OUTER CONTINENTAL SHELF

HEARINGS

BEFORE THE

SUBCOMMITTEE ON MINERALS, MATERIALS, AND FUELS

OF THE

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS UNITED STATES SENATE

NINETY-FIRST CONGRESS

SECOND SESSION

ON

ISSUES RELATED TO ESTABLISHMENT OF SEAWARD BOUNDARY OF UNITED STATES OUTER CONTINENTAL SHELF AND RELATED MATTER, INCLUDING S. 3970, TO AMEND THE OUTER CONTINENTAL SHELF LANDS ACT

SEPTEMBER 22 AND 23, 1970

PART 3

Printed for the use of the
Committee on Interior and Insular Affairs

U.S. GOVERNMENT PRINTING OFFICE
52-035 WASHINGTON : 1970

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OUTER CONTINENTAL SHELF

TUESDAY, SEPTEMBER 22, 1970

UNITED STATES SENATE,
SUBCOMMITTEE ON MINERALS, MATERIALS, AND FUELS
OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C.

The subcommittee met, pursuant to call, at 10 a.m., in room 3110, New Senate Office Building, Senator Lee Metcalf presiding.

Present: Senators Metcalf, Gravel, and Hansen.

Also present: Jerry T. Verkler, staff director; Stewart French, chief counsel; and Thomas Nelson, assistant minority counsel.

Senator METCALF. The subcommittee will please come to order.

On May 23, 1970, the President of the United States announced his proposal concerning a policy for the seabeds. This proposal was expanded in the form of a working paper, presented at the U.N. Seabed Committee meeting in Geneva, August 3–29, 1970.

The Subcommittee on Minerals, Materials, and Fuels is continuing the hearings, begun by the Special Subcommittee on the Outer Continental Shelf on the subject of U.S. policy concerning the recovery of mineral resources from the continental margin and the deep seabed.

Our focus during the hearings will pertain to two related matters.

The first concerns the contents of the draft seabed treaty contained in the working paper. In this regard, we will appreciate your comments on the extent to which you feel that the draft treaty provides sufficient incentive to industry to step up its efforts in the recovery of seabed resources.

The subcommittee would be pleased to receive any suggestions from you concerning possible improvements in the draft seabed treaty.

Inasmuch as President Nixon stated that prior to any future seabed treaty entering into force, it was his desire that exploration and exploitation of seabed minerals continue, the subcommittee also intends to focus attention on interim policy arrangements.

In this regard, we will be pleased to hear your views on whether existing legal arrangements provide sufficient incentive to increase efforts related to the recovery of seabed resources. If for any reason you feel that the present legal arrangements are insufficient to encourage the development of seabed mineral recovery operations, what would be your views concerning legislation which would apply to the interim period prior to the entering into force of a future seabed treaty? If you feel that such legislation is necessary, what provisions should it contain?

We appreciate the fact that several of the witnesses are engaged in extensive reviews of the draft working paper and are considering possibilities for interim legislation—and may not have completed

their efforts in time for these hearings. Accordingly, we will leave the record open for submission of any additional comments or amendments each witness might care to make.

It is to be noted that these hearings coincide with the convening of the U.N. General Assembly which again this year is scheduled to debate the matter of the seabed. It is toward these activities, particularly as they tend to affect U.S. nationals, that this committee will be refocusing its attention as we continue these hearing.

Without objection, I will direct that the text of the bill S. 3970 appear at this point of the hearing record.

(The bill referred to follows:)

[S. 3970, 91st Cong., second sess.]

A BILL To amend the Outer Continental Shelf Lands Act (Public Law 212, Eighty-third Congress; 67 Stat. 462) with respect to the development and use of the natural resources in the seabed seaward of the two hundred meter depth line.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) section 3(a) of the Outer Continental Shelf Lands Act (Public Law 212 Eighty-third Congress; 67 Stat. 462) is amended by striking the period at the end and inserting a comma in lieu thereof and the following: "except that with respect to any lands which lie seaward and outside the seaward boundaries of the States as defined in section 2 of the Submerged Lands Act (Public Law 31, Eighty-third Congress; 67 Stat. 29) and which are seaward of the two hundred meter depth line, it shall be the policy of the United States that the development of the natural resources of the subsoil and seabed of the Outer Continental Shelf should be regulated by international treaty providing in part for the dedication and use of a portion of the revenues from such development for the benefit of all mankind."

The Secretary of the Interior, in consultation with other executive department heads, shall make an investigation and study on which to base recommendations with respect to making this policy effective, and shall report the results of such investigation and study, together with his recommendations, to the President and the Congress as soon as practicable.

(b) The amendments made by this Act shall not apply to any rights established under the Outer Continental Shelf Lands Act prior to the date of enactment of this Act.

Senator METCALF. This morning we have two witnesses, Mr. Northcutt Ely and Mr. John Laylin. I am going to ask them to each present his statement and then remain as a panel to be open for interrogation.

We hope that other committee members will be here and have a chance to read your statements, and participate in the interrogation.

The first witness will be Mr. Northcutt Ely and he will be followed by Mr. John Laylin. Then we will ask you some questions.

Mr. Ely, we are delighted to have you again before the committee.

STATEMENT OF NORTHCUTT ELY, ESQ., ON BEHALF OF THE AMERICAN BAR ASSOCIATION

Mr. ELY. Thank you, Mr. Chairman.

My name is Northcutt Ely. I am a lawyer in private practice, with offices in Washington, D.C.

I have the honor to be vice chairman of the section of natural resources law of the American Bar Association. In that capacity I have been invited by the Chairman of the Subcommittee on Minerals, Materials, and Fuels of the Committee on Interior and Insular Affairs to testify on the draft of a seabed convention which was submitted to

the U.N. Seabed Committee August 3, 1970, by the U.S. delegation as a working paper.

A related matter, now before the committee, is S. 3970. The relation between the two is that S. 3970 would amend the Outer Continental Shelf Lands Act, by subjecting future leases to the provisions of any treaty to which the United States may become a party, and a draft treaty now before you would supersede the Outer Continental Shelf Lands Act, in important respects, in areas between the 200-meter isobath and the seaward edge of the continental margin.

Your committee invited comments on two general subjects: on the draft seabed treaty, itself, and on interim arrangements that should apply prior to any treaty entering into force.

At the outset, I must make it clear that only the resolutions of the house of delegates state official policy of the American Bar Association. The reports and recommendations of bar association sections or committees represent only the views of the sections or committees submitting them.

The house of delegates adopted a resolution (No. 73) on seabed resources at its 1968 annual meeting. This resolution was based on a recommendation and joint report of the sections of Natural Resources Law, International and Comparative Law, and the Standing Committee on Peace and Law Through United Nations.

The same sections and committee approved a second report at the A.B.A. meeting in 1969. I shall ask to include in the record copies of the resolution and the two reports.

NOTE.—The A.B.A. 1969 meeting approved the resolutions adopted in the 1968 meeting.

Senator METCALF. I will make a general ruling here that the material you submit for the record will be included at the appropriate place.

(The material referred to above is in the appendix.)

Mr. ELY. Thank you, Mr. Chairman.

There is a fundamental difference between the policy expressed in the proposed seabed treaty and that expressed in the resolution of the House of Delegates and the bar association committees.

The American Bar Association position is that the United States should stand on its rights under the 1958 Convention on the Continental Shelf.

Resolution 73 says:

(2) That within the area of exclusive sovereign rights adjacent to the United States, the interests of the United States in the natural resources of the submarine areas be protected to the full extent permitted by the 1958 Convention on the Continental Shelf.

The convention defines the legal Continental Shelf as the seabed and subsoil adjacent to the coast outside the territorial sea to a depth of 200 meters, or beyond that limit to where the depth of the superjacent waters admits of the exploitation of said areas.

Article 2 says that the coastal state exercises over the Continental Shelf sovereign rights for the purpose of exploring it and exploiting its natural resources, that these rights are exclusive in the sense that if the coastal state does not explore the Continental Shelf or exploit its natural resources, no one may undertake these activities, or make a claim to the Continental Shelf, without the express consent of the

coastal state, and goes on to say that these rights of the coastal state do not depend on occupation or proclamation.

Under this concept, the acts of Congress, particularly the Outer Continental Shelf Lands Act, control mineral development on the American continental margin, seaward of the 200-meter depth line, as well as landward of that line.

All this would be changed by the proposed treaty, not only with respect to the geographical extent of the coastal state's rights, but the character of those rights.

The draft treaty proposes that the United States renounce these rights, seaward of the 200-meter depth line, to a new International Seabed Resources Authority, and receive back a new status as a trustee of the area between the 200-meter isobath and the seaward edge of the continental margin. All of its powers would be derived from the treaty, by delegation from the international community, not from any inherent powers as a sovereign of the adjacent land territories.

The seabeds of the world, seaward of the 200-meter isobath, would be called the International Seabed Area (art. 2), and all of it would be the "common heritage of all mankind" (art. 1). This area is declared by article 3 to be "open to use by all states, without discrimination, except as provided in this convention.

The portion of the International Seabed Area between the 200-meter isobath and the seaward edge of the continental margin would be called the International Trusteeship Area (art. 26), in which the coastal state would have special rights and obligations derived from the treaty, delegated to it as trustee for the International Seabed Resources Authority (ch. IV). This is a supranational agency comprised of a council, an assembly, a secretariat, three commissions, and an international tribunal.

Article 27(1) says:

> 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.

As to geographical extent, the exclusive sovereign rights of the coastal state would stop at the 200-meter line.

It is fair to add—and this is important—that the proposal recognizes that the coastal state does have a special relationship to the whole continental margin, for without this recognition there would be no logical basis for recognizing this area between the 200-meter line and the seaward edge of the continental margin as a "trusteeship zone," to be administered by the coastal state.

As to the change of character of the right, the proposed treaty says explicitly (art. 2 (1)) that:

> No State may claim or exercise sovereign rights over any part of the International Seabed Area or its resources.

The International Seabed Area, it will be remembered, is everything seaward of the 200-meter isobath.

And article 2(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.

This is the language which renounces what the coastal nations now have under the convention.

The powers and obligations which the United States would get in exchange for this renunciation, that is, its new status as trustee, would be the result of bargaining in international negotiations.

I shall come later to the proposals made in this draft treaty as to these powers and obligations, but it must be remembered that what the committee has before it is not a treaty which has been signed and is here for advice and consent as to its ratification, but is instead simply a "working paper," an initial offer by the United States.

Senator METCALF. I propose to let both witnesses go along but I insist here that, of course, if we had a treaty before us it would not be before this committee.

This committee has only jurisdiction over the existing law in the Outer Continental Shelf. That is what we want to talk about.

A treaty would be before the Foreign Relations Committee.

Mr. ELY. For that reason, Mr. Chairman, I would ask you to direct your attention primarily to the change of status proposed for the United States rather than the details of the "working paper."

The question is whether the new American policy is on the right track, in renouncing our rights under the convention seaward of the 200-meter line, or whether the American Bar Association was correct in urging that we stand on our rights under that convention.

The intent of the sponsors of the treaty to renounce American claims under the convention on the Continental Shelf beyond the 200-meter line was made explicit in the statement of Ambassador Phillips, the U.S. representative on the Seabed Committee, at the close of the sessions on August 28, 1970. He said:

> . . . We, as a party to the 1958 Geneva Continental Shelf Convention, could have relied on the exploitability test to extend our boundary unilaterally. We felt, however, that in view of the uncertainties surrounding seabed boundaries, and in light of the great opportunity the international community now has to rectify the inequities of the law of the sea, it would be better for states to renounce under a treaty all national claims beyond the 200-meter isobath, leaving the international seabed area as the widest area possible. By this move we could wipe the slate clean and, in essence, re-think the proper relationship of international community interests to those of coastal states.
>
> . . . We are trying to convey the idea that in a portion of the international seabed area a coastal state acts for and on behalf of the international community. The coastal states' rights derive from and are specifically defined in the Treaty. Our proposal has also been criticized for giving "unfettered" power to the trustee state. While the coastal state does have limited, important functions, the international machinery has a supervisory role in the trusteeship zone, including such powers as inspection and suspension of licenses and of the trusteeship itself in certain cases.

What are the legal rights that we are asked to renounce?

Under the convention, as we have said, the United States now possesses exclusive sovereign rights to the exploration and exploitation of the submarine areas adjacent to its coasts, not only to the water depth of 200 meters, but, beyond that limit, to where the depth of the superjacent waters admits of their exploitation. It has these rights by the specific terms of articles 1 and 2 of the convention on the Continental Shelf.

But the United States not only now possesses these rights by the terms of the convention on the Continental Shelf, but also under customary international law, as declared by the International Court of Justice in the *North Sea Continental Shelf* cases (1969) I.C.J. Rep. 1. The Court referred (par. 19) to—

> . . . what the Court entertains no doubt is the most fundamental of all the rules of law relating to the continental shelf, enshrined in Article 2 of the 1958 Geneva Convention, though quite independent of it—namely that the rights of the coastal State in respect of the area of Continental Shelf that constitutes a natural prolongation of its land territory into and under the sea exist *ipso facto* and *ab initio*, by virtue of its sovereignty over the land, and as an extension of it in an exercise of sovereign rights for the purpose of exploring the seabed and exploiting its natural resources. In short, there is here an inherent right. In order to exercise it, no special legal process has to be gone through, nor have any special legal acts to be performed. Its existence can be declared (and many States have done this) but does not need to be constituted. Furthermore, the right does not depend on its being exercised. To echo the language of the Geneva Convention, it is "exclusive" in the sense that if the coastal State does not choose to explore or exploit the areas of shelf appertaining to it, that is is own affair, but no one else may do so without its express consent.

Let there be no quibble over the fact that the North Sea is less than 200 meters deep. If the Court's rationale that the seabed is to be treated as the "natural prolongation" of the coastal state's land territories is correct, then the decision would have to be the same if the North Sea were 10 times as deep as it is.

The Court related this doctrine to the Truman proclamation of 1945. It said (paragraph 47)—

> . . . Although this instrument was not the first or only one to have appeared, it has in the opinion of the Court a special status. Previously, various theories as to the nature and extent of the rights relative to or exercisable over the continental shelf had been advanced by jurists, publicists and technicians. The Truman Proclamation, however, soon came to be regarded as the starting point of the positive law on the subject, and the chief doctrine it enunciated, namely, that of the coastal State as having an original, natural, and exclusive (in short, a vested) right to the Continental Shelf off its shores, came to prevail over all others, being now reflected in Article 2 of the 1958 Geneva Convention on the Continental Shelf . . .

How extensive are the rights under the exploitability criteria which would be thus renounced? The 1968 joint report of the American Bar Association sections said:

> The Convention's definition of the seaward extent of the coastal state's jurisdiction has been subjected to a number of interpretations.
>
> Some argue that the factor of exploitability would carry the coastal nation's exclusive mineral jurisdiction to mid-ocean. We disagree. Others argue that it should be restricted to waters as shallow as 200 meters or 12 miles from shore. We disagree with this, too.
>
> The better view, in our opinion, is that the "exploitability" factor of the Convention is limited by the element of "adjacency". The exclusive sovereign rights of the coastal nations to the exploration and exploitation of the natural resources of the seabed and subsoil encompass "the submarine areas adjacent to the coast but outside the area of the territorial sea". According to this view, therefore, the exclusive sovereign rights of the coastal nations with respect to the seabed minerals now embrace the submerged land mass of the adjacent continent down to its junction with the deep ocean floor, irrespective of depth.
>
> Importance of the 1958 Convention to the United States.

If the minerals underlying the seabed adjacent to our coasts remain under American control, as they now are under the Continental Shelf Convention, as we construe it, they continue to be resources available for national defense, essential components of the American economy, and important elements of the Federal and State tax base.

We do not believe that it is in the interests of the United States that negotiations for the creation of an international regime to govern mineral development of the ocean floor should proceed on the assumption that this new regime will have authority to take over the administration of, or the governmental revenues derived from, the development of the minerals of any part of the submerged segments of the American continent.

In our opinion, the United States should stand on its right under the Convention as heretofore ratified.

If legal uncertainties are believed to constitute an impediment to utilization of undersea mineral resources, such uncertainties can be eliminated by uniform declarations of the coastal nations which are parties to the Convention on the Continental Shelf, identifying their claims of jurisdiction with the submerged portion of the continental land mass, and reciprocally restricting their claims accordingly. No new conference to amend the Continental Shelf Convention is necessary to accomplish this.

The 1969 report of those sections put it this way:

In the light of the discussion above [11]—

The discussion above included the following:

and the previous actions in the ABA which have been described, we submit the following comments and conclusions regarding the points reviewed in this section:

(1) We reaffirm our opinion that the concept of adjacency contained in the present Shelf Convention should properly be interpreted to include the submerged continental land mass. In the view widely held among our members, all of the submerged continental land mass is subject to national jurisdiction over its natural resources. In the view of a significant number of our members any part of this land mass will come within national jurisdiction as soon as it becomes accessible to exploitation.

(2) We reaffirm our opinion that it would not be desirable, in terms of overall United States interests, to seek a formal international conference for the purpose of fixing a precise boundary for the legal shelf. We believe it both preferable and proper to achieve this aim through parallel declarations by interested states announcing a uniform interpretation of the criteria embodied in the 1958 Convention.

(3) We reaffirm our opinion that the United States should assert to the full the rights over adjacent submarine areas now vested in it by the Shelf Convention and by general international law.

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[11] Since the 1968 Joint Report, however, a number of our members have stated that this formulation did not accurately reflect their views. In the opinion of these members, the physical concept of "adjacency" can persuasively be constructed to embrace areas to the foot of the continental margin; but the "exploitability" concept in the Convention extends sovereign rights over the seabed beyond the 200-meter line only as technological progress makes exploitation in that area possible in fact. Since exploitation techniques still cannot reach the foot of the continental margin, these members believe it erroneous to say that sovereign rights now embrace that area. To this extent they are unwilling to perpetuate what they regard as a misunderstanding of their position in the 1968 Joint Report.

Those who take the view that sovereign rights now embrace that area answer that under the existing Convention on the Continental Shelf (1) the coastal State's exclusive sovereign rights encompasses any exploitation on the adjoining continental margin, whether that exploitation is affected by its national or by a foreigner; (2) a change in the Convention which would retract this boundary of the area of the coastal state's exclusive interest to a line which is landward of the submerged edge of the continent would deprive the coastal nation of rights now recognized in that state by the existing Convention. This being so, they say that it does not matter greatly (with respect to exploration and exploitation of seabed resources) whether the outer limit of exclusive sovereign rights of the coastal state is characterized as the boundary of rights heretofore vested in the coastal nation, or the limit on jurisdiction to be acquired in futuro by exploitation of successively deeper areas, since, in either event, occupation and exploitation by any other state of the area within this limit is prohibited.

(4) We reaffirm our opinion that claims to rights in excess of those recognized in the Shelf Convention (such as rights over the superjacent waters, non-sedentary fisheries, or airspace) are invalid extensions of the continental shelf doctrine, and should be so regarded by the United States.

The position in these comments necessarily leads us to disagree with the Commission's recommendation, already quoted, that the United States should take the initiative to secure international agreement on a seaward limit for the legal shelf at the 200-meter line (or 50 miles offshore, whichever is greater). Both these limits have now been exceeded in practice, and they must be regarded as obsolete. We also disagree with the proposed initiative to seek international agreement if this means the convocation of a formal conference for that purpose.

The 1968 Interim Report of the Committee on Deep Sea Mineral Resources of the International Law Association said:

However, for reasons seldom made explicit, some find difficulty with the boundary definition in the convention, particularly in terms of the reach of the exploitability criterion in light of the principle of adjacency. Accordingly, a number of alternatives are now being advanced in various quarters for revising the Continental Shelf Convention in order to place a firm limitation on coastal control. The Committee believes that this assumption of a need to revise the Shelf Convention is unwarranted in terms of projected technological progress in offshore mineral exploitation. Reasonably interpreted, the Convention definition of the shelf extends, and limits, coastal control to adjacent marine regions of sufficient extent that the outer limit of control will not be reached for a very long time.

As a general rule, the limit of adjacency may reasonably be regarded as coinciding with the foot of the submerged portion of the continental land mass. There is strong support for this view in the drafting history of the Convention, although other interpretations have been advanced.

The second interim report of the same committee, in 1970, said:

This Report builds upon our Interim Report of July 19, 1968, in which this Committee preliminarily examined the question of the establishment of a deep seabed regime. That 1968 Report also discussed at length the question of the seaward limits of exclusive national jurisdiction over the exploration and exploitation of the natural resources of the seabed. We then expressed the conclusion that the language of the 1958 Geneva Convention on the Continental Shelf was sufficiently precise in its definition of the seaward limits of exclusive jurisdiction to require no amendment. In our view, the development of customary international law supports the same conclusion. Accordingly, the Committee stands on its prior position that rights under the 1958 Geneva Convention on the Continental Shelf extend to the limit of exploitability existing at any given time, within an ultimate limit of adjacency which would encompass the entire continental margin. This Report now goes on to discuss the development of a deep seabed regime beyond the limits of national jurisdiction.

In view of the present proposal to renounce, beyond a depth of 200 meters, the rights that President Truman asserted, and which the International Court of Justice declared to be the foundation of the Continental Shelf doctrine, it may be useful to read again what his proclamation said. The portions relevant here provided:

Whereas it is the view of the government of the United States that the exercise of jurisdiction over the natural resources of the subsoil and seabed of the continental shelf by the contiguous nation is reasonable and just, since the effectiveness of measures to utilize or conserve these resources would be contingent upon cooperation and protection from the shore, since the continental shelf may be regarded as an extension of the land-mass of the coastal nation and thus naturally appurtenant to it, since these resources frequently form a seaward extension of a pool or deposit lying within its territory, and since self-protection compels the coastal nation to keep close watch over activities off its shores which are of the nature necessary for utilization of these resources;

Now, therefore, I, Harry S. Truman, President of the United States of America, do hereby proclaim the following policy of the United States of America with respect to the natural resources of the subsoil and seabed of the continental shelf.

Having concern for the urgency of conserving and prudently utilizing its natural resources, the Government of the United States regards the natural resources of the subsoil and seabed of the continental shelf beneath the high seas but contiguous to the coasts of the United States as appertaining to the United States, subject to its jurisdiction and control. In cases where the continental shelf extends to the shores of another State, or is shared with an adjacent State, the boundary shall be determined by the United States and the State concerned in accordance with equitable principles. The character as high seas of the waters above the continental shelf and the right to their free and unimpeded navigation are in no way thus affected.

And the reasons for this policy do not abruptly disappear at the 200-meter depth line. The press release which accompanied the Truman proclamation, indeed, referred to the 200-meter line, but that depth, considered the foreseeable limit of technological capability 25 years ago, has become as obsolete as the dirigible.

