According to Environment and Other Factors

11.1. The levels of payments and work requirements, as well as the rates at which such payments and work requirements escalate over time, may be graduated to take account of probable risk and cost to the investor, including such factors as water depth, climate, volume of production, proximity to existing production, or other factors affecting the economic rent that can reasonably be anticipated from mineral production in a given area.

11.2. Any graduated levels and rates shall be described and categorized in an Annex in such a way as to affect all licensees in each category equally and not to discriminate against or favor individual Parties or groups of Parties, or their nationals.

11.3. Any increases in such levels of payments or requirements shall apply only to new licenses or renewals and not to those already in force.

12. Liability

12.1. The operator and his Authorizing or Sponsoring Party, as appropriate, shall be liable for damage to other users of the marine environment and for clean-up and restoration costs of damage to the land environment.

12.2. The Authorizing or Sponsoring Party, as appropriate, shall require operators to subscribe to an insurance plan or provide other means of guaranteeing responsibility, adequate to cover the liability described in paragraph ....[1]

13. Revocation

13.1. In the event of revocation pursuant to Article 52 of this Convention, there shall be no reimbursement for any expense incurred by the licensee prior to the revocation. The licensee shall, however, have the right to recover installations or equipment within six months of the date of the revocation of his license. Any installations or devices not removed by that time shall be removed and disposed of by the Authority, or the Authorizing or Sponsoring Party, at the expense of the licensee.

14. International Fees and Payments

14.1. The Authority shall specify the intervals at which fees and other payments collected by an Authorizing or Sponsoring Party shall be transmitted.

14.2. No Contracting Party shall impose or collect any tax, direct or indirect, on fees and other payments to the Authority.

14.3. All fees and payments required under this Convention shall be those in force at the time a license was issued or renewed.

14.4. All fees and payments to the Authority shall be transmitted in convertible currency.

1. *NOTE:* More detailed provisions on liability should be included.

APPENDIX B

TERMS AND PROCEDURES APPLYING TO LICENSES IN THE INTERNATIONAL SEABED AREA BEYOND THE INTERNATIONAL TRUSTEESHIP AREA

1. Entities Entitled to Obtain Licenses

1.1. Contracting Parties or a group of Contracting Parties, one of which shall act as the operating or sponsoring Party for purposes of fixing operational or supervisory responsibility, are authorized to apply for and obtain exploration and exploitation licenses. Any Contracting Party or group of Contracting Parties, which applies for a license to engage directly in exploration or exploitation, shall designate a specific agency to act as operator on its behalf for the purposes of this Convention.

1.2. Natural or juridical persons are authorized to apply for and obtain exploration and exploitation licenses from the International Seabed Resource Authority if they are sponsored by a Contracting Party.

2. Exploration Licenses—Procedures

2.1. Licenses shall be issued promptly by the Authority through the Sponsoring Party to applicants meeting the requirements specified in Appendix A.

3. Exploitation Licenses—Procedures

3.1. The Sponsoring Party shall certify as to the technical and financial competence of the operator, and shall transmit the operator's work plan.

3.2. An application for an exploitation license shall be preceded by a notice of intent to apply for a license submitted by the operator to the Authority and the prospective Sponsoring Party. Such a notice of intent, when accompanied by evidence of the deposit of the license fee referred to in paragraph 4.1 of Appendix A, shall reserve the block for one hundred and eighty days. Notices of intent may not be renewed.

3.3. Notices of intent shall be submitted sealed to the Authority and opened at monthly intervals at previously announced times.

3.4. Subject to compliance with these procedures, if only one notice of intent has been received for a particular block, the applicant shall be granted a license, except as provided in paragraphs 3.6 through 3.8.