It has neither geologic nor technologic nor legal significance, being accompanied in the convention by the exploitability criterion which explicitly gives coastal states exclusive rights beyond that depth.

The Truman Proclamation of 1945 has been American policy for 25 years. The Convention on the Continental Shelf, to borrow the expression of the International Court of Justice, "enshrines" it.

This is the policy which is endorsed in resolution 73 of the American Bar Association. It is the policy which would be reversed by the present proposal, beyond a depth of 200 meters.

What is the worth of the asset that we are asked to renounce? The U.S. Geological Survey has estimated potential resources in place between the 200- and 2,500-meter isobaths as including more than 600 billion barrels of oil.

By comparison, the production of oil from the United States, on land and on the Continental Shelf during the 100 years since oil was discovered here, has amounted to less than 100 billion barrels.

To date, our Government has collected over $4 billion in offshore royalties and bonuses, some four times as much as from all of its lands onshore; yet the area leased has been equal to less than 1 percent of that which we are asked to renounce.

Perhaps the recoverable portion of the petroleum in the American continental margin which is about to be renamed the International Trusteeship Zone may be only a fraction of the quantity that the Geological Survey believes to be there. Even so, it is manifest that in this proposed treaty we are characterizing as the "common heritage of mankind" resources that, under existing international law, are a major component of the American mineral estate, in which the United States has exclusive sovereign rights exercised by Congress.

What is the quid pro quo? What does the United States receive, by this treaty, in return for what it gives up? The consideration, if there is one, must be sought in some other document. The advantages to the United States visible within the four corners of this treaty are minimal.

Perhaps the basic defects of the treaty originate in the rhetoric of the words "renounce" and "trusteeship." It seems to me that the proper objectives of a treaty dealing with the continental margin, the quid pro quo, should be a confirmation (not a renunciation) of the coastal state's exclusive jurisdiction with respect to mineral resources of the whole continental margin, in exchange for an agreement to share with the international community revenues from the area encompassed by the exploitability criterion thus recognized.

The dissociation of seabed jurisdiction from jurisdiction over the superjacent waters is already assured by article 3 of the existing convention. To the extent that freedom of scientific research is a problem, it can be clarified by a protocol, and should not be bought by a renunciation of minerals.

The search for a quid pro quo for the "renunciation" and "trusteeship" proposed here is a very baffling search indeed. If freedom of use of the seabed for military but nonoffensive purposes is the objective, it seems that it ought to be reached in a treaty dealing with military uses of the seabed, not in a treaty dealing with the mineral resources of the seabed.

Any nation discontented with the planting of little black boxes on its continental margin is likely to dig them up on the general justification of self-defense, undeterred by the declaration in article 3 that the "International Seabed Area shall be open to use by all states."

If freedom of transit of the straits of the world is the objective, that, too, is the subject of a treaty dealing with the water column, not the seabed. And if free transit of straits is the objective, it is ludicrous to suppose that we can obtain the acquiescence, say, of Indonesia, in the withdrawal of her claims to a 12-mile territorial sea which would close the Straits of Malacca, by offering her a deal whereby she also renounces her mineral claims in waters deeper than 200 meters.

If our objective is to induce certain Latin American countries to reduce their claims to a 200-mile territorial sea, in order to free our fishing boats from harassment, it would seem that this objective is not likely to be furthered by a proposal that they also renounce their claims to the seabed. A nation threatened with loss of its claims to a wide continental shelf would naturally, or so it seems to me, be impelled toward protecting itself by a claim to a wide territorial sea, a claim to plenary jurisdiction of far greater concern to us than the width of its rather limited seabed jurisdiction.

I come now to the committee's request for expressions of views on "interim arrangements." This, I take it, refers to the period between the present date and the coming into force of a treaty which would supersede the Outer Continental Shelf Lands Act seaward of the 200-meter line.

One aspect of the problem is whether leases issued under the Outer Continental Shelf Lands Act between, say, July 1, 1970 (the date proposd in art. 73 of the treaty), and the date on which the treaty comes into effect, shall state on their face that they are subject to change to conform to any treaty that may be negotiated.

Another problem is whether this infirmity shall be imposed by unilateral action of the United States, in anticipation of the execution and eventual ratification of a treaty—in which event the uncertainty would commence with the date of the President's instructions to insert such clauses in leases—or whether it shall commence only upon the execution of the treaty which imposes this infirmity, as article 73 provides.

In either event, it seems clear that for many years no exploration in waters deeper than 200 meters could be carried on with any assurance whatever as to the terms of the contract.

For example, appendix A to the treaty states a comprehensive new mining law, applying to all licenses in the International Seabed Area—this includes the areas now under the control of the Outer Continental Shelf Lands Act seaward of the 200-meter line—and appendix C states the terms and procedures for licenses in this same area, now to be called an International Trusteeship Area.

Rental fees and work requirements are stated in article 6 of appendix A, royalties in article 10. In the event of production, $500,000 to $2 million per block must be paid. Royalties of 5 to 40 percent of the gross value at the site of oil and gas, and 2 to 20 percent of the gross value of other minerals, are required. The coastal state can increase these. It must pay to the International Seabed Authority from 50 percent to 66⅔ percent of the revenues it receives from these resources. The amendment of these provisions would be beyond the power of Congress.

It must be self-evident that a presidential proclamation which subjected all future leases to the provisions of a future treaty, its terms unknown, would be a major deterrent to the investment of capital in this super-risky kind of mineral venture.

This is particularly true because it is known in advance that our own Government would not only acquiesce in, but indeed is originating, provisions of this sort.

CONCLUSION

It bears repeating that the philosophy of the treaty is that the coastal states shall renounce or cede their rights under the convention, seaward of the 200-meter line, to the international regime, and receive back some sort of a qualified title designated as a trusteeship.

The significant point is that the source of power, of competence to administer this area, is no longer the Convention on the Continental Shelf or customary law as the International Court of Justice declared it to be in the North Sea cases, and the controlling law is no longer the municipal law of the coastal state.

Instead, the source of power or competence of the coastal state would be the international regime, and the dominant law would be the treaty and its appendixes, which include the full text of a universal seabed mining law.

The international regime to which the coastal state's existing powers beyond 200 meters would be ceded is not, of course, within the control of the United States.

Having in mind the recent history of the United Nations, it is not at all clear that this agency would be in friendly hands. Even if it is, the consequence of the cession is that the international regime will have the status of grantor, and the United States the status of grantee, of powers with respect to the development of the mineral resources of the American continental margin in an area to be reclassified as the "International Trusteeship Zone."

It now derives these powers from the inherent sovereignty of this Nation, delegated to it by the Constitution. Hereafter, if this treaty ever takes effect, such powers as Congress may have in this Trusteeship area will come to it by delegation from the international community, spelled out in a treaty.

Congress becomes merely a trustee of lands which are the "common heritage of mankind," and the United States "shall have no greater rights in the International Trusteeship Area off its coast than any other contracting party," except as the treaty may specifically provide (art. 27).

The proposed change of status of the United States and its Congress, the change in the source and means of exercise of power, are immense, indeed revolutionary. This would remain true even though the forthcoming mining code for the continental margin (app. A and C of the proposed treaty) should be amended to read word for word like the United States Outer Continental Shelf Lands Act.

Under the new regime, power would rest in a complicated structure of an assembly composed of all contracting states, a council composed of 24 contracting states, a secretariat and three commissions.

We might or might not like future amendments. It is beyond our power, acting alone, either to enact them or to prevent them. Article 76 so provides.

Under the American regime, disputes are adjudicated in U.S. courts, and ultimately in the U.S. Supreme Court. Under the proposed regime, many kinds of disputes would be adjudicated in a new international tribunal of five to nine judges.

This great change in the source and exercise of power gives disquieting emphasis to Ambassador Phillips' statement to the Seabed Committee on August 28, 1970, as to what the new treaty proposes:

> . . . While the coastal state does have limited, important functions, the international machinery has a supervisory role in the trusteeship zone, including such powers as inspection and suspension of licenses and of the trusteeship itself in certain cases.

I must, therefore, conclude that the proposed treaty is in conflict with the policy of the American Bar Association stated in resolution 73 (1968):

> (2) That within the area of exclusive sovereign rights adjacent to the United States, the interests of the United States in the natural resources of the submarine areas be protected to the full extent permitted by the 1958 Convention on the Continental Shelf.

With respect to the area seaward of the continental margin, there is not the same degree of conflict between the provisions of the proposed treaty and the recommendations of the American Bar Association's resolution 73 as there is with respect to the continental margin.

(Extract from A.B.A. resolution 73 (1968)):

> (3) That on the basis of the information now available, the most desirable long-range goal for a regime to govern exploration and development of the mineral resources of the seabed and ocean floor and subsoil beyond the limits of national jurisdiction is not the creation of a supersovereignty with power to grant or deny mineral concessions, but rather agreement upon norms of conduct designed to minimize conflicts between sovereigns which undertake such exploration and development.
>
> (4) That the resources of the bed and subsoil of the deep sea, beyond the limits of national jurisdiction, be the subject of study and consultation with a view to formulating rules and practices to be observed by common restraint or by other arrangements which will assure, inter alia, freedom of exploration by all nations on a nondiscriminatory basis, security of tenure to those engaged in producing the resources in compliance with such rules, encouragement to discover and develop these resources, and optimum use to the benefit of all peoples. . . .

I think it fair to say that the draft treaty, in the area seaward of the submerged continent, represents an effort to reach goals which are not greatly different from those stated in our resolution, although the new regime does come close to being the "supersovereignty" that our resolution objects to, and the machinery is immensely complicated and topheavy.

The primary objection that I am expressing today is not to the structure and functions of an international regime, if such a regime were to function only in the areas seaward of the continental margin.

That problem of composition and powers of the regime, important though it is, is miniscule when compared to the hazards we would voluntarily assume by renouncing to any international regime, irrespective of the perfection of its organization, the sovereign rights that the United States now possesses in its continental margin, and the acceptance back from the new supersovereign of a mere contract right, a right under a contract that can be amended without our consent, to henceforth administer the surrendered area as trustee of a "heritage of all mankind."

I prefer to look to the Congress to continue to administer the resources of the American continental margin as the heritage of the American people.

Thank you, Mr. Chairman.

Senator METCALF. Thank you, Mr. Ely, for a very persuasive and impressive statement.

As I said at the opening, I am now going to call on Mr. John Laylin, who has also been a witness before this committee.

STATEMENT OF JOHN G. LAYLIN, ON BEHALF OF THE COMMITTEE ON OCEANOGRAPHY, SECTIONS OF INTERNATIONAL LAW AND COMPARATIVE LAW, AMERICAN BAR ASSOCIATION

Mr. LAYLIN. My name is John G. Laylin, I am a member of a number of committees on oceanography.

The focus of interest, your invitation states, pertains to two related matters. The first concerns the contents of the draft seabed treaty presented by the U.S. delegation on August 3, 1970, to the Seabed Committee of the United Nations General Assembly.

The draft, in my opinion, is a considerable achievement, in light of the short time in which it was prepared, and its presentation as a working paper to the Seabeds Committee was timely.

The draft is a good beginning. One reason is because of the way it was prepared. The different departments of our Government conferred intensively not only with one another, but with groups of interested scholars, scientific and legal, industrialists experienced in the exploration and exploitation of the resources of the seabed, and with their lawyers and other advisers. Governmental staff officers also conferred with their counterparts in other governments.

The Seabed Committee has made little progress toward reaching agreement, but the meetings afforded opportunities for staff officers of those countries that seriously desire a sensible treaty to exchange views.

The result is a document that takes into account the contentions of the different interested groups and to my mind points the way toward

reconciling what at one time appeared to be irreconcilable, conflicting positions.

My own interest has been primarily in the regime to regulate exploitation of the hard minerals found to lie on the surface of the deep seabed beyond the outer edge of the Continental Shelf, however that is defined.

I shall not comment, therefore, on the merits of the proposal made by the President in May and embodied in the draft convention to establish a trusteeship area between the 200 meter isobath and the continental margin.

There are a number of suggestions for improvement which those interested in mining on the deep seabed would like to see made. These will doubtless be made by the witness you have invited to speak for the American Mining Congress.

The interested departments of the Government, in continuation of the practice that preceded the publication of the draft treaty, have asked for memoranda setting out any changes believed to be desirable.

I am engaged with others in the preparation of such a memorandum. When it is completed, I shall send a copy to this committee for inclusion, if desired, in the record of these hearings.

There are a few changes which I would like to mention now. I wish to state again that I am speaking only of those provisions of the draft convention that would apply to the area seaward of the trusteeship area. I would not want any suggestion made as to that area to apply to the trusteeship area, if the effect were to be prejudicial to exploration and exploitation there.

The draft, as you know, provides that licenses must be obtained to exploit the resources of the deep seabed. This is good, and the fact that a licensee will be protected from having to share his discovery of a rich ore bed with others is not only good—it is essential.

But as now written, the draft prohibits prospecting except under a license to be issued by an international authority. As applied to prospecting for deep-sea nodules, this is not only not good—it is unworkable.

We are dealing, it must be remembered, with activity on or under the high seas, over which no nation has jurisdiction. It is inconceivable that every nation could be trusted not to carry on voyages of discovery before applying for and obtaining a license. The requirement would serve only to handicap the conscientious.

The manner of fixing and collecting fees from operators requires, in my judgment, revamping. The amount of payments to an international office should, I submit, be determined on a basis that can be easily arrived at and checked, and all such payments should be made by states, even though the activity is carried on by a private company under its auspices.

What the operating company should pay should be determined by the sponsoring state, and all payments should be made to that state.

This two-tier system maintains uniformity as between states, while permitting each state to apply its own policies to the activities of those operators that it sponsors. Some states may be so desirous of bringing into their economy, without drain on their balance of payments, minerals found on or under the seabed as to adopt legislation which

authorizes subsidies to operators, or special tax consideration. Japan is said to be subsidizing exploratory work at the present time.

Other states—and the United States might well be one of them—will want to make sure that the operators they sponsor do not have to pay more than they would pay if operating wholly on land.

Article 10.2 of appendix A contemplates payments by the operators of percentages of gross value at the site of hard minerals. If imposed by the United States on the operators it sponsors, there would not be any mining activity. Ocean mining would be economically unthinkable. The tax payable by the operator should in any case be measured by the economic success of the venture.

The organization provisions, beginning with chapter IV, I find to be too elaborate. The administrative expenses would very possibly exceed for many years to come all payments made by states to the organization.

I turn now to your request for my views "on whether existing legal arrangements provide sufficient incentive to increase efforts related to the recovery of seabed resources," and if not, what would be my "views concerning legislation which would apply to the interim period."

Customary international law would sustain protection of nationals of the United States from interference with their activities on the deep seabed by any foreign state or its nationals.

The principle of the freedom of the seas, codified in the 1958 Convention on the High Seas, was recognized in that treaty to require states in their exercise of that right to refrain from interfering in the exercise by other states of that right.

The common law probably affords a right of action against a person subject to the jurisdiction of our courts who causes damage to an operator on the deep seabed. If not, this could readily be remedied by Federal legislation. Such a statute could apply to anyone subject to the jurisdiction of our courts, notwithstanding that the interference took place beyond the jurisdiction of the United States.

The United States could go further and set up a procedure for the issuance of licenses giving the licensee an exclusive right to mine in a defined area outside as well as inside the area under the jurisdiction of the United States.

This would be good against every person under the jurisdiction of the United States, but, of course, would be good against nationals of other countries residing outside of the United States only if their countries consented. Consent could be by treaty or by parallel legislation.

I recommend that a procedure of this nature be established, and that our Government seek by diplomatic negotiation agreement of the leading maritime powers to establish a similar procedure, with each country agreeing to respect, and requiring its nationals to respect, the licenses issued by one another.

I have recommended over the past year that our Government seek through bilateral discussions with representatives of the governments of those countries that have shown an interest in reaching agreement on a sensible deep-sea regime an understanding to control exploitation of the resources of the deep seabed pending formal agreement on a multilateral convention.

The technological capability is progressing to the point where commercial production will soon be possible. It will take place, I am confident, long before the Seabed Committee or a conference of the members of the United Nations can reach agreement on any kind of a regime acceptable to the majority.

I do not suggest that we cease working in the United Nations to bring about a many-nation agreement on a permanent deep seabed regime. Our efforts there to that end should continue. But we need to do more, and the first step is to work out with the principal maritime powers a modus vivendi to assure orderly exploitation of the resources of the deep seabed in the interim period.

The draft convention prepared by our Government can be—indeed, already is—of great assistance in finding areas of agreement with those countries that want to encourage orderly development of the seabed resources. We should continue informal talks with those countries looking to agreement on a permanent convention.

It may be possible to avoid a long drawn out interim period by recognizing now what will every year become more apparent, that the goal of near universality—that is, of a many-nation convention for a regime acceptable to a majority of the nations of the world—is not obtainable in the foreseeable future. It will never be obtainable through the Seabed Committee. It will not be attained through a large international conference.

The nearest that can be attained by any method is, I believe, a convention to which only principal maritime powers are the original parties. This would then be opened to accession by all others who wish to become parties. This is obtainable, and, with active diplomatic negotiation, could be reached in a few years. The draft convention prepared by our Government is a big step toward such an agreement.

For the interim period, an understanding with other nations having the capability to recover resources from the deep seabed could be based on an anticipation that the ultimate regime will be not unlike that provided for in the draft convention.

This is envisaged in the President's announcement of May 23. After calling "on other nations to join the United States in an interim policy," he states what policy he has in mind for the interim. The States would issue licenses to operators which would be subject "to the international regime to be agreed upon."

That regime, the licensee will be assured, will "include due protection for the integrity of investments made in the interim period." To me, this means that the United States will issue licenses along the lines provided in the draft convention, and subject to the conditions and limitations there provided, or provided in an understanding between the nations that join with the United States in establishing an interim policy.

Assuming this program is followed, what legal arrangements do I think desirable to provide "incentive to increase efforts related to the recovery of seabed resources"?

Before offering my suggestions in response to this question let us remind ourselves, once again, that we are dealing with an area beyond our jurisdiction—an area where there will be recovery of resources

by all sorts of operators. The operators that are not themselves State agencies or State subsidized may be the exception.

In considering arrangements that will encourage private enterprise to engage in seabed mineral recovery operations, we must not overlook the kind of competition our operators may have to meet.

The arrangement should assure that prospecting may go on as at present, without need to apply for a license or to disclose the discoveries made. Licenses would then be issued to exploit the minerals found.

The licenses should protect the licensees from intrusion within the licensed area. The licenses should run for a period long enough to allow recovery of the investment and a profit commensurate with the risk.

Probably there will have to be tax incentives, and most certainly fees should be from net profits. For the hard mineral industry, the practice of competitive bidding applied to the oil leases would be most inappropriate. This is recognized in the Stratton report (pp. 135–137).

Until there is formal agreement between the principal nations, investors will be timid over committing large sums for an extended period of time without some sort of insurance against losses from "claim jumping" by nationals of other countries, or by their governments.

The risk to the United States would not be great, if it had during the interim period bilateral agreements with the principal maritime countries that claim jumping would be dealt with as an unlawful interference.

Without insurance of this sort, the United States, whose nationals are now in the forefront in prospecting and experimenting with recovery techniques, might lag behind other countries that in one way or another absorb the risks of loss from "claim jumping."

There is a second risk that should also be covered. The licenses issued during the interim period are, under the President's statement, to be "subject to the international regime to be agreed upon." The coverage should provide for compensation for losses suffered by reason of any curtailment of rights under the international regime.

Here again, the risk to the United States is not great, for the United States can refrain from agreeing to an international regime that cuts down on the rights of operators it has licensed.

Article 73 of the draft convention contemplates that there "shall be due protection for the integrity of investments made in the international seabed area" during the interim period.

It must be borne in mind that any project for recovering the deep sea nodules will require more than a ship with recovery equipment. There must be land-based plants to separate the copper, nickel, and cobalt.

Ship, recovery equipment, and a land-based processing plant will call for large investment. This cannot be financed if the licensee is not insured by his government against losses resulting from deprivation of his exclusive right to exploit the minerals in the area designated in his license on the terms described in the license for the period of time covered by the license.

In conclusion, let me commend the authors of the draft convention for its contents and the timeliness of its publication. As a working

paper, it has already helped to clarify thinking and resolve some seemingly incompatible views. It is only a beginning, but a good one. There are important changes to be made, but the basic plan is sound.

Of immediate importance are the arrangements to be made domestically and with those nations that desire to participate in the encouragement of deep seabed mining in an orderly way pending establishment of a permanent many-nation seabed regime.

The program I have outlined has been discussed over the past year with many international lawyers in this country and recently in Geneva and at the Conference of the International Law Association at The Hague.

I am satisfied that it will win support in the principal maritime nations and while preserving order in the interim period promote eventual agreement on a worldwide permanent seabed regime.

Thank you, Mr. Chairman.

Senator METCALF. Thank you very much, Mr. Laylin. Your statement will be most helpful to the members of this committee.

Mr. Laylin, I have you listed as representing the Committee on Oceanography, Section on International and Comparative Law, of the American Bar Association. Mr. Ely said he was testifying for the American Bar Association.

Are you testifying for this section, or this Committee on Oceanography?

Mr. LAYLIN. Senator, after the testimony this spring, I think I felt I should resign as chairman, because up to that time I had been able to keep a neutral position between the conflicting views of the hard mineral and the oil people.

I had to come out pretty strongly at one side of the hearing, so I resigned and suggested that they name somebody who did not have any particular interest in the one or the other. Mr. Clingan, a professor now down at Miami University Law School, is the chairman. I hope I am still on his committee.

I am on Mr. Ely's committee of the American Branch of the International Law Association. Together, we are on the international committee.

Then I have clients, my firm has clients that are interested both in offshore oil and offshore hard minerals.

Senator METCALF. We recognize you as an expert in this field. We are not trying to derogate your testimony. I was trying to find out whether or not you were actually representing——

Mr. LAYLIN. To the extent that my interest measures my expertise, I am an expert.

Senator METCALF. Thank you very much.

Senator Hansen, will you start the questions?

Senator HANSEN. Thank you very much, Mr. Chairman.

First may I just observe that I am most impressed with the testimony that I have heard this morning.

Mr. Ely, if I may, I would like to direct some questions to you, sir.

I get the impression that if you had been drafting the treaty submitted to the U.N. Seabed Committee as a working paper, you might have done it differently. If my hunch is correct, what major differences in approach would you have taken in drafting the seabed treaty?

Mr. ELY. Senator Hansen, my criticism does not relate to the professional character of the work done. In my opinion, it is of a high caliber, indeed. My objection relates to the marching orders that this talent received.

I think, and I said so when asked in advance of the presentation of this draft agreement, that it was a mistake to surface now with a full text of any draft treaty or any universal mining law.

It would be better by far, and would have been better by far, in my opinion, to have offered a statement of general principles of proposed terms of an agreement.

Take specifically the proposed mining law. In many respects, this is an expertly drafted document. From my experience with mining laws around the world, I give it rather high marks.

I think it is a fundamental mistake of the United States to take the position of a law giver for the coastal nations of the world, 105 of them, of whom 65 have offshore operations, of telling them here is a model statute that is to be imposed upon you by acceptance of this treaty, although our own Congress has enacted now the Continental Shelf Lands Act that is quite different from it. In my mind, this is an impossible posture to be in.

With respect to the provisions of the treaty itself, as I have indicated earlier, the principles that I would have proposed would have gone in the exact opposite direction with respect to the status of what is called the International Trusteeship Area.

I would not have proposed the creation of a trusteeship at all. Instead, as I indicated in my prepared opinion, the principles I would have suggested would have had as point 1 on page 1 the confirmation of the exclusive rights of the coastal nation to the full geographical extent of the continental margin, and would have confirmed that these are rather limited rights in the nature of the jurisdiction for governing exploration and exploitation of the resources of the seabed as the convention now does, without effect on the superjacent waters.

The quid pro quo that I have stated as point 2 of those principles would be that the coastal nations would agree to pay over to an international fund such as the World Bank for use in development of less-developed countries an agreed percentage of the revenues they might derive from specified portions of this continental margin.

This could have been a very simple set of principles. If it is not acceptable to the nations of the world, discover it early.

There comes a time when American representatives are trustees for their own people, not for all mankind. It would have been incumbent upon them to say, as perhaps the Russians would say, "Nyet," we do not propose to relinquish, renounce, impose a trusteeship on what is now ours.

I have offered those principles in the belief, perhaps a mistaken one, that they were consistent with President Nixon's announcement of May 23, in which, unfortunately, he did indeed use the rhetoric of "renounce" and "trusteeship."

But what he was truly proposing was to share revenues from the continental margin. The rights of the coastal nations, as was explained here to you by then Under Secretary Richardson, I believe, would have

been fully preserved. They are not fully preserved by this proposed treaty.

Senator METCALF. I wonder if Mr. Laylin has some comments on either the question or Mr. Ely's response.

Mr. LAYLIN. It is mainly a question of difference of point of view, Senator.

From my point of view, my colleague is shortsighted to only see out to the edge of the continental margin. He thinks mainly of one resource. Our country has many interests beyond the margin, and we have many interests besides petroleum, as great as that is.

From where I see it, I know that the Government was trying to meet the point of view that has been expressed today, as far as it could meet it without sacrificing other interests that were considered perhaps more vital. This oil is inside of the quota system.

Senator HANSEN. It is what?

Mr. LAYLIN. It is inside this quota system. This trusteeship oil is inside the quota system.

A good many of my friends in the oil industry think they can live with it very nicely. There are others that agree strongly with my colleague, that we should not have gone so far.

My own judgment is that this was an ingenious solution that the White House put out, and that it does meet the essential interest of defense, science, oil, navigation, fishing, hard minerals.

Mr. ELY. May I comment further, Mr. Hansen?

Senator HANSEN. I was hoping you might, Mr. Ely.

Mr. ELY. To go ahead with my tabulation of principles, I come next to the point Mr. Laylin just made, the interest of the United States beyond the continental margin, and in the deep sea.

Here, as you will note from his comments, despite his compliments to the treaty, we have not obtained the objectives that he offers; namely, a regime under which for a protracted period of time the major nations capable of exploring the seabed would call the tune, arrive at an agreement or treaty that they would sign and hold open for accession. If others did not, so be it. That is not what we got by this tradeoff, this renunciation of the continental margin.

What he is describing is what is, in effect, proposed by the American Bar Association in paragraph 3, appearing as a footnote on page 19 of my statement, in which the house of delegates Resolution No. 73 said:

> That on the basis of the information now available, the most desirable long-range goal for a regime to govern exploration and development of the mineral resources of the seabed and ocean floor and subsoil beyond the limits of national jurisdiction is not the creation of a supersovereignty with power to grant or deny mineral concessions, but rather agreement upon norms of conduct designed to minimize conflicts between sovereigns which undertake such exploration and development.

In the interim report of the American branch of the International Law Association, of which I have the honor to be chairman, and Mr. Laylin is a valued member, we spell this out as norms of conduct to be followed by the countries capable of carrying on these explorations, including avoidance of claim jumping.

What we in fact got in the draft treaty is not that, at all. It is the creation of a sort of floating Chinese pagoda composed of a council of

24 nations, not the six or seven Mr. Laylin speaks of; an assembly of all contracting nations, presumably including the 77 who voted as a bloc against everything the United States wanted in the assembly; the secretariat—this is not the United Nations Secretariat, but brand new; three commissions; and finally an international tribune to displace the International Court of Justice in this field.

Now, the document that we got is one that can be amended. As a treaty, bear in mind that the Senate, should it consent to a ratification of a treaty of this sort, is consenting to a treaty that can be amended, and remain in force against us, without the consent of the United States. We would have to have others joining with us to block it.

You don't know what regime you are creating out there on the deep sea, which is going to come now onto the continental margin as a grantee of the powers that hereafter Congress might exercise.

Consequently, my principle would have been the creation of a simple regime to encourage work rather than to police a "gold rush," to encourage perhaps what even some nations think is necessary, to subsidize deep-sea exploration, and to assure by a simple agreement among a half dozen nations capable of interference with each other that they would not interfere—the same sort of thing that the American Bar Association proposed in 1968, and Mr. Laylin endorsed here, but we didn't get that.

The fourth principle I think I have suggested is that if there is to be a future international conference, let it be preceded, as the 1958 conference was, by extensive preparation by an international law commission and other experts, and not by precipitately offering of proposals in the Seabed Committee with 3 or 4 weeks preparation. This principle should be self-evident.

As I said in my prepared statement, I am not primarily concerned with the deep-sea regime. I think this is not well conceived. I think Mr. Laylin's testimony shows that it is not. But if it is something that all nations of the world want and could get along with, I would be more tolerant of it if its jurisdiction were restricted to the area seaward of the continental margin.

Where Mr. Laylin's testimony and mine differ is that I am primarily concerned with the renunciation of our rights in the continental margin, and with respect to the deep ocean I think the structure here is too complicated, and we are getting at it the wrong way, and getting in an irrevocable position, perhaps, and I prefer an agreement among the major nations, as the American Bar Association did. But imperfect though it might be, its imperfections are a minor irritant compared with the present danger to what we now have on the continental margin, because we will be dependent upon these resources in the very near future, perhaps another decade, for our liquid fuels. The date when the world will be dependent on resources of the very deep ocean to a depth of several miles is in the nature of things further off in point of time.

Mr. LAYLIN. I heartily agree that the council would get nowhere with all the nations of the United Nations, but it would not get there even if there were careful preparatory work, the way all of these nations, this group of 77 that Mr. Ely refers to, behave most irresponsibly and arrogantly.

Senator HANSEN. Pardon me, sir. Would you pull the "mike" just a little closer toward you?

Mr. LAYLIN. As now constituted, the General Assembly is an irresponsible body. This group of 77 Afro-Asian nations, in alliance with some of the South American countries, command a majority. They are probably going to vote for a conference without any preparatory work.

I agree with Mr. Ely that there should very definitely be preparatory work. I am afraid that even as things are now, even with careful preparatory work, a conference would not arrive at anything. There are nations that don't want an agreement.

Zambia and Peru and Chile may not want an agreement because the copper in the bed of the sea competes with their copper. Kuwait does not want an agreement because they want to have a larger production of their own. Then there are all sorts of other factors.

I sat as an observer at Geneva. It is just impossible to think that anything good is going to come out of that, beyond this. It gives them a chance to voice their grievances and so forth.

That is why I said in my prepared statement I would continue participating, doing the utmost to accomplish something that way, and also making it clear that we are not excluding them from anything, but we might as well face it now, instead of 2 or 3 years from now, that that is not going to get anywhere, and we should go directly in conversation with people who do want an agreement.

Now, on the language that is expressed in the President's announcement, or statement, I agree with Mr. Ely. I think "renounce" is a very strong way to do it, but that is language of salesmanship, and I am afraid that I think the reason that that kind of language is necessary is the overassertiveness of some of our friends as to where the continental share now is.

When one says that this treaty is against the bar association resolution, one is getting back to that whole haggle we had last spring, as to where is the boundary now.

Of course, we differ. Also, we differ as to the reading of the *North Sea* case. The language that was quoted was talking about the lateral boundaries between The Netherlands and Denmark and Germany, not the outer boundary.

This is such a complicated thing, it is so intimately connected with our relations with other nations on many, many fronts, that I think we make a mistake in being too assertive in one area.

Senator HANSEN. In being what?

Mr. LAYLIN. Too assertive in one area. We are, you know, and the other countries don't like it.

Mr. ELY. Mr. Chairman, I don't know how long you want to continue this exchange——

Senator METCALF. We are trying to get a dialog here, so let us go ahead.

Mr. ELY. First, the American Bar Association committee consideration: Of course this has been the subject of the deepest study by some of the ablest international lawyers in the United States, present company excepted, naturally, and the latest report of these sections said this—in 1969—that "We reaffirm our opinion that the concept of adja-

cency contained in the present Shelf Convention should properly be interpreted to include the submerged land mass."

It goes on to say:

> We affirm our opinion that it would not be desirable in terms of overall United States interest to seek a formal international conference for the purpose of fixing a precise boundary for the legal shelf. We believe it both preferable and proper to achieve this aim through parallel declaration by interested states announcing a uniform interpretation of the criteria embodied in the 1959 Convention.
>
> We reaffirm our opinion that the U.S. should assert to the full rights over adjacent submarine areas now vested in it by the Shelf Convention and by international law.

The American Branch Committee of the International Law Association on this subject, in August of this year, reaffirmed the same position.

What seems to me is an essential inconsistency by Mr. Laylin is: On the one hand renunciation was a great and good thing because people like these American Bar Association committees as well as the National Petroleum Council and others have been too assertive as to the rights of the coastal nation, and therefore we should renounce these rights in order to gain the goodwill of nations at large.

These nations, as Mr. Laylin said, are represented in the United Nations Assembly, which he goes on to say has proved very irresponsible. Further, he is so disenchanted with the prospects of getting an agreement among the nations of the world on a new treaty, "We will never get it," he says, we had better be exclusive and go for an agreement among the six or seven.

Now, the very nations that would be parties, members of this exclusive club of six or seven, happen to be nations that so far as I know, with the possible exception of Japan, have all taken the position that their coastal jurisdiction should be a broad one.

Soviet Russia is on record with the most conservative position imaginable. They just will not agree to any retrenchment. The United Kingdom is on record to less extent. Canada has recently promulgated a claim to a hundred mile antipollution zone, and claims jurisdiction by speeches of her Premier out to the foot of the continental margin.

It is true that France at one time objected to the whole theory of Continental Shelf, but I have not heard France disclaiming anything Frenchward for a long time.

I don't know where in the list of the first seven industrial nations of the world you would get a vote for a narrow shelf, with the possible exception of Japan. When Japan takes a look at the problem at her back in the East China Sea, she is not going to vote for a narrow shelf, either.

Consequently, if you are able to bring about a happy result of a parliament consisting of seven nations, you would arrive at an agreement on the widest possible coastal jurisdiction, with the possible exception of present spokesmen of our Government, and you might very well arrive at what the American Bar Association advocated, Mr. Laylin is advocating; namely, an agreement on mutual restraints and jumping each other's claims.

So that I do not follow the argument, the rationale, that renunciation was a necessary sort of medicine to take because of the insistence

upon a wide shelf jurisdiction by the American Bar Association and other agencies in this country.

To my mind, you do not need to renounce anything that you now have in order to get a sound bargain on the deep sea. If it is good for us in the deep sea, it is good for everybody. If it is not good for everybody, then we are in an indefensible position in seeking to get an advantage there for ourselves. We are not going to get it by renouncing anything on the Continental Shelf.

Mr. LAYLIN. May I make a correction?

Senator METCALF. Go right ahead, Mr. Laylin.

Mr. LAYLIN. I did not say that the bar association was assertive. It is my friend who says the bar association is assertive. I say the bar association, and he quoted it, said that the limit of adjacency is the margin. It did not say that the Continental Shelf goes out to the limit of adjacency.

We also have he exploitability test. It is the people who ignore the exploitability test that I was speaking of, not the bar association. They should not represent the bar association as agreeing with it.

Mr. ELY. Mr. Chairman, I will be glad to hear any one individual named who asserts that the jurisdiction of the coastal nation goes beyond the continental margin.

The position of the bar association has been in these reports Mr. Laylin signed as well as I have, repeatedly, that the limit of exploitability is restrained by the criterion of adjacency, and this corresponds to the extent of the submerged continental land mass.

No one, so far as I know, asserts that under the Convention on the Continental Shelf the coastal State's jurisdiction goes beyond the submerged continental land mass. Adjacency places that limitation on them.

One of the straw men that has been pursued by those advocating a wide international regime has been that somebody, unnamed, claims that under the convention the jurisdiction of the coastal nations makes the Pacific Ocean a lake because the jurisdiction goes to the median line. This is silly. I have never heard anyone make that statement for the last 5 years.

It is true that earlier two lawyers did it, and I think they have repented, but they do not speak for the American Bar Association.

The bar committee has been perfectly plain and explicit on it.

Mr. LAYLIN. I agree it is silly. I don't see why you bring it up.

Mr. ELY. Because you a moment ago said the people like myself have been too insistent upon too wide a claim.

As far as I am concerned, those for whom I speak have always insisted to the contrary, adjacency limits the exploitability theory.

Senator HANSEN. Mr. Ely, I infer from your testimony that you feel the International Seabed Treaty is not in the national interest. What elements, if any, does it contain which are in the best national interest, as you study it?

Mr. ELY. I would be leaving a false impression if I left you with the idea that all is black and white, and everything written in this treaty is on the wrong side of the ledger.

Senator HANSEN. I did not mean to imply that.

Mr. ELY. I hope not.

An identified one, to my mind, favorable feature is the recognition that the special interest of the coastal State does indeed encompass the entire continental margin, and is not limited to the 200-meter line or to the geological Continental Shelf, but goes out to the entire scope of the geological continental margin, the submerged portion of the continent.

If this were not so, there would be no rationale for granting the trusteeship in this area to the coastal country as compared to some different country, picked by lot, perhaps.

That is a favorable point, a good concession.

Another good point is the provision against expropriation by anybody, aimed particularly at coastal States or trustees. This is good. But to my mind, it is an advantage to the operators who might be imperiled. It is not appropriate for the heritage of the American people in their own continental margin to be traded off to secure this sort of insurance or protection for oil companies or mining companies, desirable as this protection is.

I have said that to the draft mining treaty I give high marks as a professional job. I disagree with the attempt to impose it in this respect. I do not disagree with the catalog of good things in this document: What I am trying to say is that there are many thoughtful, well worked out provisions in it. I disagree with the marching orders.

Senator HANSEN. It is my understanding that the undeveloped nations are interested in holding one big "international law of the sea congress," in which the following problems would be considered as units:

One, the limits of the territorial sea;
Two, free passage through straits;
Three, preference fishing rights for coastal nations;
Four, the limits of the legal Continental Shelf;
Five, the substantive contents of a deep seabed regime; and
Six, high seas pollution.

If this is true, that these are the intentions of a large number of undeveloped nations, what could be their motive in combining these obviously unrelated issues?

Mr. ELY. My speculation would be, Senator Hansen, that some of them think that the riches of the continental margins are readily obtainable, that they could be an asset to be shared among them all, that they make a drive for this. They know the United States is interested for reasons of defense in securing free transit of the straits of the world and free overflight of the areas that would be encompassed by a 12-mile territorial sea.

Perhaps they feel that they can trade these off in some way and get a share of the American continental margin for their own advantage as the price of their acquiescing to and relinquishing of these political points.

I think we are headed toward such a conference, unfortunately, and I think it has been precipitated or accelerated by our failure to stand our ground early against the proposals in the Assembly for the encroachment on the continental margin, indicating we are willing to trade on them.

I think Mr. Laylin has pinpointed very well the disadvantages to the United States of a general conference on all of the law of the sea.

I am aware that our State Department has taken the position wisely, that if there is to be a conference, it should deal primarily with a 12-mile territorial sea, probably accompanied by assurance of free transit of straits affected by the 12-mile territorial sea and free overflight. I hope that can be accomplished. The present temper of the Assembly indicated the resolution is headed in the opposite direction, and for the reasons I have indicated.

Mr. LAYLIN. I agree.

Besides that, of course, there are some who think that the best way to prevent there being an agreement is to have a conference where all of these things would come in. Then there is a tremendous amount of trading.

In that connection, I would like to comment on one statement in Mr. Ely's prepared statement. On page 15, he says:

> If our objective is to induce certain Latin American countries to reduce their claims to a 200-mile territorial sea, in order to free our fishing boats from harassment, it would seem that this objective is not likely to be furthered by a proposal that they also renounce their claims to the seabed.

Of course that is not the point. The thing is, if we show a certain amount of restraint as to what we want to grab, maybe we can induce other countries to show a little restraint. That is the thinking behind this trusteeship.

Mr. ELY. I think if any of the Senators on this committee occupied the position of Foreign Minister or Minister of Mines of any one of these foreign or Latin American countries, and had the trusteeship of your own people as your primary responsibility, and you felt you really had a right to the exclusive control of fisheries out to 200 miles, for any number of reasons, because the deep ocean waters come welling up there with nutrients that attract the fish, and this is in a sense your equivalent of the Continental Shelf, you would make quite a speech about the importance of defending that national interest.

If you were told, well, don't do this, retract to 12 miles and accept some modified control of fishing out there, and the inducement for it is that all the nations are going to give up part of the rights to the seabed, you would think with proper, quite proper Latin logic that here is a non sequitur here some place, that each of these matters should be dealt with on its merits.

That is why I say the fishing problem that the President recognized in his announcement of May 23, when he said we are prepared to consider special fishing privileges—those may not have been his words, that is my interpretation—for special parts of the world, this is a water-column problem. It has nothing to do with the seabed.

Senator METCALF. Would you yield?

Senator HANSEN. Yes.

Senator METCALF. I take it that you both agree on the perils of a large-scale international conference encompassing all of these various things that Senator Hansen has enumerated.

Mr. LAYLIN. I did not hear the first words.

Senator METCALF. On the perils of having such a large international conference.

Mr. LAYLIN. The necessity for having a preparation?

Oh, the perils?

Senator METCALF. Yes.

Mr. LAYLIN. I think nothing would happen. Some half dozen Americans would have to go to Geneva somewhere and sit there for 6 weeks or more and just waste their time.

But there is no peril, because we would not agree. You know, there is one group that wants to have a super mining company whose stockholders are all the nations of the world, and it should do the actual operating. There are lots of other crazy things.

Senator METCALF. In hearings of the special subcommittee, we were particularly admonished that we should not reopen the Geneva Convention.

Mr. LAYLIN. Right.

Senator METCALF. Would not such an international conference as envisaged here be tantamount to reopening the Geneva Convention?

Mr. LAYLIN. No; it would not have any effect on that until we signed something.

Senator METCALF. I understand that.

It is your position that it does not make any difference, because we are not going to reach any agreement?

Mr. LAYLIN. I think it is unfortunate. It would be wonderful if the 110 nations went there with well prepared, intelligent people who were desirous of arriving at an agreement, but that is not the case.

Senator METCALF. That is not even the case of the hundred Members of the Senate.

How are we going to reach a solution to this problem, if we cannot get all 110 nations together? Are we going to do as some have suggested, just negotiate special treaties, one with Russia on the 12-mile limit, another treaty with Peru on a territorial limit, and another treaty with someone else on free passage through straits? Is that how we are going to accomplish it?

Mr. LAYLIN. I think so; yes.

On the particular seabed matter, I don't want to have my plan be exclusive. I would not want to exclude anybody to these conversations, if he showed the slightest interest in trying to reach a result. There is no sense in our sitting week after week just hearing a filibuster from somebody who does not want to reach any result.

Senator METCALF. The point I am making is that it is going to be a long time, even with this working paper and so forth, before we do reach the proper international agreements.

Mr. LAYLIN. Very long time.

Senator METCALF. Therefore, more and more feel that during this interim period we must modernize and extend the laws that are the subject of jurisdiction of this committee.

Mr. LAYLIN. Yes; in cooperation with the State Department and its corresponding interests up here on the Hill. We have to have two things moving along side by side. We have to have these bilateral agreements. Otherwise, our licenses cannot be exclusive. If we have the bilateral agreements with the countries that have the capability of jumping

claims, we don't need to worry that some one of the other countries will do that.

Senator METCALF. Thank you.

Senator HANSEN. Do I refer correctly from your testimony, Mr. Ely, that our hope, and indeed the belief of some, at least, that we can be participants in a joint effort that will result in the establishment of a viable international agency of some kind—I don't know exactly what handle I should put on it, I should suspect that some may regard it as a supersovereignty or supergovernment—that we could bring about, hopefully a diminution of conflict, resolution of interests that would otherwise hit headon, and that it is reasonable to expect that the world is ready for that sort of approach if we take the leadership?

Is that the impression you get from some statements that have been made by leaders in our Government?

Mr. ELY. Senator Hansen, if I can sort this problem out in my own mind a little.

First of all, I would disagree with anyone's premise that there is now a conflict in the deep ocean beyond the continental margin which requires some sort of machinery to avoid chaos or anarchy. There is not.

I am talking of the area beyond the continental margin, and I will come back to the area within.

Beyond the continental margins in the deep water, beyond the depth of 2,500 meters, or a mile and a half, there is present now no existing capability for mining the minerals that may be on the seabed, presumably manganese.

Senator HANSEN. To clarify my own thinking, what you are saying, if I understand you correctly, is that at the present time there is no technology, there is no capability which permits an exploitation of the interests in waters of this depth and deeper. So, as a consequence, there just are not any conflicts of interest between various States.

Mr. ELY. Not now; not yet. This is not to say there cannot be in the future, as technology improves.

To take it one step further, I am still talking, now, about the very deep oceans, beyond the continental margin, the most likely mineral to be developed is manganese. These contain on the average about 30 percent silica and 30 percent manganese, fractions of 1 percent of copper, nickel, cobalt.

The time may well come when the world hunger for copper, cobalt, and nickel may require it to go after these resources, regardless of price. It is not likely to happen for a century with respect to manganese. There is more manganese above ground of higher grade than this, and without the silica content, which makes it almost unusable.