3.5. If more than one notice of intent to apply for a license for the same block or portion thereof is received at the same opening, the Authority shall notify the applicants and their Sponsoring Parties that the exploitation license to the block or portion thereof will be sold to the highest bidder at a sale to be held one hundred and eighty days later, under the following terms:

(a) The bidding shall be on a cash bonus basis and the minimum bid shall be twice the license fee;

(b) Bids shall be sealed;

(c) The bidding shall be limited to such of the original applicants whose applications have been received in the interim from their Sponsoring Parties;

(d) Bids shall be announced publicly by the Authority when they are opened. In the event of a tie, the tie bidders shall submit a second sealed bid to be opened 28 days later;

(e) The final award shall be announced publicly by the Authority within seven days after the bids have been opened.

3.6. In the event of the termination, forfeiture, or revocation of an exploitation license to a block, or relinquishment of a part of a block, the block or portion thereof will be offered for sale by sealed competitive bidding on a cash bonus basis in addition to the current license fee. The following provisions shall apply to such a sale:

(a) The availability of such a block, or portion thereof, for bidding shall be publicly announced by the Authority as soon as possible after it becomes available, and a sale following the above procedures shall be held within one hundred and eighty days after a request for an exploitation license on the block has been received;

(b) The bidding shall be open to all sponsored operators, including, except in the case of revocation, the operator who previously held the exploitation license to the block or to the available portion thereof;

(c) If the winning bid is submitted by an operator who previously held the exploitation right to the same block, or to the same portion thereof, the work requirement will begin at the level that would have applied if the operator had continuously held the block.

3.7. Blocks, or portions thereof, contiguous to a block on which production has begun shall also be sold by sealed competitive bidding under the terms specied in paragraph 3.6.

3.8. Blocks, or separate portions thereof, from which hydrocarbons or other fluids are being drained, or are believed to be drained, by production from another block shall be offered for sale by sealed competitive bidding under the terms specified in paragraph 3.6 at the initiative of the Authority.

3.9. Geologic and other data concerning blocks, or portions thereof, open for bidding pursuant to paragraph 3.6 through 3.8, which are no longer confidential, shall be made available to the public

prior to the bidding date. Data on blocks, or separate portions thereof, for which the license has been revoked for violations shall be made available to the public within 30 days after revocation.

3.10. Exploitation licenses shall only be transferable with the approval of the Sponsoring Party and the Authority, provided that the transferee meets the requirements of this Convention, is sponsored by a Contracting Party, and a transfer fee is paid to the Authority in the amount of $250,000. This fee shall not apply in transfers between parts of the same operating enterprise.

4. Duration of Exploitation Licenses

4.1. If commercial production has been achieved within fifteen years after the license has been issued, the exploitation license shall be extended automatically for twenty additional years from the date commercial production has commenced.

4.2. At the completion of the twenty-year production period referred to in paragraph 4.1, the operator with the approval of the Sponsoring Party shall have the option to renew his license for another twenty years at the rental fees and payment rates in effect at the time of renewal.

4.3. At the end of the forty-year term, or earlier if the license is voluntarily relinquished or expires pursuant to paragraph 5.9 of Appendix A, the block or blocks, or separate portions of blocks, to which the license applied shall be offered for sale by competitive bidding on a cash bonus basis. The previous licensee shall have no preferential right to such block, or separate portion thereof.

5. Work Requirements

5.1. The annual work requirements fee per block shall be specified in an Annex in accordance with the following schedule:

Para. 5.1(a) and (c) minerals

Years	Amount per annum
1-5	$ 20,000 - 60,000
6-10	180,000 - 540,000
11-15	200,000 - 600,000
Total	$2,000,000 - 6,000,000

Para. 5.1(b) minerals

Years	Amount per annum
1-2	$ 20,000 - 60,000
3-10	120,000 - 360,000
11-15	200,000 - 600,000
Total	$2,000,000 - 6,000,000

The minimum annual work requirement fee for a portion of a block shall be an appropriate fraction of the above, to be specified in an Annex.