To make it useful to go after the manganese, the manganese content of the nodules would be like so much rock, initially, not always, but initially. The recovery of these nodules will be affected presumably by large floating vessels with connections to the seabed of various kinds that must bring up huge quantities of them.

A paper by Mr. Frank LaQue, given at the Malta Conference, and I think he has given it before committees of Congress, is very enlightening. I will put his tables in the record, if I may.

If you went after the cobalt in the nodules, you could recover a quantity equal to the entire cobalt consumption of the world at present by

harvesting an area of 200 square miles per year. That is 10 by 20 square miles. Probably one ship, one expedition could do this, at most two.

You are not going to have a tremendous area under competitive exploration, unless there are hot spots there that nobody has found yet. The expeditions probably could not find each other to borrow a monkey wrench or borrow flour from.

There is no submarine gold rush you have to police. You might have to subsidize these people to take the risk.

If copper and nickel are produced, then the problem arises if you lift enough of these to meet the nickel or copper requirement of the world, you are going to flood the cobalt market three or four or five times over.

You go down the list of metals this way. So that the problems may well be as to some agreement which will rationalize on a worldwide production quota basis what you do with these minerals, and how do you subsidize people to go after them.

The revenues, the net revenues available for a government "take" as income tax or its equivalent is not likely to be large for a long time.

Consequently, to come back to the beginning of your question, there is no immediate, critical problem that requires creating a five-layer international regime to deal with it. As Mr. Laylin indicated, the revenues would not be there to support it for decades.

You are creating a bureaucracy to deal with a problem that would not exist soon. You would have no customers, or very few.

Now, this does not mean that you should not be wise enough to provide in advance against contingencies of this sort, but it is no reason to trade off the interest of the American people in their continental margin to get the blueprint accepted for a piece of machinery that you may never crank up and put gasoline in, or would not for another two decades, possibly, to have any real work to do.

When you come back to the continental margin, there is not any international anarchy or chaos there. The coastal jurisdiction now goes to the 200-meter line and beyond that whatever depth is exploitable.

Consequently, any mining company or oil company that wants to explore in depths greater than 200 meters, and there are 40 such countries in the world which have licensed operations in waters deeper than 200 meters, the American has no problem at all in discovering what jurisdiction to deal with.

He might not like the laws of this particular country, but that is the one he deals with. There is no chaos, no anarchy, no international policemen to deal with. He either negotiates the deal, or does not.

The difficulty with the scheme now proposed, instead of having 40 nations, or 75 or 105, as potential licensors, you will have possibly one, because it will be a monolithic mining law, and each would be a trustee for an international regime.

Consequently, to wind up this long answer to your question, I would say that on the deep oceans there is not yet a problem that requires a complicated solution of the type Mr. Laylin is talking about, an agreement among the nations capable of interfering with each other, that what the American Bar Association talked about is adequate enough.

Within the continental margin, the jurisdiction is clear, unless it is clouded by proposals of the type we have discussed here today. This draft treaty does cloud it. It would make it very difficult for an American company to take a lease from the Department of the Interior in waters deeper than 200 meters, and know what his contract was.

For the first time, you have an impediment to the development of these resources projected by this draft treaty.

Senator METCALF. Mr. Ely, in your prepared statement you talked about unilateral action by the United States. This is at the top of page 16. You talked about leases issued later which could be taken prior to negotiation of the treaty by unilateral action.

Are you talking about administrative action, say by the Secretary of the Interior, or do you think that we need an act of Congress?

Mr. ELY. What I am concerned about, Mr. Chairman, is that the President or the Secretary of the Interior by his direction would announce by regulations that hereafter leases granted under the Outer Continental Shelf Lands Act would contain this soft spot, the statement that beyond the 200 meter line they are subject to any international regime hereafter entered into.

Senator METCALF. As you point out, we don't have to do that now.

Mr. ELY. You don't. For that reason, the pending bill, 3970, which would accomplish this, I think needs very careful study.

I think it would be against the interest of the United States to impose clouds of that sort upon permits issued to mine manganese nodules on the Blake Plateau, or to look for oil in waters deeper than 200 meters. There is already a successful well in California in waters about 400 meters deep. It is not yet producing, but oil has been discovered.

I think to now impose this sort of added weight upon the tremendous risk involved in going into these very deep waters would be a tragic mistake. I would rather see the opposite direction taken, that the leases granted by the United States were firm, and hereafter if a treaty is entered into which has the unexpected effect of cutting them off, of course the claimant would have a claim against the United States in the Court of Claims. But I would not like to see him take a piece of paper that is not bankable because it carries on its face an infirmity in the title.

Senator METCALF. Of course, Senator Bellmon and I regarded that bill as the beginning of a pleading, a vehicle in order to start discussion and hearings.

Mr. ELY. I may say, Mr. Chairman, I welcomed its introduction for that reason. It is time this question is faced up to. Your bill brings out on the table what is to be our national policy.

Your bill has the added advantage in making it clear that what we are now considering under the guise of a treaty is a revolutionary change in the Outer Continental Shelf Lands Act.

To my mind, that legislation, which took form in this committee, ought to be considered in this committee, and amended here, if anywhere, and it should not be superimposed by a treaty which is beyond the power of Congress to amend if we made the wrong move, as you can amend the Outer Continental Shelf Lands Act.

So I thoroughly approve of, personally, the introduction of your bill. Whether that has the result you want to reach is not the point. The

point is that it directs the attention of the Congress to the fact that the jurisdiction properly rests in this committee for legislation that governs the American continental margin.

Senator METCALF. Mr. Laylin, along the same line, you were an observer at the Seabed meeting this summer. In your opinion, how best can we preserve these opportunities for investment in development and further exploration of these important resources?

Mr. LAYLIN. At the present time, outside of the legal continental shelf, one can explore, any national of any country can explore wherever he chooses, and he can recover.

Senator METCALF. We have to have some security, not only against claim jumpers, but when you have exploration, security of opportunity for development.

Mr. LAYLIN. That is true.

Senator METCALF. We have more of that now, according to Mr. Ely, than we would have under the convention, or we would have under the passage of the legislation that Senator Bellmon and I have proposed in order to get a development of the issues before this committee.

Mr. LAYLIN. Speaking of the area beyond the continental margin, the two or three American companies that have carried on serious prospecting, and one of them I know spent over $7 million in prospecting, they are going to be ready in a much shorter time than was thought a year ago to actually recover these manganese nodules.

By the way, I brought one down here to show you. This was brought up from 15,000 feet.

Senator METCALF. Is this the Deep Seas Venture?

Mr. LAYLIN. It is not Deep Seas Venture. Another company, Kennecott Copper.

Senator METCALF. We did have Deep Seas Venture before us. They were furnishing nodules, too.

Mr. LAYLIN. They have been mining on the Blake Plateau, which is part of the continental shelf. They have a permit from the Department of the Interior. This was taken from 15,000 feet down in the middle of the Pacific.

Senator METCALF. Was this obtained by that same sort of glorified vacuum cleaner technique?

Mr. LAYLIN. No, this was by detached floats that would go down with a load of lead on each side of a clam shell at the bottom. When it was triggered as it hit the bottom, the clam shell would close and drop the lead, and it would make it buoyant and it would bring the nodules back up. That is only for exploration, of course.

You have been told about the way Flipse is doing this on the Blake Plateau. He told me that was working so well, when they first put the compressed air down to get under the nodules and send them up through the pipe, they shot 200 feet in the air.

I agree with Mr. Ely, it is a long time before we will need anything approaching the labyrinth of this working paper. I think that is recognized by the draftsmen, as well.

We are going to need in the interim period agreement between the nations that have the capability. We need to get started on that now, because it will take 2 or 3 years to work this out.

As I said in my prepared statement, this is going to involve an

investment of over a hundred million dollars, and that is not bankable until we have some sort of understanding with other countries that they will not jump our claims, and then we, of course, are as concerned as Mr. Ely about the license being modified by a subsequent treaty. That is why I have suggested that there be some sort of insurance to protect against loss. I think that applies as well to the oil people as to the hard mineral people.

Mr. ELY. It occurs to me, Mr. Chairman, in response to one of your questions, that one field of study by this committee and its staff might very well be an amendment to the Outer Continental Lands Act dealing with permits and their effect for exploration in waters on the whole continental margin, and, second, in waters which are beyond those limits of national jurisdiction.

What piece of paper should a vessel have on board, if any, from the American Government, if it is going to claim the protection of the American Government for very deep sea exploration and production in advance of any international agreement?

We do have power to police our own nationals, to impose upon them these norms of conduct, and perhaps if these were exhibited in an American statute it would be that much easier to get reciprocal legislation from other nations, even if they were not at present to render them in a treaty.

If we have a similar type of declaration from Russia and Great Britain, Germany, Japan, Sweden, a couple of others of the British Commonwealth, Australia and Canada, you could with reasonable assurance know that they were not going to interfere with you, and we might go at this by the technique of domestic legislation, purporting only to govern our own nationals, our own vessels, under our registry.

That is beyond the continental margin. Within the continental margin, I would like to see the committee go in the direction of assertion of U.S. jurisdiction out to that limit, and encouragement by the Secretary of the Interior to go ahead with permits and leases out to that limit, and no further, to remove the ambiguity now clouding the question whether he shall or can offer leases in waters deeper than 200 meters.

Mr. LAYLIN. When one comes to that, I hope you will distinguish between prospecting and exploring and exploiting, because the thing that would most discourage getting this incentive that you are interested in would be to require a permit to just prospect. You want to leave everybody free to prospect and keep secret what he finds.

Senator METCALF. What is wrong with using an extension of a very well developed pattern of law, mining law that has grown and built this country? Why do we have to have a whole new mining code to explore what is a logical extension of the continental land mass?

Mr. LAYLIN. I don't think we do. I think all we need, really, is to have some procedure, and perhaps it can be set up without the necessity of legislative action, designating somebody who could grant an applicant that kind of license that the State Department could point to when it told the British, "This operator is operating with the knowledge and the approval of the United States, and under our conversations you keep your people from interfering."

That is all we need. It does not need to be very elaborate.

Mr. ELY. I suggest, Mr. Chairman, Mr. Laylin perhaps misunderstood your question, or perhaps I did.

I thought you were saying that in view of the existence of the Outer Continental Shelf Lands Act, for example, what is wrong with building on that, as compared with superimposing a uniform worldwide seabed mining law. Am I right?

Senator METCALF. Yes.

Mr. ELY. I would agree with you. The Outer Continental Shelf Lands Act, within this committee's jurisdiction, can be amended in the way necessary to protect, to control, first, the mineral operations on the American continental margin out to the edge, and second, I suggest that it might be an appropriate vehicle to control permits for American mining and mineral operations beyond the continental margin, setting up therein a set of norms, standards of good conduct, which would preclude that operator from jumping claims, let us say, or interfering with other uses of the sea, polluting the sea by his operations, and, hopefully, such a model set of good conduct standards that other nations would enact reciprocal legislation.

In other words, you may have within your power to accomplish the result that will be required for a very long period before an international treaty is ever arrived at.

Mr. LAYLIN. Of course, I don't agree, that we don't have the right to do that. We don't have the right to legislate out to the edge of the continental margin. Under the 1958 treaty, we have a right to legislate where you have already legislated to.

Mr. ELY. That includes exploitability. We can put a limit of adjacency upon exploitability.

Let us get this clear first of all, Mr. Chairman. If I may, hopefully, get this clear, under existing international law, the exclusive jurisdiction of the coastal state extends beyond 200 meters under the exploitability theory, but it does not extend to midocean. It goes out to a limit. The limit is adjacency, which coincides with the land mass. Your committee has jurisdiction to legislate with respect to that area.

Senator METCALF. We have a joint session at 12:30 today, and the Senate is supposed to be assembling right now to go over to the House chamber. I am going to have to call these hearings off. I think we have pretty well explored the subject matter.

We are dealing here, we have been dealing with a working paper which some refer to as a draft treaty, and various other documents that were not introduced into the hearings of the Special Subcommittee on Outer Continental Shelf, nor have they been incorporated in the hearing here by the Minerals Subcommittee.

So I will direct the staff to put in the appendix of this hearing the State Department's working paper and other such official documents as were referred to as a preface to the statements this morning.

I also want to point out that we have asked the National Petroleum Council to appear. I have a letter from the Council that I will incorporate in the record, telling us why they don't feel it is proper to appear at this time.

Tomorrow we will hear Luke Finlay, chairman of the American Petroleum Institute Committee on Oceanography, and T. S. Ary, vice

president of Union Carbide Exploration. Mr. Ary is appearing in response to an invitation addressed to the American Mining Congress.

Today I want to thank both of the witnesses for I think a most useful, most helpful discussion and presentation.

As both of you probably know, I am an advocate of an adversary proceeding before the regulatory agencies. If they could sit and benefit from such a discussion as we have had this morning, they would find that the adversary proceeding is beneficial in exploration and discovery of new ideas and truth in all these matters.

In this very complicated matter, you have been very helpful. Thank you for coming.

Unless there is something else to come before the committee, we stand in recess until 10 o'clock tomorrow.

(Whereupon, at 12:10 p.m., the subcommittee recessed, to reconvene at 10 a.m., Wednesday, September 23, 1970.)

OUTER CONTINENTAL SHELF

WEDNESDAY, SEPTEMBER 23, 1970

U.S. SENATE,
SUBCOMMITTEE ON MINERALS, MATERIALS, AND FUELS,
OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C.

The subcommittee met, pursuant to recess, at 10 a.m., in room 3110, New Senate Office Building, Senator Lee Metcalf presiding.

Present: Senator Metcalf.

Also present: Jerry T. Verkler, staff director; and Stewart French, chief counsel.

Senator METCALF. The subcommittee will be in order.

This is a continuation of the hearing on S. 3970.

The witnesses have a letter informing them of the special interest that the committee has in this hearing. That is, what should we do about the working paper presented before the United Nations Seabed Committee and especially the interim period prior to entering into a treaty or any other agreement. What is our further responsibility in developing the resources of the seabed and the Outer Continental Shelf?

This morning, we have two witnesses.

Yesterday, it was very profitable to have both witnesses present their statements and then have an interrogation and sometimes a dialog between the witnesses.

Today, unless there is objection, I will ask both to come forward and read their statements or summarize them, if they choose, and then be prepared for discussion between themselves or interrogation by the chairman or such other members as are then present.

We have a vote at 12:30, so we do have a little bit of a time limitation on the presentations.

Without any further discussion, I will call Mr. T. S. Ary, vice president of the Union Carbide Exploration Corp., to come forward.

You present your statement first and you will be followed by Mr. Luke Finlay on behalf of the American Petroleum Institute.

At least I will have some questions to ask.

We are delighted to have you both here.

Mr. FINLAY. We are very happy to appear together.

Senator METCALF. Go ahead, Mr. Ary. You may be first.

STATEMENT OF T. S. ARY, VICE PRESIDENT, UNION CARBIDE EXPLORATION CORP., ON BEHALF OF THE AMERICAN MINING CONGRESS

Mr. ARY. Thank you very much.

My name is T. S. Ary. I am vice president of Union Carbide Exploration Corp.

I am also a representative of the American Mining Congress as chairman of the ad hoc committee on undersea mineral resources.

The American Mining Congress is a trade association composed of U.S. companies that produce most of the Nation's metals, coal, and industrial and agricultural minerals. It also represents more than 220 companies that manufacture mining and mineral processing equipment and supplies, and commercial banks and other institutions serving the mining industry and the financial community.

Representatives of the American Mining Congress have enjoyed the privilege of submitting testimony to the Special Subcommittee on the Outer Continental Shelf on two previous occasions this year. Mr. C. H. Burgess of the Kennecott Copper Corp. testified before that special subcommittee on March 4, 1970, and I submitted a supplemental statement for the record in June 1970.

Senator METCALF. That subcommittee has completed its action. This is Senator Moss' standing Subcommittee on Minerals, Materials, and Fuels. It is just a coincidence that I am chairing both of them.

Mr. ARY. You are starting over again.

Senator METCALF. Yes.

Mr. ARY. We appreciate the opportunity afforded to us to appear before this subcommittee to present testimony on the subject of U.S. policy concerning the recovery of mineral resources on the continental margin and deep seabed.

We would like to emphasize that in our statement today we are addressing ourselves only to the "hard minerals" area of the mining industry.

The present hearings were prompted by the announcement by the administration on May 23, 1970, of a U.S. oceans policy and the subsequent preparation of a draft treaty which was presented to the United Nations Seabed Committee at its August meeting in Geneva as a "working paper."

As Senator Moss stated to us in his letter of August 24, 1970: "* * * our focus during the hearing will pertain to two related matters. The first concerns the content of the draft seabeds treaty * * *." You have asked if the draft treaty "* * * provides sufficient incentive to industry to step up its efforts in the recovery of seabed resources * * *."

The second matter concerns the adequacy of existing legal arrangements. Your letter has asked us to comment "on whether existing legal arrangements provide sufficient incentive to increase efforts related to the recovery of seabed resources."

We will discuss this second question first, since it is most important that early attention be given to the problem of interim arrangements.

This problem was anticipated in the President's May 23, 1970, statement. He said: "I do not believe it is either necessary or desirable to try to halt exploration and exploitation of the seabeds beyond the depth of

200 meters during the negotiation process * * *" which is necessary to establish an international treaty.

The President called on other nations to "join the United States in an interim policy." He suggested:

> * * * that all permits for exploration and exploitation of the seabed 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.

In fact, existing legal arrangements do not satisfy the policy proposed in the President's statement nor do they meet industry's needs in the face of a rapidly developing technology that is making possible the practical exploitation of the oceans' depths beyond 200 meters in the near future. The most serious needs are (1) to establish the secure investment climate for the commitment of substantial funds to ocean mining; and (2) to provide for security of tenure beyond the limitation of national jurisdiction.

The necessary legal arrangements to operate in the area extending to the seaward limit of the Continental Shelf as defined in the 1958 Geneva Convention are basically provided for by existing legislation in the form of the Submerged Lands Act and the Outer Continental Shelf Lands Act. The 1958 Geneva Convention provided:

ARTICLE 1

> For the purpose of these articles, the term "continental shelf" is used as referring (a) to the seabed and subsoil of the submarine areas adjacent to the coast, but outside the area of the territorial sea, to a depth of 200 meters, or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas; (b) to the seabed and subsoil of similar submarine areas adjacent to the coasts of islands.

ARTICLE 2

> 1. The coastal State exercises over the continental shelf sovereign rights for the purpose of exploring it and exploiting its natural resources.
> 2. The rights referred to in paragraph 1 of this article are exclusive in the sense that if the coastal State does not explore the continental shelf or exploit its natural resources, no one may undertake these activities, or make a claim to the continental shelf, without the express consent of the coastal State.
> 3. The rights of the coastal State over the continental shelf do not depend on occupation, effective or national, or on any express proclamation.
> 4. The natural resources referred to in these articles consist of the mineral and other non-living resources of the seabed and subsoil together with living organisms belonging to sedentary species, that is to say, organisms which, at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil.

ARTICLE 3

> The rights of the coastal State over the continental shelf do not affect the legal status of the superjacent waters as high seas, or that of the air space above those waters.

However, this present legislation in the form of the Submerged Lands Act and the Outer Continental Shelf Lands Act has not encouraged "hard rock minerals" exploration and exploitation on the Continental Shelf.

In order to provide the necessary encouragement, domestic legislation in the form of an amendment to the Outer Continental Shelf Lands Act is required to permit free, nonexclusive prospecting with-

out prior authorization and subsequent disclosures of information obtained from such prospecting.

An amendment of this nature would encourage pioneering efforts to prospect and develop "hard minerals" on the Continental Shelf.

The amendment to the act should further provide the right to obtain exclusive authorizations to explore and exploit a specific area on a "first-in-time, first-in-right" basis.

Further, the amendment should provide that the terms and conditions of all authorizations granted prior to the ratification of the proposed draft treaty continue in full force and effect so long as said authorizations exist and not subject to the imposition ex post facto regulations which could be imposed by some future international treaty.

In previous testimony before this committee, we indicated that financial incentives were desirable and, from the various alternatives given to us at that time, the incentives in the form of tax easements were by far the most desirable.

Another major incentive to the mining industry would be the enactment of an amendment providing for the acquisition of "hard minerals" authorizations on the Outer Continental Shelf on a royalty-free basis.

All activities under the protection of the above legislation, or amendments thereto, should be considered for all tax, tariff, import, export, depletion, and depreciation purposes as domestic production.

The American Mining Congress declaration of policy on undersea mineral resources states in part:

> Eventually more precise international arrangements and possibly new legal concepts may be needed to assure a favorable international context for extensive deep ocean mining. Until such an overall international agreement is reached, we recommend that the United States cooperate with other nations in establishing at the earliest possible time a pattern of rules and practices to be observed by common accord, and eventually to form the basis for a formal agreement to assure freedom of development of the deep ocean and security of tenure to those engaged in mining on and under the ocean floor in compliance with such rules.

Thus, in the area beyond national jurisdiction we believe it is essential to establish interim arrangements whereby operators may actively prospect, explore, and exploit for marine minerals.

In order to provide the necessary incentive for this activity prior to the establishment of an international agreement, Congress should enact legislation to assure security of investment and the control of the ocean activities of U.S. citizens. The assurance of the security of investment could be in the form of financial protection against losses resulting from foreign interference with or disruption of mining operations conducted by U.S. nationals.

Of course, this protection should not be extended to risks which are subject to private insurance coverage at reasonable rates. This suggested legislation would protect the ocean miner against the largest financial risks he would face during the interim period—namely, interference from others and lack of security of tenure. Neither of these risks would qualify for, nor could an operator obtain, protection against them under ordinary insurance at reasonable rates.

The control of the ocean activities of U.S. citizens would provide tangible benefits in providing at least internal control in the deep ocean area. More importantly, it might establish a customary pat-

tern of rules and practices that could be the basis for agreement with like-minded nations.

The draft treaty represents a tangible step in the direction of providing "the more precise international arrangements" mentioned in the American Mining Congress declaration of policy.

We applaud this attempt to progress in the establishment of more precise international arrangements in the seabed area beyond national jurisdiction.

The U.S. Government is, I think, to be commended for taking this initiative. Many worthwhile concepts have been included in this draft and some of the needs of industry have been considered.

However, we also believe that modifications must be made in the draft treaty as presently constituted to achieve the requisite incentive for industry to step up its efforts in the recovery of seabed resources.

Apart from our specific suggestions for various provisions of the draft, we believe that article 73 of the draft poses serious uncertainties for those in the mining industry who may wish to carry on operations in Continental Shelf areas beyond the 200-meter depth. These Continental Shelf areas are now subject to national jurisdiction and, in the case of the U.S. shelf, may be the subject of rights granted under the Outer Continental Shelf Lands Act and possible future domestic legislation.

Under article 73, all exploration and exploitation permits authorized by a contracting party in the area beyond 200 meters after July 1, 1970, must be converted into new licenses under the authority of the international seabeds authority established by the draft treaty within 5 years after the treaty is in force. At the moment, no one knows what license provisions will ultimately be included in the final text of this treaty.

Clearly, therefore, the approach taken by article 73 creates serious uncertainties in the interim period and inevitably inhibits the incentive to search for and develop minerals. Moreover, this defect in article 73 impairs the secure investment climate which is a prerequisite of the obtaining of investment-risk capital in the interim period.

We also object to the implication in article 73 that nations may now be entitled to grant exclusive or other rights with respect to seabed areas which are beyond presently recognized limits of national jurisdiction. We doubt that the U.S. Government is prepared to grant these rights to its nationals, but we cannot assume that other governments would take the same position.

Accordingly, any such implication is clearly undesirable in principle and to the extent that it may give other nations a prior position in seeking licenses under the treaty with respect to areas of the seabed now beyond national jurisdiction. If this implication is allowed to remain, it will certainly create the "land rush" referred to by the various United Nations committees.

Nevertheless, some provisions must be made with respect to operations undertaken in the area beyond national jurisdiction to recognize them under this treaty without imposing on an operator ex post facto requirements.

In our judgment, the draft treaty as presently constituted does not

provide sufficient incentive to industry to step up its efforts in the recovery of seabed resources in areas that would be subject to the treaty.

In the following statements, we do not intend to comment on each specific item in the draft treaty, but we would like to highlight the following provisions:

1. The draft treaty proposes the establishment of an international seabed authority that appears to be unnecessarily elaborate. It is feared that this type of organization will encumber the exploration and exploitation of marine mineral resources through administrative red tape and the imposition of financial burdens. Simplicity and efficiency without unnecessary expense should be the prime goals of any seabed authority that is established.

2. We are in agreement with that basic concept of the draft treaty in which operators should be responsible to the trustee or the contracting party and they, in turn, be responsible to the proposed international authority.

3. In the "hard minerals" world, it is customary when we refer to the development of raw materials to speak and think of three distinct stages—prospecting, exploring, and exploiting—as applied to the seabeds. These stages may be described as follows:

(*a*) Prospecting—this first stage is open to all on a nonexclusive basis for the purpose of making geophysical and geochemical measurements or bottom sampling so long as such prospecting is carried on in a manner that does not significantly alter the surface or subsurface of the seabed;

(*b*) Exploring—this second stake covers the intensive work in a specific area covered by an exclusive right;

(*c*) Exploiting—this third stage consists of the actual recovery of the mineral.

We are of the opinion that prospecting should be recognized as an activity which may be carried on without the necessity of applying for a license.

Accordingly, we recommend that article 75.7 of the draft treaty be amended to exclude prospecting activities. This might be accomplished by adding the following after the first sentence of article 75.7:

> The term does not refer to scientific research nor does it refer to prospecting from surface, submarine, or airships for the purpose of making geophysical and geochemical measurements or bottom sampling, so long as such prospecting is carried on in a manner that does not significantly alter the surface or subsurface of the seabed.

4. The mining industry does not agree that all of the information required under the reporting provisions of the draft treaty is necessary. It is not necessary to submit all of the details related to the methods, equipment, techniques, and results of work done under the various authorizations.

Industry should not be required to supply proprietary information, trade secrets, interpretations of data, or any processes, methods and techniques utilized at sea or in land-based operations. Complete disclosure will place the operators in a disadvantageous position due to the very competitive nature of the business.

We do not mean to exclude data (available to trustee or the authority at its expense) which is required to establish conformance with general regulations to be met under the licensing requirements, for example, environmental protection.

It is desirable, of course, that data necessary for the trustee or the authority to satisfy itself that standards established to protect the environment and to prevent interference with other uses should be made available and be open to public inspection.

Beyond that, the reporting and monitoring envisaged would—so far as hard mineral mining is concerned—serve only to impede any utilization of the category 5.1 (b) and (c) resources of the deep seabed.

5. We recommend that the only disclosures required should be those which are necessary to certify the correctness of the amounts payable to the contracting parties or which bear directly upon compliance with minimum work requirements and environmental standards.

APPENDIX A

6. There appears to have been a typographical error in our copy of the draft treaty with respect to the lack of an exclusive right in the licenses for category 5(b) minerals. It should be made clear in appendix A of the draft treaty that all exploration and exploitation licenses will assure to the licensee an exclusive right to explore and exploit in a specific area all minerals in category 5.1 (a), (b) or (c) for which application has been made.

7. Careful consideration should be given to prevent the acquisition of large, contiguous blocks of the seabed which may be controlled by one nation or a group of nations acting together. A procedure should be developed which will establish a limitation on any one nation or group of nations. A limitation on acquisition of large blocks of the seabed would aid in the assurance to all contracting parties that there will be a great land rush to acquire rights within the deep ocean area. The treaty should not lend encouragement to those who may be mainly interested in control of mineral reserves for international political reasons.

8. The intent of the draft treaty is to provide a regime which will encourage the development of the marine mineral resources. The regime should discourage speculation or speculators from acquiring authorization for resale or assignment.

9. It is the opinion of the mining industry that, in general, there are far too many fees, rentals and bonuses required under the draft treaty. This pyramid of fees, rentals and bonuses creates a large front load on a very high cost exploration and exploitation project.

We recommend that the front-end payments be abolished but that the minimum work requirements be substantially increased and the time limit for partial relinquishment of the blocks for the 5 (b) and (c) minerals be substantially shortened to, say, 4 years instead of the 15 years now permitted under the draft treaty. In this manner, industry will be able to put the money in the ground and more rapidly develop the marine mineral resources.

10. We find the provisions of Nos. 10 and 11 in appendix A pertaining to the payments on production and the graduation of payments according to environment and other factors unworkable as applied to operators sponsored or authorized by governments with very different economic systems, taxing and accounting concepts.

We recommend that these paragraphs be rewritten based upon a system under which the sponsoring or authorizing party makes payments to the authority based upon units of an area under license or units of production or other basis, uniform for all sponsoring parties, and the operator (if not itself an agency of the sponsoring party) makes payment to its sponsoring or authorizing party on a basis fixed by the government of that party under its own taxing and policy concepts.

Some sponsoring or authorizing parties may be desirous of bringing into their economy without drain on their balance of payments minerals found on or under the seabed so as to subsidize their operators by payments or by taxes lower than those levied on operators working only on land.

The operator with a subsidy—and an operator that is an agency of a socialistic state—could easily outbid a private operator, in case of a competitive bid, that had to bear all of its costs.

Other parties—and the United States might well be one of them—would want to make sure that the operators they sponsored or authorized did not have to pay more than they would if operating wholly on land.

Owing to the novelty and uncertainties and to encourage venture capital, the United States might well wish to legislate a tax holiday for all American operators on the deep ocean bed during the first 5 years of all production begun before, say, 1980. The tax payable by the operator should, in any case, be measured by the economic success of the venture.

In view of the extra hazards and the interest in encouraging venture capital, the rate might well be less than that on profits from proven land-based ventures.

Yet the United States and other developed countries might well be prepared to pay to the authority amounts in excess of its collections to be made available to aid developing countries.

Under AID, we are already giving sums larger by far than the total payments likely to be made to the authority by the United States for decades to come. With a prospect of receiving assured amounts, the developing countries might become enthusiastic supporters of a satisfactory international deep seabed regime. They might also see the advantages to them of a simple organizational structure with low administrative expenditures.

We would suggest that the draft treaty paragraphs under discussion be revamped to provide for payments by sponsoring and authorizing parties leaving up to them the taxes to be assessed against the operator.

If the provisions of paragraphs 10.1 and 10.2 of the draft treaty would have been applied by the Government of the United States to operators it authorized or sponsored, we would find many questions that remain to be answered.

We believe that within the range of the bonuses and percentages proposed and based on possible interpretations of the meaning of "gross value at the site" the payments assessed probably would make ocean mining economically unthinkable.

APPENDIX B

11. We recommend that applications or notices of intent be handled on a "first-in-time, first-in-right" basis. The first operator to submit and file an application or notice of intent should be granted the license, subject to assuring financial and technical competence.

The sponsoring party should obligate itself to sponsor the first applicant to submit and file a notice of intent.

We recommend that competitive bidding be required only when two or more notices of intent are filed simultaneously. The bidding should be based on the amount of the minimum work requirement guaranteed in a specific time period. The license should go to the operator bidding the larger minimum work guarantee. This method will assure the most rapid development of a specific block in a given time period.

12. The mining industry has some concern why an area which at one time was included in a license and later forfeited or relinquished should be treated any differently than any other unlicensed area.

13. The exploitation period should be for a minimum period of 40 years and so long thereafter as commercial production is maintained.

Again, we appreciate the opportunity afforded to us to appear before you today to present the testimony on this important subject.

We assure you that the mining industry is vitally concerned and endorses continued direct consultation between its representatives, the Congress and the executive branch of the Government of the United States relative to this subject of U.S. seabeds policy.

Thank you.

Senator METCALF. Thank you, Mr. Ary.

We are certainly encouraged by your statement.

We will be glad to continue to consult you.

Before I ask questions, under the previous ground rules we have laid down I will ask Mr. Luke Finlay on behalf of the American Petroleum Institute to continue.

STATEMENT OF LUKE W. FINLAY, ON BEHALF OF AMERICAN PETROLEUM INSTITUTE

Mr. FINLAY. Mr. Chairman, members of the committee, I am pleased to have this opportunity to appear before this subcommittee in response to the invitation extended to Mr. Frank N. Ikard, president of the American Petroleum Institute.

I am an international lawyer specializing in matters of interest to the petroleum industry, and am chairman of the API Ad Hoc Committee on Mineral Resources Beneath the Seas. It is in this capacity that I am appearing today.

Until my retirement last December, I was for many years an attorney and executive of the Standard Oil Co. of New Jersey.

The letter of invitation to Mr. Ikard asked for views on two points:

1. The contents of the August 3, 1970 draft convention submitted by the U.S. delegation to the United Nations Seabed Committee at its recent session in Geneva, Switzerland; and

2. The sufficiency of the incentive provided by existing legal arrangements to encourage increased efforts in the recovery of seabed resources.

On May 23, 1970, the President announced his administration's policy for the development of seabed resources lying beyond 200 meters in depth. I shall make clear that in several critical aspects the President's statement raises key questions which are of deep concern, but many more issues of comparable gravity are raised in the draft convention which has been brought forward in working paper form as the instrument to implement his policy.

The draft convention of August 3, with its appendices, covers some 70 pages and undertakes, among other things, to establish a comprehensive petroleum and mining code for the entire seabed area of the high seas beyond the depth of 200 meters.

A matter of this complexity involves many kinds of expertise: That of the international lawyer, the concession negotiator and the international tax specialist, and that of geologists, drillers, producers, and economists skilled in the many aspects of offshore operations.

Proposals of this sort would normally be the subject of many months of discussions between Government officials and their technical advisers on the one hand and industry experts on the other before they were reduced to definitive form.

Since discussion of these details has not yet been completed, I propose with your indulgence to limit my comments on the draft to two general points:

First, its critical failure to protect essential U.S. national interests in the mineral resources of the U.S. continental margins; and

Second, the stifling effect that it would have on the future development of the U.S. Outer Continental Shelf beyond the 200-meter isobath if it were adopted as official U.S. policy.

Although the August 3 draft is designated as a working paper for discussion purposes, the general tenor of the remarks of the U.S. spokesmen at the August meeting of the United Nations Seabed Committee seemed to be that it was something that the United States was prepared to accept if the other nations would go along.

The Department of the Interior has requested the views of the National Petroleum Council on the detailed provisions of the August 3 draft and the report of the NPC will presumably be available to your subcommittee once it has been submitted to the Department of the Interior.

If, after review of that report, you should desire the further views of the API, we would be most happy to respond.

Similarly, if, after our own review of the NPC report, we should feel that further comments from the API might be helpful to your subcommittee, we would like to feel free to take the initiative in suggesting a further appearance.

The August 3 draft convention is critically defective in its failure to provide adequate protection to U.S. offshore mineral interests.

My first point is that the August 3 draft convention is critically defective in its failure to give adequate and lasting protection to the vital interests of the United States in the mineral resources of the U.S. continental margins beyond the 200-meter isobath.

Before explaining my reasons for this conclusion, however, I would like to refer by way of background to a statement of policy of the API on *Jurisdiction Over the Natural Resources of the Ocean Floor.* As set forth in the preamble to this statement:

> Low-cost domestic energy resources have been the cornerstone of this nation's unprecedented growth. Energy, in ample supply and reasonably priced, is vital to economic progress, industrial expansion, and national security.
>
> Three-quarters of America's energy requirements are supplied by petroleum—oil and natural gas. They provide the fuels for the nation's transportation network and its armed forces and for most of the country's industrial power and residential heat. They are the raw materials for countless other products which have become essential to the national well-being.
>
> Because energy from oil and natural gas plays such a critical role in the nation's overall security and strength, our national policy has had as one of its prime objectives the fostering of a healthy and expanding domestic petroleum producing industry. America's future growth and security dictate that this goal continue to be a fundamental tenet of United States policy.
>
> Demand for oil and natural gas in the years ahead, according to both industry and government estimates, will far outstrip the current level of consumption. If these ever-increasing needs are to be met, the nation must look to all domestic sources of petroleum, both onshore and offshore, to the full limit of United States jurisdiction over seabed resources. The seabed resources over which the United States, as a coastal nation, has national jurisdiction, are particularly vital to the nation's future, for they may well spell the difference between continued adequacy of domestic petroleum supplies and excessive dependence on potentially interruptible foreign oil supplies.

On the basis of these salient facts, backed by an intensive study of the law of the Continental Shelf from the standpoint of both conventional and customary international law, the board of directors of the API on November 10, 1969 adopted the following statement of policy:

> Exclusive jurisdiction over the natural resources of the seabed adjacent to the United States coasts, including the entirety of the submerged continent out to where it meets the abyssal ocean floor, is this nation's right as confirmed by the 1958 Geneva Convention on the Continental Shelf. The importance of these ocean floor resources to the nation's future economic growth and security is such that the United States should unequivocally assert, in concert with other like-minded nations, its full rights as confirmed by that Convention.
>
> As for the ocean floor beyond national jurisdiction, much more needs to be known about the deep sea environment before intelligent consideration can be given to the formulation of a definitive system to govern the exploitation of the natural resources of these areas. Until that knowledge is at hand, decision on the precise arrangements to govern deep sea exploitation beyond national jurisdiction should be deferred.

President Nixon, in his statement of May 23, 1970, on U.S. Oceans Policy, rejected the view that the United States should assert its full rights over the natural resources of the entire continental margin. He proposed, instead, that all nations should join in an international 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.

At the same time, the President proposed as an integral part of his policy 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.

Under Secretary of State Richardson, in explaining President Nixon's proposal to the Metcalf subcommittee on May 27, 1970, testified (transcript at page 443) that the power of the coastal nation as trustee—

> Would derive by treaty, and it would be safeguarded by treaty and not subject to revocation by the international regime.

Let us look, then, to the August 3 draft convention to see whether the rights of the United States are, in fact, effectively protected.

Article 1 of this convention would establish as the common heritage of all mankind an international seabed area. It would comprise not only that portion of the seabed lying beyond the jurisdiction of coastal nations under present international law but also that portion within their jurisdiction which lies under the high seas beyond the 200-meter isobath.

Article 2 purports to preclude any nation, whether or not a party to the convention, from claiming or exercising sovereignty or sovereign rights over any part of the international seabed area or its resources. It would bind contracting parties not to recognize any such claim or exercise of sovereignty or sovereign rights. It would limit the rights of all nations in the international seabed area (again, whether contracting parties or not) to those acquired under the convention.

This, of course, is a sharp departure from the present rights of the United States under the Geneva Convention on the Continental Shelf and customary international law and from those explained to the U.S. Senate when that convention was ratified.

Article 77 would permit a nation to withdraw from the convention but, as it is totally silent regarding the rights that a withdrawing party would take with it, the clear implication is that it would take none whatever. This is the disastrous, but, nonetheless, inevitable, result that would flow from the withdrawing party's previous commitment that its rights to the Continental Shelf beyond the 200-meter isobath were irrevocably renounced.

Nor can the matter be brushed away with the comment that the United States would never have occasion to withdraw from the convention. "Never" is a long time and we are faced here with an entirely new and untried type of international arrangement. It is characterized by a current and inevitably continuing effort of the developing nations, who constitute a heavy majority of the United Nations membership, to obtain the controlling voice in the international regime. To them, "one man, one vote", when translated to United Nations' parlance, means "one nation, one vote".

However justified this view may be in other areas of international activity, it is hardly in the U.S. national interest to allow this doctrine to govern the mineral resources of the U.S. continental margins.[1]

[1] It is also perfectly clear under article 76 that the developing countries as a group, or any one of the six most industrially advanced nations (for example, Russia), could effectively bar any amendment to the convention which the United States might find essential for the protection of its national interest.

Nor was our concern lessened by a statement of the U.S. Delegate to the United Nations Seabeds Committee on August 28, 1970.

In attempting to alleviate the fears expressed by some of the other delegates that the U.S. draft convention would give the coastal nations excessive powers in the international trusteeship zone, he stated that:[2]

> While the coastal state does have limited, important functions, the international machinery has a supervisory role in the trusteeship zone, including such powers as inspection and suspension of licenses and of the trusteeship itself in certain cases.

And I repeat, "and of the trusteeship itself in certain cases."

It was startling to note that in the same statement the U.S. delegate characterized the Continental Shelf rights of the coastal nations under present international law as inequitable and in need of being brought into proper relationship with international community interests.

"Inequitable" is hardly the term to apply to rights that the International Court of Justice had described only a year previously in the following incisive language:[3]

> . . . What the Court entertains no doubt is the most fundamental of all the rules of law relating to the continental shelf, enshrined in Article 2 of the 1958 Geneva Convention, though quite independent of it,—namely, that the rights of the coastal State in respect of the area of continental shelf that constitutes a natural prolongation of its land territory into and under the sea exist ipso facto and ab initio, by virtue of its sovereignty over the land, and as an extension of it in an exercise of sovereign rights for the purpose of exploring the seabed and exploiting its natural resources. In short, there is here an inherent right.
>
> . . . To echo the language of the Geneva Convention, it is "exclusive" in the sense that if the coastal State does not choose to explore or exploit the areas of shelf appertaining to it, that is its own affair, but no one else may do so without its express consent.

Because of the killing effects of the proposed renunciation of all rights of the United States to the natural resources of the continental margin beyond the 200-meter isobath and their irrevocable dedication to the common heritage of all mankind, the problem cannot be solved by minor changes in the August 3 draft convention.

Instead, a reconsideration of the President's May 23 statement on U.S. oceans policy is urgently needed as the only adequate answer to the problem.

If there was ever any doubt regarding the essentiality of the United States retaining effective control over the energy resources of its continental margins, that doubt should have been dispelled by recent events.

The shutdown of a single pipeline in the Middle East with a capacity of about 500,000 barrels per day and a 780,000 barrels per day cutback of production in the single Arab country of Libya, added to the earlier closure of the Suez Canal, have created a tanker shortage which has skyrocketed tanker rates and has had a serious impact on the supply of foreign oil to both Europe and the United States.

For the week ending September 4, 1970, U.S. stocks of crude oil of foreign origin were down 4.6 million barrels, or almost 25 percent, from those of a year earlier, and, if stocks of Canadian origin were

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[2] See Press Release of the U.S. Mission, Geneva, covering the statement of Ambassador Christopher H. Phillips, made to the United Nations Seabeds Committee on August 28, 1970.

[3] Opinion of the Court, para. 19. North Sea Continental Shelf Cases (1969), I.C.J. Rep. 3 at 22; 63 A.J.I.L. 591 at 602–603 (1969); 8 Int. Legal Materials 340 at 357 (1969).

excluded, the decline would undoubtedly have been considerably higher.

Similarly, total stocks of residual fuel oil, which is largely of foreign origin, were down 15.1 million barrels, or 23 percent.

Possibilities such as this have long been apparent to industry experts but have only recently become apparent, in their full significance, to the responsible officials of the executive branch, who are currently dealing with the projected fuel shortage in the months ahead.

The matter could not have been better stated than in the August 13, 1970, letter to President Nixon from Gen. G. A. Lincoln, Director of the Office of Emergency Preparedness and Chairman of the President's Oil Policy Committee. The pertinent portions of his letter are as follows:

> 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 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 above 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 a 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 United States dependence.
>
> Because of these factors, the Oil Policy Committee concurs with my judgment that we discontinue consideration of moving to a tariff system 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.

The message of this letter, and particularly of the last two sentences, is loud and clear. It is regrettable that it reached the President after his May 23 decision on U.S. oceans policy.

As you, of course, are well aware, the President acted favorably on General Lincoln's letter and it is not too late for him to reconsider his statement on U.S. oceans policy in the light of the new evidence so cogently laid down by General Lincoln.

What is needed is an abandonment of the proposed renunciation by the coastal nations of all national rights beyond the 200-meter isobath. For it, there should be substituted a proposal that all nations join in

a treaty which would firmly establish the outer limit of coastal nation jurisdiction over seabed resources at the outer edge of the continental margin.

In exchange, the coastal nations would commit themselves to other proposals of the President's May 23 policy statement. You could call this commitment a form of trusteeship, if you wish. The commitment could include:

(*a*) Dedication of a substantial portion of the governmental revenues from that portion of the continental margin beyond the 200-meter isobath to international community purposes and particularly economic assistance to developing countries.

The amount of the dedicated revenues could be the same as under the President's proposal, but with the important difference that the international seabed area and the common heritage of mankind would begin at the outer edge of the continental margin, rather than at the 200-meter isobath.

The payments to the international regime and other undertakings on the part of the coastal nations would be in exchange for international agreement clarifying the extent of their rights. There would be no recognition of any overriding rights of the international regime as guardian of any common heritage on the continental margins.

(*b*) Prevention of unreasonable interference with other uses of the margin. With the change in approach, there would be no need to limit this undertaking to the area beyond the 200-meter isobath. It could apply to the entire high seas area, beginning at the outer limit of the territorial sea.

(*c*) Protection of the entire high seas area from pollution. Here again, under the revised proposal there would be no need to limit the commitment to the area seaward of the 200-meter isobath, though it would be essential to assure the reasonableness of any international standards. This is not likely to be a practical problem because the United States will probably have higher domestic standards than most other treaty participants.

(*d*) Assurance of the integrity of investment necessary for exploitation.

(*e*) Provision for peaceful and compulsory settlement of disputes.