5.2. Work expenditures with respect to one or more blocks may be considered as meeting the aggregate work requirements on a group of blocks originally licensed in the same year, to the same operator, in the same category, provided that the number of such blocks shall not exceed sixteen in the case of the category of minerals described in paragraph 5.1(a) of Appendix A, four in the case of the category of minerals described in paragraph 5.1(b) of Appendix A and eight in the case of the category of minerals described in paragraph 5.1(c) of Appendix A.

5.3. Should the aggregate work requirement fee of $2,000,000 to $6,000,000 be spent prior to the end of the thirteenth year, an additional work requirement fee of $25,000-$50,000, as specified in an Annex, shall be met until commercial production begins or until expiration of the fifteen-year period.

5.4. After commercial production begins, the operator shall at the beginning of each year deposit $100,000 to $200,000 as specified in an Annex, or with the Sponsoring Party post a bond for that amount. Such deposit or bond shall be returned in an amount equivalent to expenditures on or related to the block and the value of production at the site. A portion [a figure between 50% and 66⅔% will be inserted here] of any funds not returned shall be transmitted to the Authority.

6. Unit Management

The Operations Commission shall assure unit management and production pursuant to Section 9 of Appendix A, giving the licensees and their Sponsoring Parties a reasonable time to reach agreement on a plan for unit operation.

APPENDIX C

TERMS AND PROCEDURES FOR LICENSES IN THE INTERNATIONAL TRUSTEESHIP AREA

1. General

1.1. Unless otherwise specified in this Convention, all provisions of this Convention except those in Appendix B shall apply to the International Trusteeship Area.

2. Entities Entitled to Obtain Licenses

2.1. The Trustee Party, pursuant to Chapter III, shall have the exclusive right, in its discretion, to approve or disapprove applications for exploration and exploitation licenses.

3. Exploration and Exploitation Licenses

3.1. The Trustee Party may use any system for issuing and allocating exploration and exploitation licenses.

3.2. Copies of licenses shall be forwarded to the Authority.

4. Categories and Size of Blocks

4.1. The Trustee Party may license separately one or more related minerals of the categories listed in paragraph 5.1 of Appendix A.

4.2. The Trustee Party may establish the size of the block for which exploitation licenses are issued within the maximum limits specified in Appendix A.

5. Duration of Exploitation Licenses

5.1. The Trustee Party may establish the term of the exploitation license and the conditions, if any, under which it may be renewed, provided that its continuance after the first 15 years is contingent upon the achievement of commercial production.

6. Work Requirements

6.1. The Trustee Party may set the work requirements at or above those specified in Appendix A and put these in terms of work to be done rather than funds to be expended.

7. Unit Management

7.1. When a deposit most rationally extracted under unit management lies wholly within the International Trusteeship Area, or astride its landward boundary, the Trustee Party concerned shall assure unit management and production pursuant to Section 9.1 of Appendix A, and shall submit the plan for unit operation to the Operations Commission.

7.2. With respect to deposits lying astride a boundary between two Trustee Parties in the International Trusteeship Area, such Parties shall agree on a plan to assure unit management and production, and shall submit the operation plan to the Operations Commission.

8. Proration

8.1. The Trustee Party may establish proration, to the extent permitted by its domestic law.

9. Payments

9.1. Pursuant to Subparagraph (e) of Article 28, the Trustee Party may collect fees and payments related to the issuance or retention of a license in addition to those specified in this Convention, including but not limited to payments on production higher than those required by this Convention.

9.2. The Trustee Party shall transfer to the Authority a portion [a figure between 50% and 66⅔% will be inserted here] of the fees and payments referred to in paragraph 9.1 except as otherwise provided in paragraphs 3.3, 4.4 and 6.4 of Appendix A.[1]

10. Standards

10.1. The Trustee Party may impose higher operating, conservation, pollution, and safety standards than those established by the Authority, and may impose additional sanctions in case of violations of applicable standards.

11. Revocation

11.1. The Trustee Party may suspend or revoke licenses for violation of this Convention, or of the rules it has established pursuant thereto, or in accordance with the terms of the license.