(*f*) Encouragement of scientific research. Here again, under the revised proposal, the undertaking could be broad enough to take in the entire high seas area, including that portion landward of the 200-meter isobath.[4]

In our judgment, such an approach would be infinitely preferable to the May 23 approach.

A further statement of Presidential policy for the transitional period is urgently needed. President Nixon, in his May 23 policy statement, said:

> . . . I do not . . . 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

[4] Encouragement of scientific research was not mentioned in the President's May 23 policy statement but was added by Secretary Richardson in his appearance before the Metcalf subcommittee on May 27.

beyond 200 meters be issued subject to the international regime to be agreed upon.

The regime should accordingly include due protection for the integrith 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.

Paragraph 1 of article 73 of the August 3 draft convention is in line with the President's objective in stating 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 convention.

The balance of the article completely undoes this protection, however, by saying that authorizations, which in our case means OCS leases, issued on or after July 1, 1970, shall either be made subject to the provisions of the convention in their entirety or shall be null and void 5 years after the coming into force of the convention.

It is pointless to examine the precise extent to which the August 3 draft would impose additional obligations on OCS lessees and the extent to which the United States would be committed under the convention to save them harmless against these added obligations (see paragraphs 2d, 3, and 6 of article 73).

This cannot be determined until a definitive, internationally agreed text has been hammered out at the negotiating table, and as the President, himself, said, this is many years away. In the meantime, there is no assurance whatever that any particular provision of the August 3 draft will survive the negotiating process.

The crucial point is that it is fundamentally wrong to subject OCS lessees to the unknown terms of a convention yet to be negotiated. To do so would be to fly in the face of the time-tested adage that one should not buy a pig in a poke, a piece of practical commonsense that becomes an imperative when one is dealing with investments of tens of millions of dollars of the type that have become commonplace on the Outer Continental Shelf.

Nor would it be enough for the administration, even with full congressional authorization, to undertake to compensate OCS lessees for any investment losses resulting from the application of the convention, as is visualized in paragraph 6 of article 73 of the August 3 draft.

Repayment of investment losses would not be an adequate measure of compensation. Moreover, under any test written into the convention, the very act of measuring the proper amount of compensation would be an involved and uncertain operation at best.

More importantly, OCS lessees cannot be expected to take the heavy risks involved in this type of operation if faced with the added risk that on the very threshold of an important discovery they might become subject to an entirely new and unexpected set of regulations that could totally frustrate their venture. In operations of the magnitude here involved, the lessees need, and are justified in demanding, assurance that the rules of the game will remain unchanged for the life of their leases.

As we see it, achievement of President Nixon's objective of promoting the active development of the Outer Continental Shelf beyond the

200-meter isobath during the negotiating period requires an entirely different approach. What is needed, in our judgment, is a further announcement of Presidential policy along the following lines:

1. Until such time as the definitive text of an internationally agreed convention is available as a point of reference, no commitment will be added to OCS leases subjecting them to the terms of an international convention.

2. Any payments that may be made to an appropriate international development agency for assistance to developing countries, or to an eventual international regime, in connection with operations under OCS leases executed prior to an agreement on the definitive text of the international convention, will be made an obligation of the United States and will have no effect whatever on the obligations of the OCS lessees under the terms of their leases.

3. No international convention will be accepted by the United States which would force it to modify the rights of lessees under previously executed OCS leases. This would not preclude the United States from accepting reasonable, internationally agreed standards governing such matters as the prevention of unreasonable interference with other uses of the ocean, the protection of the ocean from pollution, the assurance of the integrity of investment necessary for exploitation and the provision for peaceful and compulsory settlement of international disputes.

I wish now to refer to S. 3970, introduced by Senator Metcalf for himself and Senator Bellmon. It would amend the Outer Continental Shelf Lands Act to provide that:

> . . . With respect to any lands which lie seaward and outside the seaward boundaries of the States as defined in section 2 of the Submerged Lands Act (Public Law 31, Eighty-third Congress; 67 Stat. 29) and which are seaward of the two hundred meter depth line, in shall be the policy of the United States that the development of the natural resources of the subsoil and seabed of the Outer Continental Shelf should be regulated by international treaty providing in part for the dedication and use of a portion of the revenues from such development for the benefit of all mankind.

We urge that no action be taken on this bill at the present time. In the first place, it is inconsistent with our recommendation that the President modify his May 21 policy statement to redefine the international seabed area to commence at the outer edge of the continental margin.

Favorable action on this recommendation would leave the regulation of the entire Outer Continental Shelf in the hands of the United States.

Compliance with internationally agreed standards on such matters as the protection of the ocean from pollution would fall far short of regulation of the outer portions of the Outer Continental Shelf by international treaty, as visualized in S. 3970.

The August 3 draft convention visualizes a degree of detailed control by the international regime over the international trusteeship zone that goes far beyond anything suggested by President Nixon in his May 23 policy statement or Secretary Richardson in his May 27 appearance before the Metcalf Subcommittee.

It is only because our recommendation for the elimination of the

trusteeship zone would obviate this problem that I have refrained from discussing it.

Even if basing American interests could be given lasting protection under the trusteeship concept, which they cannot, we would have favored the kind of broad administrative authority in the coastal nation that we feel was inherent in President Nixon's policy statement as explained by Secretary Richardson, in preference to the extremely detailed control by the international regime that is inherent in the August 3 draft.

In the second place, S. 3970 would seem to subject the holders of OCS leases executed after its date of enactment to the unknown terms of a future treaty and thus would raise the same objection that I have previously voiced with respect to the transition provisions of the August 3 draft convention.

It would be preferable, in our view, to hold S. 3970 in abeyance until an internationally agreed text of the proposed convention is available for consideration.

I might add at this point that we think it is most important that this committee retain jurisdiction because the Outer Continental Shelf Lands act is inextricably interrelated with any proposals to be considered.

In the meantime, we would welcome any support that the subcommittee is able and willing to give to our recommendation that OCS lessees be assured that they can safely expend the vast sums necessary to exploit their leases for their full life without fear of a unilateral change in their terms by the U.S. Government.

With appropriate administrative action, existing legislation is sufficient to encourage increased efforts in the recovery of seabed resources.

In closing, I would like to refer briefly to the second question put to Mr. Ikard, whether existing legal arrangements are sufficient to encourage increased efforts in the recovery of seabed resources.

Many aspects of the Outer Continental Shelf Lands Act were considered at some length by the Public Land Law Review Commission and were covered in its report, one third of the Nation's land, which was submitted to the President and to Congress on June 20, 1970. Presumably they will be considered at another time in conjunction with that report.

If the President were to take favorable action on the recommendations that I have made earlier in my testimony, we would see no treaty-related need for any change in existing legislation.

Mr. Chairman, may I express my gratitude for the opportunity to make this presentation on behalf of the American Petroleum Institute.

Senator METCALF. May I express my gratitude on behalf of the subcommittee for your appearance here this morning and your very careful analysis, both of the present state of the law and the suggestions for future conduct of the committee.

Mr. FINLEY. Thank you.

Senator METCALF. I want to say that we on the subcommittee have insisted and continue to insist that the proposal that was presented by the American delegation at Geneva is not an approved draft treaty. We don't give it that status. This subcommittee did not endorse it and

does not endorse it in its present deplorable form. We continue to insist that it is only a working paper.

I know that sometimes in the discussion I have said, and Senator Hansen has said, and I think in the reading of Mr. Ary's statement he called it a draft treaty, and probably will again, but, in my discussions with the State Department's legal adviser we called it a working paper.

Now I have some questions.

As I understand it, Mr. Finlay's position is that the Senate Interior Committee should have continued jurisdiction over the Outer Continental Shelf but in your opinion no legislation is necessary at this time.

You put a condition on that, if there were a change in Presidential policy. Suppose there is not any change in Presidential policy and Congress feels that it is in the best interest of American development of our resources to assert our jurisdiction to the continental margin, what should be done?

Mr. FINLAY. Mr. Chairman, if the Secretary of the Interior were to put out regulations under his rulemaking power under the Outer Continental Shelf Lands Act, which probably would not be broad enough to cover this particular point, saying that any future lease subsequent to the effective day of the regulations would be subject to the terms of a treaty yet to be negotiated, the industry would be in an utterly impossible position and at that point if we could not resolve the matter administratively, I feel quite confident that we would want to come to this committee and your corresponding committee in the House and request legislative assistance.

Senator METCALF. Suppose nothing is done?

Mr. FINLAY. If nothing is done, we are in a little different position from the hard minerals industry, Mr. Chairman, in this respect:

Any search for oil and gas beyond the jurisdictional scope of the Outer Continental Shelf Lands Act is so remote and indefinite that it would be entirely premature for us to talk today about what is needed to hunt for oil and gas on the abyssal ocean floor.

On the other hand, there are hard minerals out there that are not nearly so remote. So, whenever the hard minerals people need to go after the manganese nodules beyond the outer edge of the continental margin, as Mr. Ary has said, they want security of tenure just as we have on our leases on the outer continental shelf.

As of this moment, I would not regard the Outer Continental Shelf Lands Act as extending generally to the abyssal ocean floor because I think the scope of the application of that act is limited by the United States national rights under the Geneva Convention and customary international law which we construe as generally extending to the outer edge of the continental margin but in cases, and there are some off the west coast of the United States, where you have precipitously dropping coastline such as you have on the west coast of South America, I think the international law and certainly the Geneva Convention would cover some reasonable distance out on to the abyssal ocean floor in that limited type of situation, just because it would be unreasonable to have foreign citizens or governments looking for natural resources on the seabed immediately outside the territorial sea of the country.

Senator METCALF. Yesterday, one of our witnesses said that he did

not think that under international law we have exclusive jurisdiction beyond the continental margin.

Mr. FINLAY. As to that, there are one or two exceptions I would make.

One is, semi-enclosed seas could conceivably be regarded as subject to the median line principle of the surrounding States and then the principles on which President Truman enunciated his continental shelf-problamation in 1945 on the need for self-defense and the basic interest of the coastal State, I think we should assure them against internationalizing the seabed too close to their shores.

As I say, there are some places where the outer edge of the continental margin does not go beyond the territorial sea, certainly it would not go beyond it if it is extended to 12 miles.

The Ciudad-Trujillo resolution, which we feel was incorporated in substance into the Geneva Convention, deliberately used the general language that was selected in order to give equity to countries such as Chile and Peru and, as I say, it also applies to parts of the west coast of the United States.

Senator METCALF. Do you agree with that, Mr. Ary?

Mr. ARY. Speaking to the deep ocean area, with respect to the concept under the freedom of the seas, I don't think that the coastal nations have any sovereign rights. However, I do believe that we all have the right of a concept under the law of the capture. If we go out and we harvest nodules and get get them in the boat, they should be ours because at the present time no one has sovereign rights and we are all out there on a first-come, first-served basis.

Mr. FINLAY. I may say, Mr. Chairman, that the prospect of oil exploration and exploitation on the deep ocean floor, whether it be 5 miles from the shore or 100 miles from the shore, is so remote that we would not feel the need for any clarification of the application of the Outer Continental Shelf Lands Act to that particular situation.

I don't believe it is a practical problem for the hard minerals industry because I feel these nodules tend to be far enough out in the ocean so that you don't get into this gray area on the one particular case such as the west coast of South America.

Do you agree with that, Mr. Ary?

Mr. ARY. This is generally true.

Mr. FINLAY. If you have a particular situation where it is necessary to pinpoint jurisdiction over some deep seabed area immediately adjacent to the coast of the United States, I would think that would be the time to take legislative cognizance of it and not right now.

Senator METCALF. You don't envisage any problem arising in the immediate future where technology would permit us to develop resources beyond the continental margin?

Mr. FINLAY. The things that are being done—and you are well familiar with the Global Challenger, of having a reentry capability in thousands of feet of water, might make it technically feasible to find the oil.

There is another question of the completion of the well and putting it into production but hunting for oil is a combination of technical capability and economic viability.

There are so many areas on the U.S. continental margin and the con-

tinental margins of the rest of the world that are virgin territory for the search for oil and gas that the economic incentives would keep the industry away from the deep ocean floor for quite a period in the future.

Senator METCALF. It is purely a hypothetical discussion as to whether or not adjacency and exploitation beyond the continental margin would come to have any importance.

Mr. FINLAY. That is correct.

Mr. ARY. We disagree with it.

Mr. FINLAY. I am speaking for oil and gas.

Senator METCALF. What about the hard minerals?

Mr. ARY. We think right now we are coming up in the near future with technology that will allow us to go out into the deep oceans and on the Continental Shelf.

Senator METCALF. Then what do we do?

Mr. FINLAY. Would it not be perfectly feasible for you to leave the jurisdictional section of the Outer Continental Shelf Lands Act as it is and then have a type of leasing for the hard minerals that would apply whether it was inside or outside the present jurisdiction of the act?

Senator METCALF. Mr. Ary?

Mr. ARY. Yes, sir.

Senator METCALF. Would you comment on that? What do we do, now that, in accordance with your statement, we are on the fringe of developing a technique for exploitation of hard minerals beyond the continental margin?

Now what do we do in order to encourage that exploitation and at the same time protect the investment of American citizens?

Mr. ARY. I would like to speak to both sides of the boundary line. I will take the deep ocean side first and then I would like to come back to the Outer Continental Shelf.

In the deep ocean, we feel at the present time there should be some legislation that would allow the U.S. citizens to go out and within their own group have some type of arrangement where there will not be interference, one with the other. We recognize that this would only apply to the U.S. nationals.

Senator METCALF. At this point, would you prepare a draft of such proposed legislation, and I will introduce it for discussion and circulation?

We are not going to pass this bill or any other bill in Congress but it is just like a working paper for the treaty; it might be something that we could circulate and discuss and amend and revise.

Would you do that for us?

Mr. ARY. I would like to go back to my committee and recommend this but I don't want to call it a working paper like Mr. Phillips did. He refers to Geneva in his presentation; he says to the effect that:

> It is a great honor for me to submit today to this committee for distribution and discussion as a working paper a draft United Nations Convention on the international seabed.

From there on out in every statement he referrs to a draft convention, draft convention.

Senator METCALF. That is right. That is why I reemphasized the fact that as far as our discussions with members of the State Department

have been concerned, it has been only a working paper. It does not have the status of an approved U.S. Government position in the form of a draft treaty. That is why it bears such a disclaimer on its very face. This disclaimer states:

> 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.

(The complete draft referred to is in the appendix.)

So you can see we are a long way from an agreed U.S. Government position.

Mr. ARY. We agree with you.

In our industry's meetings with the State Department, we tried to reemphasize this. Of course, we didn't but we agree with you.

I would like to discuss this with our committee because we feel that before we can spend the amounts of money that are necessary or even before we can raise the amounts of money that are necessary, we need some control within the United States, citizens and industry, in the protection in the deep oceans. We are in hopes that if we could have something of this nature that it might rub off on some other nations and become common rules.

Senator METCALF. I don't know whether you will accept it or not but I will make this offer.

If you will prepare some draft legislation, I will introduce it. I am not telling you that I will support it. That is problematical. But I will certainly introduce it so that you will have something for circulation and discussion.

Mr. ARY. I am kind of hedging, too. I say I will go back to my committee but I will not promise.

Senator METCALF. Thank you.

Mr. ARY. I would like to go back to the Outer Continental Shelf.

We feel from the 200-meter limit out to wherever this boundary is established, and I think the oil and gas people and the mining people are thinking the same about where the boundaries should be——

Senator METCALF. Both of you say under your understanding of the existing law the boundary is the continental margin.

Mr. ARY. That is correct.

We are claiming as far out as the Geneva Convention will allow us to go.

Senator METCALF. That is beyond the continental margin under the exploitability test.

Mr. ARY. That is right. We are talking about the slope of the floor where it meets the ocean floor. From there back to 200 meters isobath. We feel if we should take a lease under the Outer Continental Shelf Act that those terms and conditions should live beyond any new treaty that comes into being that might establish the boundary of the international seabed area at the 200 meter.

Senator METCALF. How about the oil people?

Mr. FINLAY. I said very clearly that we recommended that the President enunciate a policy that any lease under the Outer Continental Shelf Lands Act up to the agreement under the definitive text of the

international treaty be respected according to its terms and those terms not incorporate the treaty provisions by reference.

Senator METCALF. I know. I have had experience with some recommendations that the President change his policy, too. But sometimes he is just as adamant as Members of Congress and does not change his policy. Then what do we do to protect American interests?

Mr. ARY. We suggested proposed legislation. If Uncle Sam wants to agree to an international treaty, whatever tribute is being extracted in that treaty, then if that is more than what Uncle Sam has agreed with his lessees, that is up to him to pay it. We do not think that you should come back to us after we are in operation and say, "Buddy, we are going to raise your rates now."

This creates an uncertainty in our minds that there would be no future exploration or development on the shelf if this were to happen.

Senator METCALF. The President has made a policy and this committee in its concern with the development and the exploitation of the natural resources of America is holding these hearings in order to determine whether or not it is necessary in the public interest for us to acquiesce in that policy, or to try to get it changed by legislation.

Now, Mr. Finlay keeps on reiterating that the President changed his mind.

Mr. FINLAY. Not in the interim period, Mr. Chairman. I said on the boundary that he should. But I don't believe that the August 3 draft lives up to the President's policy. The President said that integrity of investments in the interim period should be protected.

Senator METCALF. He does not tell us how.

Mr. FINLAY. I know he didn't.

The people that drafted the August 3 draft treaty gave that lipservice and then, as I said, they completely destroyed it by saying that every lease issued on or after July 1, 1970, would be subject to the terms of the convention in its entirety.

Now, they do have some provisions trying to pass the burden of any inconsistencies to the Nation rather than to the lessee. You have no idea how the final convention is coming out.

Now, what we have recommended is that the President clarify what he meant by protecting the integrity of investment by saying that leases under the Outer Continental Shelf Lands Act will continue in their present form and will be respected for their life, and that will apply to every lease that is issued up until the date of agreement on the definitive text of an international treaty.

We think that if you want further exploration and development of the Outer Continental Shelf beyond the 200-meter isobath it is imperative, with the fantastic investments that would be involved in exploitation of the deep portion of the shelf, that that type of protection be afforded to the lessees. That would be a clarification and implementation of his May 23 policy statement and not a correction or revision of it.

Senator METCALF. Mr. Ary.

Mr. ARY. We are trying to say in our statement and trying to provide an incentive for the United States and the State Department specifically to be a little better negotiator.

We are saying that if the Department of the Interior gives us a

lease that those terms continue and that this provides the incentive for the State Department to negotiate a little harder on how much of a giveaway they are going to make. Anything that is a giveaway over what they are charging us is going to come out of Uncle Sam's Treasury. This is an incentive we think they have for beating little better negotiators.

We were very surprised in our discussions with the Interior and State Departments in seeing the working paper which they have proposed to take to Geneva. It looks like they had no negotiating position. They have given away everything they could possibly give away.

Senator METCALF. They did not give it away; they proposed to renounce it.

Mr. ARY. OK. Semantics. Renounced or giveaway, they don't have it any more.

But they had indicated they had taken a step that we felt should have only been taken up as a last resort. So, we would like to see them put on their negotiating hats and do a little better job. Of course, we are not privy to all the problems and all of the behind-the-scenes movements.

Senator METCALF. No, and that brings up a matter and I might just as well raise it now. I don't know how much money is involved. Do you know how much?

Mr. ARY. You mean on initial investment?

Senator METCALF. Well, the investment is tremendous.

Mr. ARY. If you work out all the problems and read everybody's reports, it appears to be that way.

Senator METCALF. The same is true of oil; isn't that correct?

Mr. FINLAY. On the continental margin, very definitely.

Senator METCALF. On the other hand, the military, the Defense Department, wants as narrow a national jurisdiction as possible.

Is it possible that in the national interest we would sacrifice—to use the President's rhetoric, renounce—at the resource of the shelf to our national defense?

Mr. ARY. I think they ought to tackle the problem head on. There is no reason to use the mineral industry as a guinea pig to gain something that the Defense Department won't face up to. If they do want the right to move out and place sensoring equipment next door to somebody's port, they should face this on a treaty basis with the defense departments of the various nations. We don't think we should be the guinea pig.

We don't think they should use the mineral aspect to reach something that the Defense Department wants. They should face that themselves.

Senator METCALF. Do you have any comment on that?

Mr. FINLAY. Mr. Chairman, you have asked an extremely important question. I would like to answer it in the depth that it deserves.

Because of my own personal military background, which I will mention in a minute, I have been intensely interested in this question of defense interests from the time this issue first arose. I have put together some notes in work that I have done over a period of time, and I would like to refer to them at some length, if I may.

I would like to mention first that I happen to be a West Point gradu-

ate who spent some 15 years of my life in the uniform and civilian service of the old War Department, the Department of the Army, and the Department of Defense, and, because of that, I have a very keen interest in the defense posture of the United States.

Back in the spring of 1968, I was a member of the Technical Subcommittee of the National Petroleum Council which was preparing an interim report on petroleum resources under the ocean floor. We were about to come up with the conclusions on jurisdiction of the United States, which came out in the final report as well as the interim report of the NPC which are comparable to those in the API statement that I read in my earlier statement.

Before committing myself to that position, I decided that I would like to find out from the horse's mouth exactly what the position of the Defense Department was to see if we would be flying in the face of their interest. We had had some officers from the Navy over with the technical subcommittee. When we started questioning them, they weren't very specific exactly where they stood. So, I was not content to rely on that lower level discussion.

At that time, as you know, the Marine Science Commission, the so-called Stratton commission, was working, among other things, on this very seabed issue. It seemed to me that the logical person to see in the Defense Department was the representative of Defense on the Stratton commission who happened to be the then Under Secretary of the Navy, Charles F. Baird.

So, I made a date with Mr. Baird for May 14, 1970, and told him I wanted to discuss this problem. He had with him at this meeting the Assistant Secretary of the Navy for Research and Development, Dr. Robert A. Frosch, the Deputy Judge Advocate General of the Navy and a Commander MacDonald who has since been promoted, who was working on the Stratton commission matters for the Navy Department.

I told him that the NPC subcommittee, of which I was a member, was about to conclude that the United States had a legitimate claim to the seabed resources of the entire continental margin and that the United States should stand upon and assert that claim.

I added that I would like to know if we would be working against any important Defense interests in so doing.

Dr. Frosch acted as spokesman for the group and told me that we could claim out as far as we thought reasonable without embarrassment to the Navy as long as we did not interfere with the freedom of the water column or the air space.

Naturally, I went back and reported this to my associates in the National Petroleum Council study.

Senator METCALF. Did you mean May 1970?

Mr. FINLAY. 1968; did I say 1970?

Excuse me. That is a typographical error. May 14, 1968.

Thank you, sir.

As I say, I went back and reported this to my associates in NPC study with considerable satisfaction.

I was quite disappointed when the Department of Defense later came out with its present position of favoring the narrowest possible Continental Shelf.

I happen to believe very strongly that the advice that I received in

May 1968, was the sounder of the two positions. The trouble with the present Defense Department position is that it seeks to achieve a degree of absolute freedom beyond the 200-meter isobath that is unattainable.

It forces the Defense Department spokesmen to a ridiculous position such as suggesting that President Truman made a mistake in issuing his 1945 proclamation on the Continental Shelf and that a Federal District Court for the Southern District of Florida made a mistake in utilizing the Outer Continental Shelf Lands Act in the *Triumph Reef* case to prevent some promoters from setting up an artificial island—as an independent republic, Grand Capri Republic, no less—on a reef only four and a half miles from the Florida coast, some 18 miles below Miami.

I would like to discuss each of these points in turn, if I may.

It was inevitable that the coastal nations were going to claim the oil deposits off their coasts as advancing technology made them exploitable. President Truman had the characteristic spunk lead the way.

By the time of the Geneva Convention in 1958, 13 years later, the community of nations not only fully ratified President Truman's action but extended coastal nation rights further than he had intended in that first step of his.

Through December 31, 1969, the Federal Government had received $4,763 billion in revenue from the Outer Continental Shelf and today production from the State and Federal portions of the Continental Shelf combined is 15.6 percent of total U.S. production of crude oil with the percentage mounting every year.

I would doubt that any member of this subcommittee of either political party would regard President Truman's actions as a mistake.

As for the *Triumph Reef* case, the building of manmade islands does not happen to be one of the recognized freedoms of the high seas and it would have been a national disgrace if the Court had not found some reason for putting an end to the particular effort here involved. That does not mean that it could or would have enjoined the exercise of a legitimate high seas freedom in the same area.

As far as the Navy's desire for free passage in international straits is concerned, they have that freedom now and I am totally with theim in their determination to keep it. They can do so by the simple expedient of refusing to surrender it.

It will not be determined one way or the other by the width of the legal Continental Shelf which has one purpose only and that is to determine the extent of the exclusive jurisdiction of the coastal State over the natural resources of the seabed and subsoil of the ocean floor.

It is sometimes suggested that we have to be prepared to trade off our Continental Shelf rights in exchange for the right of free passage through and over international straits.

Let me say to that, first, Under Secretary Richardson spoke of the territorial sea problem as a separate question in his appearance before the Metcalf subcommittee and not as part of a package deal. This was undoubtedly because the suggestion of a deal will not stand critical analysis.

Some of the most important or potentially important straits less

than 24 miles wide are off countries such as Canada, Indonesia, and Malaysia, which also have highly prospective continental margins.

If the U.S. Ambassador were to approach the Prime Minister of one of these countries with the suggestion that we would join with them in an international agreement fixing a 12-mile limit to the territorial sea provided they would agree to the right of free passage through and over international straits and that to sweeten the pot we would be prepared to join with them in renouncing their and our sovereign rights to seabed resources beyond the 200-meter isobath, the Prime Minister would think that the U.S. Ambassador was rehearsing for a deadpan comedy routine.

With respect to military uses of the seabed beyond the territorial sea, I feel that we would be much better off with the broad Continental Shelf governed by the Geneva Convention on the Continental Shelf and customary international law than under the August 3 draft treaty.

The Geneva Convention protects all high seas freedom except to the extent of reasonable interference necessary for the exploration and exploitation of seabed resources.

It is clear that high seas freedoms are broad enough to cover freedom of the ocean floor, as one of the four freedoms specifically enumerated in the Geneva Convention on the high seas is the freedom to lay submarine cables and pipeline.

Whether a particular unspecified military use qualifies as a high seas freedom will depend upon a balancing of the interests of the coastal States against the interests of the community of nations as a whole and not on the much-used and much-abused doctrine of "creeping jurisdiction."

Admittedly, the military will have their problems here—and I borrow the words of the Canadian Minister of External Affairs in his note to the United States in connection with the recent Canadian Arctic waters pollution prevention legislation, and I quote:

> Based on the overriding right of self-defense of coastal states to protect themselves against grave threats to their environment.

And I add *a fortiari*, to their security.

If when measured by this balancing of interest a particular military use of the seabed would not qualify as a high seas freedom, I would still rather see us take our chances with the broad shelf governed by present law than with the narrow shelf governed by the August 3 draft treaty.

Under present law, great parts of the continental margins of the world would be available to us through the indifference or friendliness of the coastal nations concerned.

Under the August 3 draft treaty, however, we would be opting for an all-or-nothing decision for all the seabed areas of the world beyond the 200-meter isobath with the final decision in the hands of a tribunal over whose membership we would have no control and whose decisions we could not flaunt without being at odds with the entire international community.

To cap the climax, article IV of the August 3 draft treaty would create an entirely new principle of international law that the international seabed area—i.e., everything beyond the 200-meter isobath—

and outside the territorial sea, shall be reserved exclusively for peaceful purposes and the tribunal created by article 31 of the August 3 draft treaty would be vested with final power of interpretation of that provision.

An article in the New York Times of September 17, 1970, reports that the members of the Pugwash Conference who "have long disapproved of deterrence as an international strategy" have just come out in strong opposition to the emplacement of sonar equipment on the seabed for finding missile-carrying submarines beneath the seas. The article continues:

> Nuclear-powered submarines can now roam the seas and are extremely difficult to detect, making counterattack difficult. The Pugwash conferees, 109 scientists and scholars from 31 nations, felt that the invulnerability of the submarines must be maintained to slow down the arms race. They urged that the matter be taken up at the strategic arms limitation talk (SALT) in Vienna.

The headline caption of the story, and I would like to offer it for the record, Mr. Chairman——

Senator METCALF. Without objection, it will be included.

Mr. FINLAY. Is "Peace Scientists Oppose Submarine-Finding Device."

(The article referred to follows:)

[From the New York Times, Sept. 17, 1970]

PEACE SCIENTISTS OPPOSE SUBMARINE-FINDING DEVICE

(By Anthony Ripley)

CHICAGO—An international group of scientists dedicated to peace issued a warning today that the next possible step-up in the arms race may come in anti-submarine warfare, and they urged it to be avoided.

Bernard T. Feld, a physicist at the Massachusetts Institute of Technology, said the key was development of new, powerful sonar equipment that could find missile-carrying submarines beneath the sea.

"The scientific community interested in arms control should not be caught flat-footed on this one," said Professor Feld, a member of the American delegation to the 20th Pugwash conference on science and world affairs.

Nuclear-powered submarines can now roam the seas and are extremely difficult to detect, making counterattack difficult. The Pugwash conferees, 109 scientists and scholars from 31 nations, felt that the invulnerability of the submarines must be maintained to slow down the arms race. They urged that the matter be taken up at the strategic arms limitation talk (SALT) in Vienna.

Leaders of the week-long conference held in Fontana, Wis., journeyed to Chicago today for a news conference to officially close their meeting.

The conference, begun in Pugwash, N.S., in 1957, has concentrated most of its efforts since then on warning the world of the dangers of nuclear weapons.

For many years, the United States and the Soviet Union have had an international balance of nuclear power with manned bombers, land-based missiles and submarine-launched missiles of the Polaris.

The theory behind the massive arrays of weapons was to deter an enemy nation from launching a nuclear attack for fear that retaliation would bring unacceptable losses to its own nation. The theory is commonly called development of a nuclear shield or simply deterence.

The Pugwash members have long disapproved of deterrence as an international strategy. But they have sought ways to cope with it because it already exists.

Six years ago they warned against the antiballistic missile system because they felt it would escalate the arms race. Since then the Soviet Union has deployed SS–9 missiles, the United States is building an ABM system and is equipping its land-based missiles with multiple warheads called MIRV (Multiple Independently Targeted Re-entry Vechicles).

While still urging severe limitations on ABM and MIRV, the Pugwash conferees predicted such new developments would eventually lead to the obsolescence of land-based intercontinental ballistic missiles. This obsolescence would come with the development of better guidance systems which could pinpoint any missile and destroy it in its underground concrete silo.

In part of a 36-page statement issued today, the conferees said:

"As long as the superpowers insist on maintaining deterrent forces, there is great advantage in their [the deterrents] being as invulnerable as possible, since any suggestion of vulnerability seems almost certain to lead to an effort to compensate for that real or imagined vulnerability with the result being an expanded arms race."

The statement said that at present the missile launching submarines were "highly invulnerable" and "an agreement to prohibit deployment of large active sonar systems seemed particularly desirable."

The new sonar techniques were described at a Pugwash symposium in June in Racine, Wis., by Victor Anderson of the Scripps Institution Company of Oceanography. They involve what one scientist called "making the seas transparent" by flooding them with sonar waves and using computers to sort out extraneous noises. It is called "phased array sonar."

Such installations would be huge and, therefore, easy to detect if built.

The Pugwash conferees took the position that research and development of such sonar should not be stopped but that the limitation should come somewhere between testing and final deployment of such a system.

The two largest delegations at the conference were American and Russian, with others coming from nations in both the East and West and from developing countries. In closed sessions, the delegates presented papers and searched for areas of international agreement.

The longest discussion of the meeting centered on the need for an international body of scientists to review the present American controversy over possible hazards from man-made radiation. Two American scientists have called for an immediate reduction in the amount of radiation considered an acceptable risk in operation of atomic power plants. Many prominent scientists have argued against the proposal.

Profs. Joseph Roblat and Patricia J. Lindop of the United Kingdom presented a paper agreeing that a revision downward seemed to be indicated. However, no position was taken on the matter because conference members felt they did not know enough about the subjects.

The conferees said the atmosphere in international relations had improved with the conclusion of a treaty between the Soviet Union and the Federal German Republic. They urged broader European security treaties with the inclusion of the United States and Canada, guaranteeing present borders, dealing with arms reduction and promoting economic cooperation.

They also called for an end to underground nuclear tests and for the strengthening of international efforts to fight pollution, excessive population and diminishing resources.

Mr. FINLAY. Who can say that the tribunal established under the August 3 draft convention would not arrive at precisely the same decision with article 4 of that draft to lean upon or hide behind?

I would like to say, Mr. Chairman, I am speaking for myself in what I have said on the defense; I am keenly interested in it because of my background.

I obviously have not had a chance to review this with the API and the API as such undoubtedly would not care to take a position one way or the other on a defense matter. But I feel that the views I have expressed are sound.

I agree with Mr. Ary that they are going to have to rely on what they can do by friendliness with a nation by treaty or otherwise rather than by thinking they can solve all their problems by giving away the natural resources jurisdiction of the United States beyond the 200-meter isobath.

Senator METCALF. I am delighted I asked that question. I am pleased that I asked it of someone who obviously is an expert on the subject.

The position of both of you is that it is probably irrelevant, isn't it? They don't fit together any more than some of these other things.

It is not important to make a package out of all of this and if it is a package we ought to be sure that the contract includes what we are buying, that is, freedom in the straits and the water column, the fishing above, the freedom of the air overhead. But those are separate matters, separate and apart from development and exploitation of the mineral and the oil resources of the seabed.

This is a problem, of course, for our own committee, for our own Congress. If it is a matter relating to the water column, it would be in the Commerce Committee. If it is an international affair, it is over in Foreign Relations. If it is a matter solely relating to defense, it is over in Armed Services.

This committee is concerned because we are concerned with the development of the resources, the mining of the minerals and oil resources of the United States.

We on this subcommittee regard this as a simple extension of the land mass out to the continental margin. We are concerned with the development of that and the development of mining on the deep seabed which is free for the use of our nationals.

It would seem to me, and I hope you agree, that it is rather irrelevant to talk about defense or the opportunity to pass through the straits or fisheries rights when we are talking about nodules on the floor of the sea or oil under the seabed.

Mr. FINLAY. I feel very strongly that way, Mr. Chairman.

It is all due to the sloppy use of this concept of creeping jurisdiction which has no validity as a measure. All the distinguished authorities on the subject, such as McDougal and Burke, in their treatise on "The Public Order of the Oceans," point out that each case has to stand on its own bottom.

You have to compare the relative rights of the coastal nation as against the rights and exceptions on the use of the ocean of the entire international community. It was decided at Geneva in 1958 and confirmed by the World Court in 1969 that the relative rights of the coastal nations over the natural resources in the natural prolongation of the land territory into the sea throws natural resources jurisdiction to them.

These authorities point out that when you are looking at particular military uses the decision can depend on who is making the use, whether it is the coastal nation, itself, or some other nation trying to make a use on the seabed coast to another coast.

Now, when you take a Texas tower, which is a minimum interference with the other uses of the sea and it is part of the defense establishment of the United States, the rule could be, yes. If it is some other nation implanting some type of sonar device on our shores or the shores of another nation, that could be of such concern to the national defense of the local country that an international tribunal could very easily hold that that is not within the freedom of the seas and that the coastal nation in self-defense has the right to prevent it.

Senator METCALF. To go back to your analogy, if somebody puts a black box on your front pouch and you feel it is not in self-defense,

and it should be removed, you just pull it up and remove it, don't you?

Mr. FINLAY. Right.

I have a black box on my house in New York. Because there is so much thievery up there, we need burglar alarms these days. But I am the one that put it there, not somebody else.

Senator METCALF. Mr. Ary.

Mr. ARY. I would like to speak with respect to what you mentioned. These various items should not be in one negotiating package.

We were invited in, industry was invited in, to visit with the State Department shortly before they went to Geneva. We were allowed to review for one afternoon the 70-page draft treaty, at that time called a draft treaty, and comment on it the next morning or the next day.

Senator METCALF. I am delighted you were invited in, because as soon as I found out you were invited in I demanded a copy of the treaty. They were reluctant to give it to me even after that.

Mr. ARY. At first blush on reading that, and we had to read it rapidly in order to try to make any sense on the comments, it appeared that they were going to use the mineral wealth, the wealth derived from the mineral production, to establish this terrifically colossal-sized organization and they had to use the mineral industry that was going to raise all this money by mining all these fabulous materials in order to get this money.

This is what you got out of this working paper at first blush.

They pitched everything else in, the reasons why they had to set the 200 meters and all their negotiating points, to some unknown items that we are not privy to.

The Defense Department wants a narrow shelf; we have to have negotiating room; some of the countries won't go for this.

The money was the point that I felt they were really after.

We object to this. We don't think they need this large organization. If they had it as it was outlined here, I doubt if there would ever be any money for the good of mankind unless the good was going to come out of being employed by the International Seabed Authority.

As a result, we object to this. We think if they want development of the natural resources they should allow us to put our risk money into the ground to develop it and to extract it.

Instead of after you find an ore, paying anyhere from a half million to $2 million bonus for the privilege of discovering this ore body, we feel they should let us keep that money and invest it in the capital items to extract the minerals and process them and get them into the world economy.

That is the place where we are going to be aiding developing countries. We are going to be able to make more material available to them than we can at this time.

I agree with you. I don't think that all of these items should be negotiated in one package.

Senator METCALF. Gentlemen, I think this has been one of the most productive and one of the most helpful of our sessions. I am sorry that more of our members could not have been here.

However, both of you are sufficiently informed of the congressional process to understand that this is just a vast fact-gathering process.

There is a hearing going on in the room behind me at the present time.

Senator Moss, of course, is understandably occupied elsewhere.

This record will be important and significant and will be read by the people most concerned and interested.

I think that both of you have made an outstanding contribution to the literature on this subject. I am very grateful for your appearance here, both personally to you and to the organizations that you represent.

Thank you very much.

Mr. ARY. Thank you.

Mr. FINLAY. Thank you. We appreciate being able to come.

Senator METCALF. Unless there is something else to come before the committee, on behalf of Senator Moss and the committee, we will stand in recess, subject to the call of the Chair.

The record will be kept open 2 weeks for any further material anyone wishes to submit.

(Subsequent to the hearing, the Committee received the following material from the American Mining Congress and National Petroleum Council:)

AMERICAN MINING CONGRESS,
October 16, 1970.

Hon. FRANK E. MOSS,
Chairman, Subcommittee on Minerals, Materials and Fuels, Committee on Interior and Insular Affairs, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: On September 23, 1970, Mr. T. S. Ary, Vice President of Union Carbide Exploration Corporation, testified before your Subcommittee on behalf of the American Mining Congress.

As you know, the AMC Mining Convention was held at Denver, Colorado, on September 27–30 at which time the American Mining Congress adopted a Declaration of Policy on Undersea Mineral Resources.

Although adopted subsequent to your hearing, we feel this statement is pertinent to your Subcommittee's deliberation since it reflects the latest policy position of the Mining Congress. We would, therefore, appreciate its being included in the record of your recent hearing.

With kindest regards, I am

Sincerely,

CHARLES S. BURNS,
Director of Government Relations.

Enclosure.

DECLARATION OF POLICY—UNDERSEA MINERAL RESOURCES

(Adopted by the American Mining Congress on September 27, 1970)

The vitality, resiliency, and enduring strength of the economy of the United States can, to a significant measure, be credited to the ability of the mining and mineral industry to marshal and to produce required mineral resources in adequate quantities. The perpetuation of a strong, viable economy requires the continued maintenance of an economically sound and stable domestic mining and minerals industry.

The burgeoning needs of the economy require each year significantly larger quantities of mineral resources. The security of the United States demands adequate supplies of strategic mineral resources. Moreover, in order to meet the increasing social requirements and demands, an adequate supply of basic raw materials is mandatory. All of these requirements need to be satisfied at reasonable costs.

A prerequisite to the accommodation of these objectives is a political, legal, social, and financial climate that will encourage rather than discourage needed mineral development. Mutual cooperation between all branches of government and the mining industry is required. Appropriate understanding and awareness by the general public of problems confronting successful mineral development is equally important.

As the industry dedicates its attention to the increasingly demanding need for technological improvements to offset the harsh economic effects of depleting

reserves of decreasing quality, it does so with increased appreciation of a social responsibility to maintain standards of environmental quality compatible with a prudent balancing of national goals.

In presenting this Declaration of Policy, the members of the American Mining Congress seek to provide a framework for achieving the objectives essential for a viable, sound mining and minerals industry in a manner consistent with economic and social progress.

The mining industry is aware that the oceans offer a potentially large source of some minerals and that their development must be achieved with due regard to other uses of the seas. Whether, and when, these prove to be economically recoverable is dependent on expanded knowledge of ocean environments and related technology, a reasonably definite legal framework, and a return on investment competitive with comparable opportunities on dry land.

The ocean environment is still largely unknown. The mining indutry urges national and international efforts toward enlarging man's knowledge of earth's last frontier. A sound technology for ocean mining can be developed by industry only after the characteristics of this environment are measured and better understood. To this end there should be freedom of scientific and industrial research and exploration of the seabed beyond the limits of national jurisdiction.

General legal principles already govern ocean activity but certain rights need sharper definition, e.g. the right to explore, the right to access, the exclusive right to mine if an ore body is found, and the right to suitable space for ancillary purposes. Certainty in advance that these rights may be secured on economically rewarding terms will further encourage exploration.

To secure the requisite certainty, we recommend:

1. The boundary between the area which by treaty is now under national jurisdiction (the "continental shelf" of the 1958 Convention) and the area beyond (the deep ocean) should be defined with precision and with due regard to the preservation of the national interests to the full extent permitted by the 1958 Convention on the Continental Shelf.

2. The United States and other nations having jurisdiction over adjacent continental shelves should at the earliest opportunity formulate improved working rules that will encourage and regulate exploration and exploitation. Permits should be issued on a first-in-time basis.

3. More precise international arrangements and new legal concepts are needed at the earliest possible time in order to provide the secure investment climate necessary for the development of deep ocean mining.

4. Until such international arrangements are achieved, we recommend that the United States cooperate with other nations in establishing a pattern of rules and practices to be observed by common accord, to form the basis for a formal agreement to assure freedom of development in the deep ocean and security of tenure to those engaged in mining on and under the ocean floor.

The mining industry endorses continued direct consultation between its representatives and the Congress and the Executive Branch, and urges that these recommendations be taken into full account in the development and implementation of U.S. policy in this area which was the subject of a statement by the President of the United States in May 1970.

NATIONAL PETROLEUM COUNCIL,
September 16, 1970.

Hon. FRANK E. MOSS,
Chairman of the Subcommittee on Minerals, Material and Fuels, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: Thank you for your letter of August 24, 1970 extending to me an invitation to appear as a witness before your Subcommittee at the hearings commencing September 22, 1970 to present testimony on the subject of the U.S. policy concerning the recovery of mineral resources from the continental margin and the deep seabed beyond.

I wish to commend you and your Subcommittee for continuing the hearings so ably conducted by Senator Lee Metcalf as Chairman of the Special Committee on the Outer Continental Shelf. I understand that the Senate Interior Committee has responsibility for legislative oversight of operations under the Outer Continental Shelf Land Act of 1953. In view of the President's Statement on

U.S. Ocean Policy of May 23, 1970 and the Draft United Nations Convention on the International Seabed Area submitted as a working paper by the U.S. to the United Nations Seabeds Committee on August 3, 1970, it is highly desirable for the Senate Interior Committee to continue to exercise its oversight function at this time.

The recent Ocean Policy enunciated by the President and the U.S. Working Paper presented at Geneva are far-ranging documents, and envisualize future development of great historical significance to the United States and the world community. This emphasizes the necessity of the most detailed and thorough analysis and discussion at any early stage of the U.S. draft U.N. Convention on this subject.

In inviting me to testify as Chairman of the National Petroleum Council may I point out that the Council has a somewhat different status than most organizations whose representatives appear before your Subcommittee. The Council was established by the Secretary of the Interior on June 18, 1946, pursuant to a directive of the President of the United States. The Secretary appoints the members annually so that he may have an industry advisory body representing virtualy all segments of the U.S. oil and gas industries. The purpose of the Council is to advise, inform and make recommendations to the Secretary with respect to matters relating to petroleum or the petroleum industry submitted to it by the Secretary. As requested by the Secretary, the Council has made to date over 175 studies on a wide range of subjects and problems. As with other industry advisory bodies, the expertise of the petroleum industry in preparing these studies is a service at no cost to the Government.

With regards to seabeds resources, the mounting demand for new supplies of energy has turned the attention of the petroleum industry to offshore areas which, indeed, are among the brightest prospects for satisfying this National's almost insatiable appetite for oil and gas. With rapidly developing technology, the search for petroleum progresses into ever deeper waters. As it does so it gives rise to political, legal and economic considerations of international import as you well appreciate. Interest in seabeds resources has been particularly stimulated by the attention being given this subject by the General Assembly of the United Nations beginning in 1967.