1. *NOTE:* Further study is required on the means to assure equitable application of the principle contained in paragraph 9.2 to socialist and non-socialist parties and their operations.

APPENDIX D
DIVISION OF REVENUE

1. Disbursements

1.1. All disbursements shall be made out of the net income of the Authority, except as otherwise provided in paragraph 2 of Article 74.

2. Administrative Expenses of the International Seabed Resource Authority

2.1. The Council, in submitting the proposed budget to the Assembly, shall specify what proportion of the revenues of the Authority shall be used for the payment of the administrative expenses of the Authority.

2.2. Upon approval of the budget by the Assembly, the Secretary-General is authorized to use the sums allotted in the budget for the expenses specified therein.

3. Distribution of the Net Income of the Authority

3.1. The net income, after administrative expenses, of the Authority shall be used to promote the economic advancement of developing States Parties to this Convention and for the purposes speciied in paragraph 2 of Article 5 and in other Articles of this Convention.

3.2. The portion to be devoted to economic advancement of developing States Parties to this Convention shall be divided among the following international development organizations as follows: [1]

3.3. The Council shall submit to the Assembly proposals for the allocation of the income of the Authority within the limits prescribed by this Appendix.

3.4. Upon approval of the allocation by the Assembly, the Secretary-General is authorized to distribute the funds.

1. *NOTE:* A list of international and regional development organizations should be included here, indicating percentages assigned to each organization.

APPENDIX E
DESIGNATED MEMBERS OF THE COUNCIL

1. Those six Contracting Parties which are both developed States and have the highest gross national product shall be considered as the six most industrially advanced Contracting Parties.

2. The six most industrially advanced Contracting Parties at the time of the entry into force of this Convention shall be deemed to be: .....

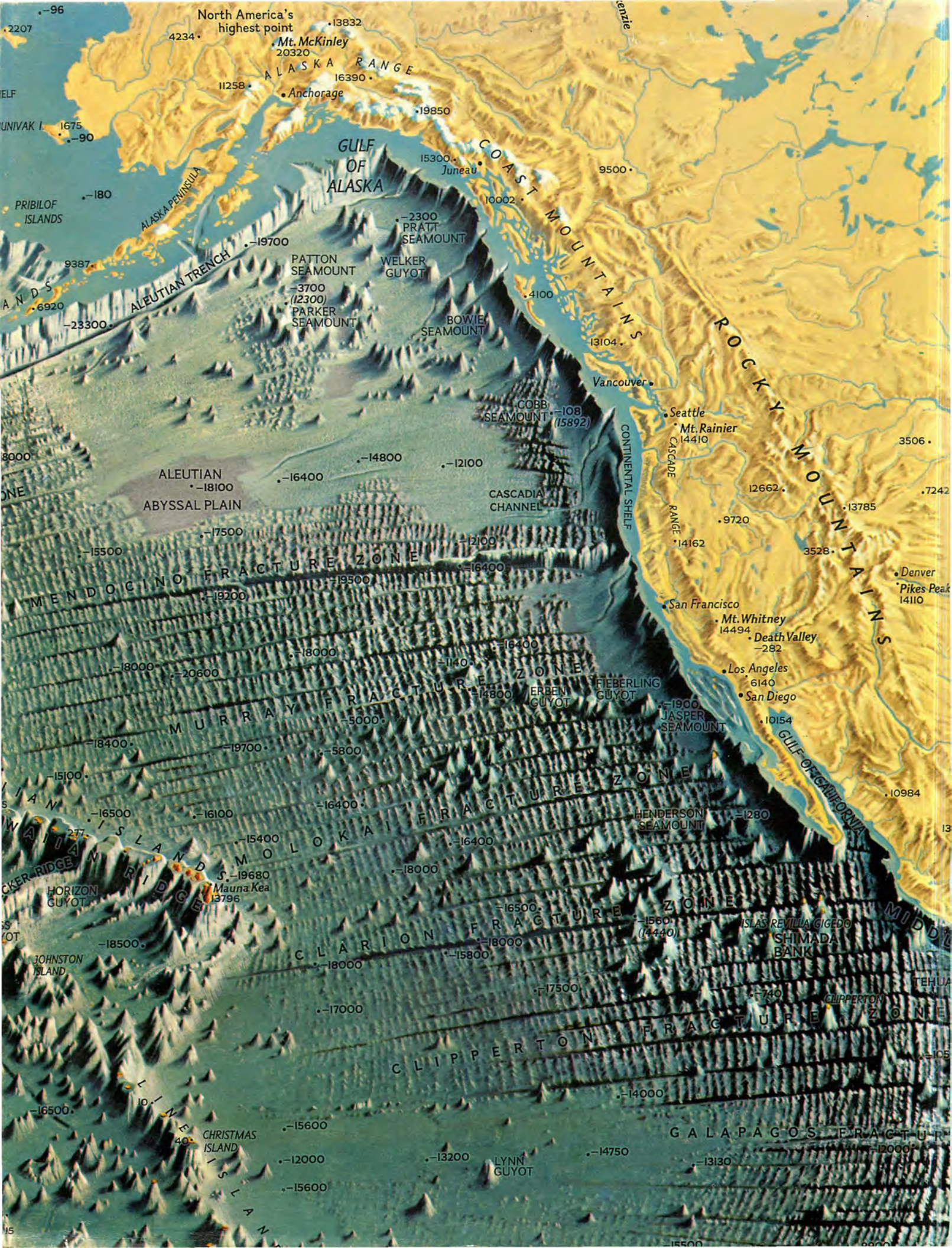
.....