In this context, it was appropriate that the Secretary of the Interior requested the National Petroleum Council in 1968 to assist the Department of the Interior and other Government agencies in formulating their posture towards development of petroleum resources of the ocean floor. The Council prepared a report *Petroleum Resources Under the Ocean Floor* which was submitted to the Secretary in March 1969. The testimony of Mr. Cecil J. Olmstead on March 4, 1970 before Senator Metcalf's Subcommittee sets forth generally the position of the Council as contained in that report. While much of the contents of the report remain currently valid, such as exploration prospects, technological capability, economic, energy requirement and national objectives considerations, the President's proposals announced on May 23, 1970 and the working paper presented at Geneva on August 3, 1970 introduce many new elements which were not considered by the Council in its March 1969 report.

The Secretary of the Interior, therefore, on August 5, 1970 requested the Council for further assistance to the Department of the Interior by studying carefully and in detail the U.S. draft treaty presented as a working paper to the U.N. Seabeds Committee at Geneva. The Council's Committee on Petroleum Resources Under the Ocean Floor and its Technical Subcommittee is now preparing a report in response to the Secretary's request. After approval by the Council membership the report will be submitted to the Secretary. The draft treaty is a complicated document requiring considerable time for reasoned and intelligent analysis. Our Committee, in order to carry out its assignment competently, must consult with industry specialists in taxation, petroleum and mining law, concession agreements, offshore petroleum technology and economics, whose views are essential on a matter of this importance and complexity.

Under these circumstances it is impracticable for the National Petroleum Council to formulate, and obtain membership approval of, official views of the Council by the dates scheduled for the hearings to be held by your Subcommittee this month. I very much appreciate your invitation to express our views on the very critical problems involved regarding the disposition of the seabed resources of the world oceans as proposed in the U.S. draft treaty. As soon as we have obtained the Council's official views and submitted the Council's report to the Secretary of the Interior, then with his concurrence, I or another qualified repre-

sentative of the Council, would welcome the opportunity to appear before your Subcommittee at some subsequent hearings to discuss the Council's findings. I exceedingly regret my inability to do so at this time. When the Council's report is completed, we will, of course, be pleased to provide you and the members of your Subcommittee with copies.

In addition to the draft treaty, I note that your Subcommittee intends to focus its attention on interim policy arrangements. This is a matter of immediate importance to the petroleum industry. With regard to the interim period, which is indefinite, the President in his Oceans Policy Statement stated, "I do not . . . believe it is either necessary or desirable to try to halt exploration and exploitation of the seabeds beyond a depth of 200 meters . . ." Further, the President declared that the regime should "include due protection for the integrity of investments made in the interim period." We interpret these remarks to confirm Presidential recognition of the present national need to continue development of the petroleum resources of the Outer Continental Shelf beyond the 200-meter isobath and a Presidential intent to assure American industry that it will have security of tenure in such areas.

As stated in the Council's 1969 report, regulation by the Government in matters of national jurisdiction and the Government's consideration of long-term arrangements concerning the seabed should reflect policies which will encourage rather than deter the finding, recovery, and use of ocean minerals. The U.S. Petroleum Industry has been able to operate successfully in the deeper waters off our coasts under the present provisions and assurances embodied in the Outer Continental Shelf Lands Act and the Geneva Convention of 1958 on the Continental Shelf.

Long experience has proven that economically successful mineral development laws, whether applicable to resources on land or under the seas, should have these policy objectives:

1. To encourage, without discrimination, exploration for and production of resources at reasonable consumer cost consistent with a fair return to the investor.

2. To encourage maximum efficient recovery by conservation both of minerals, and in the case of petroleum, of the natural forces, such as reservoir energy, which are required for production, always being mindful of the needs of future generations as well as our own.

3. To reconcile competing uses of the environment and minimize adverse effects of mineral operations on that environment.

While the above three policy objectives are requisite to successful mineral regulation, certain conditions must be established for the protection of the entrepreneur to induce his dedication of risk capital to the costly search. As ocean depth increases, the search for minerals becomes more risky and hazardous. Increasing amounts of capital are required and must be found in competition with other demands including mineral exploration onshore and in shallower waters.

Thus four types of prerequisites should be operative to attract capital and talent:

1. The regulatory arrangement should offer encouragement for mineral exploration with the promise of obtaining areas of sufficient size to justify later expenditures on concentrated exploration and development.

2. Security of tenure is essential. The entrepreneur requires the exclusive right to occupy a defined area for exploration and the exclusive right to produce minerals discovered in that area for an assured period of time.

3. The mineral venture should be assured that in the event of exploratory success, the exactions of the granting authority, including royalties and taxation, will not be so oppressive as to discourage the enterprise or make its continuance uneconomic.

4. The entrepreneur must be assured that the mineral regulatory system, including payments to the granting authority, will not be altered so as to be less favorable to it after investments have been made, i.e., the rules of the game should not be changed after the game has started.

I would consider it appropriate for this letter to be included in the record of the September hearings of your Subcommittee.

Sincerely yours,

E. D. BROCKETT, *Chairman,*

(Whereupon, at 12:05 p.m., the subcommittee adjourned, to reconvene at the call of the Chair.)

APPENDIX

(Under authority previously granted, the following statements and communications were ordered printed:)

DRAFT UNITED NATIONS CONVENTION ON THE INTERNATIONAL SEABED AREA, AUGUST 3, 1970

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.

UNITED NATIONS CONVENTION ON THE INTERNATIONAL SEABED AREA

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 longitude. 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 landward of the International Seabed Area, or with respect to any delimitation pursuant to Article 30.

[1] 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.

ARTICLE 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.

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.

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.

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. 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 ageres 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 I 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:———.

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.[1]

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.

(NOTE.—Additional consideration will be given to problems raised by enclosed and semi-enclosed seas.)

[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.

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 International 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;

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 Contratcing 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 Convetnion 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 resources 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 is 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, providing, 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.

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 exploration 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 persuant 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 paragraphs 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:

Paragraph 5.1 (a) and (c) minerals

Years:	*Amounts per annum*
1 to 5	$20,000
6 to 10	180,000
11 to 15	200,000
Total	2,000,000

Paragraph 5.1(b) minerals

Years:	*Amounts per annum*
1 to 2	$20,000
3 to 10	120,000
11 to 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 Authorizing 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 Sponsoring 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———.

(NOTE.—More detailed provisions on liability should be included.)

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.

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 Patries 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 opened 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 specified 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 paragraphs 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 payed 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 requirement fee per block shall be specified in an Annex in accordance with the following schedule:

Paragraph 5.1(a) and (c) minerals

Years:	*Amounts per annum*
1 to 5	$20, 000 to $60, 000.
6 to 10	$180, 000 to $540, 000.
11 to 15	$200, 000 to $600, 000.
Total	$2, 000, 000 to $6, 000, 000.

Paragraph 5.1(b) minerals

Years:	*Amounts per annum*
1 to 2	$20, 000 to $60, 000.
3 to 10	$120, 000 to $360, 000.
11 to 15	$200, 000 to $600, 000.
Total	$2, 000, 000 to $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 $2,000,00 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 issued 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 Secton 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.

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.

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.

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 specified 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:

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

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.

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.

(No. 73)

AMERICAN BAR ASSOCIATION

JOINT REPORT OF SECTIONS OF NATURAL RESOURCES LAW, INTERNATIONAL AND COMPARATIVE LAW, AND THE STANDING COMMITTEE ON PEACE AND LAW THROUGH UNITED NATIONS

RECOMMENDATION

The Sections of Natural Resources Law, International and Comparative Law, and the Standing Committee on Peace and Law Through United Nations, recommend that the following resolution be adopted by the House of Delegates:

Whereas, the natural resources of the seabed and subsoil under the high seas are becoming, through technological progress, increasingly available to mankind in ways until recently unforeseen; and

Whereas, a Committee of the United Nations General Assembly is presently considering "practical means to promote international co-operation in the exploration, conservation and use of the seabed and the ocean floor, and the subsoil thereof, . . . and of their resources"; and

Whereas, the United States, as a member of that United Nations Committee, has proposed that the exploration and use of the deep ocean floor be open to all states and their nationals without discrimination and in accordance with international law, and as a corollary of this that the exercise of sovereignty or sovereign rights over any part of the deep ocean floor be ruled out; and

Whereas, the treaty known as the 1958 Convention on the Continental Shelf in force between 37 nations, including the United States, recognizes that each coastal state has "exclusive sovereign rights for the purpose of" exploring and exploiting the natural resources of "the sea-bed and subsoil of the submarine areas adjacent to the coast . . . to a depth of 200 meters or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas"; and

Whereas, it is generally recognized that the definition in the 1958 Convention on the Continental Shelf of the boundary between the area of exclusive sovereign rights and the deep ocean floor needs to be clarified by an agreed interpretation; and

Whereas, the House of Delegates, by its Resolution of August 9, 1966, stated that "prior to framing a policy . . . the United States Government . . . review thoroughly the issues at stake in consultation with representatives of the American Bar Association and others competent in the field of international law, with scientific and technical experts and with leaders of American industry in oceanic development": Now, therefore, be it

Resolved, That the American Bar Association—

Supports the efforts being made in and out of the governments of interested states to protect the seabed and subsoil of the deep ocean floor beyond the limits of national jurisdiction from claims of sovereignty or rights of discretionary control by any nation or group or organization of nations;

Supports the call by the United States Government for internationally agreed arrangements governing the exploitation of natural resources of the deep ocean floor beyond the limits of national jurisdiction to be established as soon as practicable;

Recommends:

(1) That the United States consult with other parties to the 1958 Continental Shelf Convention with a view to establishing, through the issuance of parallel declarations or by other means, an agreed interpretation of the definition of the boundary between the area of exclusive sovereign rights with respect to natural resources of the seabed and subsoil and the deep ocean floor beyond the limits of national jurisdiction.

(2) That within the area of exclusive sovereign rights adjacent to the United States, the interests of the United States in the natural resources of the submarine areas be protected to the full extent permitted by the 1958 Convention on the Continental Shelf.

(3) That on the basis of the information now available, the most desirable long-range goal for a regime to govern exploration and development of the mineral resources of the seabed and ocean floor and subsoil beyond the limits of national jurisdiction is not the creation of a supersovereignty with power to grant or deny mineral concessions, but rather agreement upon norms of conduct designed to minimize conflicts between sovereigns which undertake such exploration and development.

(4) That the resources of the bed and subsoil of the deep sea, beyond the limits of national jurisdiction, be the subject of study and consultation with a view to formulating rules and practices to be observed by common restraint or by other arrangements which will assure, *inter alia*, freedom of exploration by all nations on a nondiscriminatory basis, security of tenure to those engaged in producing the resources in compliance with such rules, encouragement to discover and develop these resources, and optimum use to the benefit of all peoples; and

Authorizes representatives of the Sections of Natural Resources Law and International and Comparative Law and the Standing Committee on Peace and Law Through United Nations to express the foregoing as the views of the American Bar Association to agencies of the Government of the United States and to the Congress of the United States.

REPORT

The House of Delegates of the American Bar Association, on August 10, 1967, adopted Report No. 97 of the Section of Natural Resources Law which constituted an offer through the Section of the Association's "services and assistance" to the National Council on Marine Resources and Engineering Development and the Commission on Marine Science, Engineering and Resources and an authorization and instruction to the Section "to establish and maintain a continuing liaison with the Council and the Commission to the end that the Section shall prepare and submit to the House of Delegates, for approval, recommendations with respect to the report or reports proposed by the Council or the Commission." The resolution required that the Section collaborate with the Section of International and Comparative Law and the Section of Administrative Law "with a view towards developing joint recommendations and policies" with regard to matters within the official purview of interest of these sections.

The Section assigned responsibility for implementing this resolution to the Chairman of the Section's Committee on Marine Resources. Subsequently, a Consulting Committee on Marine Resources was formed, consisting of representatives of the named sections as well as the Association's Standing Committee on Peace and Law Through United Nations and the Committee on World Peace Through Law.

In the fall of 1967 liaison was established with the Council and the Commission which resulted in the Commission's making inquiry as to a number of subjects affecting the interest of the United States in offshore lands. Work with the Council and Commission is continuing toward the end of assisting in the formulation of a United States policy in these matters. The Council and the Commission have not as yet made any reports or recommendations on these subjects except of the most preliminary mature.

This report discusses some of the issues involved in developing a regime for exploration and exploitation of the mineral resources on and under the floor of the ocean. It also discusses the question of the extent of the area of exclusive mineral resource jurisdiction of the adjacent coastal states.

The matter has taken on some urgency owing to a number of factors. One is the fact that the Convention on the Continental Shelf, to which reference is made later, is, by its terms, subject to amendment after June 10, 1969. Of more immediate concern, however, is the motion submitted to the Twenty-Second Session of the General Assembly of the United Nations by the delegate from Malta. This apparently contemplated establishment of an international agency which would regulate, supervise and control activities on the deep ocean floor beyond the limits of national jurisdiction. Implicit, of course, is the threshold problem of establishing the line between the area of exclusive seabed jurisdiction of the coastal nations recognized by the Convention on the Continental Shelf, and the deep ocean floor

seaward of that jurisdiction. This problem is of grave importance to the United States as a coastal nation engaged in major development of the minerals of the submarine continent.

The General Assembly recognized that so far-reaching a suggestion called for profound study and by resolution decided to establish an *ad hoc* committee "to study the peaceful uses of the seabed and the ocean floor beyond the limits of national jurisdiction." This committee was requested by the resolution to prepare a study for consideration by the General Assembly at its next (Twenty-Third) session. The committee was asked to include in its study "an indication regarding practical means to promote international cooperation in the exploration, conservation and use of the seabed and the ocean floor, and the subsoil thereof." The resolution was adopted on December 18, 1967, by a vote of 99 to 0. The United States voted for the resolution and is one of the members of the *ad hoc* committee consisting of thirty-five nations.

THE CONVENTION ON THE CONTINENTAL SHELF

The threshhold question, vital to the United States, is the geographical extent of the exclusive rights now vested in the coastal nations, as recognized in the 1958 Convention on the Continental Shelf. The relevant articles of this Convention read:

"*Article 1*

"For the purpose of these articles, the term 'continental shelf' is used as referring (a) to the seabed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea, to a depth of 200 metres or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas; (b) to the seabed and subsoil of similar submarine areas adjacent to the coasts of islands.

"*Article 2*

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

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

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

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

"*Article 3*

"The rights of the coastal State over the continental shelf do not affect the legal status of the superjacent waters as high seas, or that of the air space above those waters."

INTERPRETATIONS OF THE CONVENTION

The Convention's definition of the seaward extent of the coastal state's jurisdiction has been subjected to a number of interpretations.

Some argue that the factor of exploitability would carry the coastal nation's exclusive mineral jurisdiction to mid-ocean. We disagree. Others argue that it should be restricted to waters as shallow as 200 meters or 12 miles from shore. We disagree with this, too.

The better view, in our opinion, is that the "exploitability" factor of the Convention is limited by the element of "adjacency." The exclusive sovereign rights of the coastal nations to the exploration and exploitation of the natural resources of the seabed and subsoil encompass "the submarine areas *adjacent* to the coast but outside the area of the territorial sea." According to this view, therefore, the exclusive sovereign rights of the coastal nations with respect to the seabed minerals now embrace the submerged land mass of the adjacent continent down to its junction with the deep ocean floor, irrespective of depth.

IMPORTANCE OF THE 1958 CONVENTION TO THE UNITED STATES

If the minerals underlying the seabed adjacent to our coasts remain under American control, as they now are under the Continental Shelf Convention as we construe it, they continue to be resources available for national defense, essential components of the American economy, and important elements of the federal and state tax base.

We do not believe that it is in the interests of the United States that negotiations for the creation of an international regime to govern mineral development of the ocean floor should proceed on the assumption that this new regime will have authority to take over the administration of, or the governmental revenues derived from, the development of the minerals of any part of the submerged segments of the American continent.

In our opinion, the United States should stand on its rights under the Convention as heretofore ratified.

If legal uncertainties are believed to constitute an impediment to utilization of undersea mineral resources, such uncertainties can be eliminated by uniform declarations of the coastal nations which are parties to the Convention on the Continental Shelf, identifying their claims of jurisdiction with the submerged portion of the continental land mass, and reciprocally restricting their claims accordingly, No new conference to amend the Continental Shelf Convention is necessary to accomplish this.

THE SEABED SEAWARD OF NATIONAL JURISDICTION

With respect to the minerals of the deep seabed beyond the exclusive jurisdiction of the coastal nations, three observations are in order: First, the problem is less pressing in point of time because most mineral development will continue to take place first in the shallower waters which are within coastal jurisdiction; second, less is known about the abyssal deeps and therefore about the type of regime that would best effectuate their utilization; third, the negotiation of an international agreement to establish a wholly new regime will consume an extended period of time. Based on the information now available, it appears that the most desirable long-range goal for a mineral regime to govern exploration and exploitation of the mineral resources of the ocean bed and subsoil seaward of the coastal jurisdiction will not be the creation of a supersovereignty with competence to grant or deny mineral concessions. Instead, the desirable goal appears to be an agreement upon norms of conduct by sovereign parties, in order to minimize conflicts between the nationals of the respective sovereigns which sponsor such developments.

While there were some early comments supporting the idea that the United Nations should step in as a supersovereign of the ocean depths, it would appear that there is no official support for this in the United States. At the same time there also appears to be general agreement, both in and out of government here and abroad, that no state should be permitted to acquire territorial sovereignty over any portion of the deep ocean floor outside the limits of national jurisdiction, but that such ocean floor should be open for exploration and exploitation by all nations. There is also general agreement that a nation which undertakes the exploration and exploitation of mineral resources on and under the deep seabead should be protected in the exclusive right to occupy the areas involved, with due regard to other uses of the marine environment, and without impairment of the high-seas character of the overlying waters.

We strongly endorse the principle that the ocean floor beyond the limits of national jurisdiction should be open for exploration and exploitation to the nationals of every country in accordance with accepted principles of international law.

Members of the Committees of the Section of Natural Resources Law and of the Section of International and Comparative Law concerned with the subject of submarine mineral resources, together with members of the Standing Committee on Peace and Law Through United Nations and members of the Committee on Deep Sea Mineral Resources of the American Branch of the International Law Association, have agreed on the following conclusions:

CONCLUSIONS

1. With respect to the gathering of factual information

Full support should be given to the International Decade of Ocean Exploration, now being formulated, and to the continuance of the maximum international cooperation in the acquisition and exchange of information about the ocean floor.

There should not be any embargo on or prohibition of exploration of deep sea mineral resources pending the negotiation of an international agreement relating thereto. To the contrary, all possible exploration, research, and exchange of knowledge should be encouraged. There is no need to prohibit this desirable progress because of uncertainties as to who shall control production, if minerals are discovered.

2. With respect to the area within the exclusive jurisdiction of the coastal nations over submarine mineral resources

Since exploration and exploitation of undersea minerals is likely to occur earlier in the shallower waters of the oceans adjacent to the continents than in the abyssal depths, it follows that if jurisdictional uncertainties arise to impede such operations during the next several decades, such problems will be primarily related to the scope of the mineral jurisdiction which is already vested exclusively in the coastal states by the "exploitability" and "adjacency" criteria of jurisdiction which now appear in the Continental Shelf Convention. This uncertainty, if necessity for its resolution occurs, might be removed by consultation among the major coastal nations which are capable of conducting deep sea mineral development, looking toward the issuance by those states of parallel ex parte declarations. These declarations might appropriately restrict claims of exclusive seabed mineral jurisdiction, pursuant to the exploitability and adjacency factors of the Continental Shelf Convention, to (i) the submerged portions of the continental land mass, or (ii) to a stated distance from the base line, whichever limitation encompasses the larger area. These declarations might appropriately recognize special cases. Two such classifications suggest themselves: (i) in the case of states whose coasts plnnge precipitously to the ocean floor (e.g., on the west coast of South America), the limit on seabed mineral jurisdiction would automatically operate on the deep ocean floor; (ii) in the case of narrow or enclosed seas, the principle of adjacency might appropriately carry coastal mineral jurisdiction to the median lines, even though these are beyond the continental blocks.

This proposal should not necessitate any amendment of the text of the Continental Shelf Convention. That Convention's differentiation between the coastal state's exclusive rights in seabed minerals, on the one hand, and, on the other hand, the non-exclusive status of the seabed with respect to research and other uses not related to mineral exploitation, would be retained. So also with the Convention's preservation of the high-seas status of the overlying waters.

It would, however, be both appropriate and desirable to reiterate these understandings in the recommended declarations. In the instance of scientific research, which is being increasingly impeded by the requirement of coastal consent for research undertaken on the continental shelf, these parallel declarations might be employed to secure greater protection for this vital activity.

3. With respect to the regime which should be applicable to the minerals in and under the seabed, seaward of the limit of the coastal state's exclusive jurisdiction

(1) On the basis of the information now available, we do not think jurisdiction should be vested in the United Nations or in any other international organization to administer an international licensing system with power to grant or deny exploration and production concessions with respect to these resources.

(2) We think there should be created an international commission (including adequate representation of the maritime powers now engaged in oceanic research and mineral exploration), or vesting responsibility in an existing commission so constituted, with instructions to draft a convention (subject, of course, to ratification) which shall have as its objectives:

a. Creation of an international agency with the limited functions of (i) receiving, recording, and publishing notices by sovereign nations of their intent to occupy and explore stated areas of the seabed exclusively for mineral production, notices of actual occupation thereof, notices of discovery, and periodic notices of continuing activity, together with (ii) resolution of conflicts between notices recorded by two or more nations encompassing the same area.

b. Establishment of norms of conduct by sovereign nations with respect to the recording of the notices proposed in the preceding paragraph, and in the occupation of the seabed and exploration and production of minerals therefrom. The drafting commission could appropriately recommend for inclusion in the resulting convention, among other things, standards (or a mechanism to establish standards) relating to permissible areas for inclusion in exploration and production phases, periods of exclusive rights of occupancy, requirements of diligence as related to tenure, conservation, avoidance of pollution, accommodation with competing uses of the marine environment, etc. The instructions to the negotiating commission should stipulate that the resulting convention shall contemplate that the actual production and marketing of minerals discovered shall be controlled by the laws of the recording nation, and that that nation shall be held accountable for the conduct of those operating under its flag in the exploration and exploitation of minerals.

c. Establishment of (i) reasonable payments to be made, preferably to the World Bank, by the nation which undertakes mineral development, in areas seaward of coastal mineral jurisdiction, in the nature of registration fees, and development fees or royalties, and (ii) the purposes to which such revenues, when received, shall be applied. These purposes should be restricted to international activities on which wide agreement can be reached, such as oceanic research, programs aimed at improved use of the sea's food resources to alleviate protein malnutrition, and the development of the natural resources of the less developed countries.

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