They shall hold office until replaced in accordance with this Appendix.

3. The Council, prior to every regular session of the Assembly, shall decide which are the six most industrially advanced Contracting Parties. It shall make rules to ensure that all questions relating to the determination of such Contracting Parties are considered by an impartial committee before being decided upon by the Council.

4. The Council shall report its decision to the Assembly, together with the recommendations of the impartial committee.

5. Any replacements of the designated members of the Council shall take effect on the day following the last day of the Assembly to which such a report is made.


North America's highest point
Mt. McKinley
20320
ALASKA RANGE
Anchorage
GULF OF ALASKA
Juneau
COAST MOUNTAINS
ROCKY MOUNTAINS
PRIBILOF ISLANDS
ALASKA PENINSULA
ALEUTIAN TRENCH
PRATT SEAMOUNT
PATTON SEAMOUNT
WELKER GUYOT
PARKER SEAMOUNT
BOWIE SEAMOUNT
COBB SEAMOUNT
(15892)
Vancouver
Seattle
Mt. Rainier
14410
CASCADE RANGE
CONTINENTAL SHELF
ALEUTIAN ABYSSAL PLAIN
CASCADIA CHANNEL
MENDOCINO FRACTURE ZONE
MURRAY FRACTURE ZONE
MOLOKAI FRACTURE ZONE
CLARION FRACTURE ZONE
CLIPPERTON FRACTURE ZONE
GALAPAGOS FRACTURE ZONE
FIEBERLING GUYOT
ERBEN GUYOT
JASPER SEAMOUNT
HENDERSON SEAMOUNT
San Francisco
Mt. Whitney
14494
Death Valley
-282
Los Angeles
6140
San Diego
10154
Denver
Pikes Peak
14110
GULF OF CALIFORNIA
HAWAIIAN RIDGE
HAWAIIAN ISLANDS
HORIZON GUYOT
Mauna Kea
13796
JOHNSTON ISLAND
LINE ISLANDS
CHRISTMAS ISLAND
LYNN GUYOT
ISLAS REVILLA GIGEDO
SHIMADA BANK
(CLIPPERTON)
TEHUA