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HEARINGS

BEFORE THE

SPECIAL SUBCOMMITTEE ON OUTER CONTINENTAL SHELF

OF THE

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS UNITED STATES SENATE

NINETY-FIRST CONGRESS

FIRST AND SECOND SESSIONS

ON

ISSUES RELATED TO ESTABLISHMENT OF SEWARD BOUNDARY OF UNITED STATES OUTER CONTINENTAL SHELF

DECEMBER 17, 1969, JANUARY 22, AND MARCH 4, 1970

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

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ISSUES RELATED TO ESTABLISHMENT OF SEAWARD BOUNDARY OF UNITED STATES OUTER CONTINENTAL SHELF

WEDNESDAY, DECEMBER 17, 1969

U.S. SENATE,
SPECIAL SUBCOMMITTEE ON OUTER CONTINENTAL SHELF
OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:10 a.m., in room 3110, New Senate Office Building, Senator Lee Metcalf (chairman of the subcommittee) presiding.

Present: Senators Metcalf, Bellmon, and Stevens.

Senator METCALF. The subcommittee will be in order.

I have a statement that I am going to ask unanimous consent to put in the record and I will read just a part of it.

The romance of the sea is being discovered and rediscovered every day. Writers who have known and studied the sea all their lives remain intoxicated by its mysteries. Despite its romance, there are serious problems developing in the oceans. Some of these problems stem from conflicts arising out of man's actual use of the ocean and the ocean floor. That is why this subcommittee was created. As we begin our inquiries into this topic, we hope to overcome the romance of it long enough to ask some sober questions and make some sober judgments.

As we open these hearings, it is appropriate that the record show how and why this Special Subcommittee on the Outer Continental Shelf was established and our jurisdiction purposes. Therefore, without objection, I will direct that the letter to me of the chairman of the Senate Committee on Interior and Insular Affairs, dated July 23, 1969, be printed at this point in the record.

(The letter referred to above follows:)

JULY 23, 1969.

Hon. LEE METCALF,
U.S. Senate,
Washington, D.C.

DEAR LEE: As you know, the Interior Committee is the unit of the Senate that conducted the hearings and gave initial consideration to the bill that became the Outer Continental Shelf Lands Act of 1953, and we have the responsibility for legislative oversight of operations under that law (67 Stat. 462; 43 U.S.C. 1331).

This Act is the first, and only, legislative declaration asserting the sovereignty of the United States over the mineral resources of the subsoil beyond the sea boundaries of the States. The character as high seas of the waters above the outer shelf and rights of navigation and fishing are explicitly preserved.

No specific outer boundary to our limited claims to sovereignty over the outer continental shelf is set forth in the 1953 Act, and at the time it was generally understood that the limits were those of exploitability of the mineral resources. Essentially, this same concept is in the definition that was adopted by the Geneva Convention in 1958.

Recently the United Nations has been considering proposals which would turn over to the United Nations or to the "have not" nations rights for development of the mineral resources beyond a fixed depth, or beyond a definite distance from shore. Our State Department, in conjunction with the Departments of Defense and Interior, is endeavoring to work out a policy position for the United States. The Interior Department has issued leases, and drilling is now under way at depths substantially greater than the figures now being discussed.

In view of our direct responsibility with respect to mineral resource development in outer shelf lands, and the proposals now under consideration, I believe we should create a special subcommittee, which probably would be temporary in nature, concerned with matters dealing only with the outer continental shelf to aid the executive branch in formulating a policy position and to oversee developments generally.

The Commerce Committee is taking identical action, and I have discussed with Chairman Magnuson the scheduling of joint hearings by our two subcommittees.

In view of your interest in minerals and the Nation's energy supply, it occurs to me that you might be interested in serving as Chairman of this special subcommittee. My present plan is to have a 4–3 membership, with Senator Allott naming the minority members and Senators Moss, Gravel and I serving with you as majority members.

Sincerely yours,

HENRY M. JACKSON, *Chairman.*

Chairman Jackson sets forth the background and legislative history of the Interior Committee's responsibilities affecting the development of the mineral resources of the submerged lands off the coasts of the United States and its offshore areas. He also outlines some of the current developments that make it highly desirable for us to continue to exercise our oversight function at this time.

In addition, I will direct that there be incorporated, by reference, into these hearings a committee print prepared by the staff of this committee entitled "Selected Materials on the Outer Continental Shelf." This print contains some of the basic documents and decisions of the Supreme Court that are highly pertinent to the present position of the United States respecting the outer shelf.

This subcommittee opened with a closed hearing on November 19. At that time we joined in an off-the-record discussion with spokesmen for the Departments of State, Defense, Commerce, Interior, Transportation, and the scientific community.

From preliminary study to date, it appears that our subcommittee can make a useful contribution to the further development of a national policy for seabed and subsoil resources by concentrating initially on the following areas of study.

(1) The adequacy of the 1958 Geneva Convention on the Continental Shelf to protect and enhance, consistent with the national interest, maximum access by the United States to the natural resources of its Continental Shelf;

(2) Whether the policies presently being considered within our Federal Government regarding a regime concerning the development of the natural resources of the deep seabed beyond the outer limits of our national jurisdiction, wherever established are consistent with the policy objectives of:

(*a*) Insuring maximum permissible exclusive national access to the natural resources of our Continental Shelf, and

(*b*) Encouraging a viable system for the development of seabed resources located beyond the outer limits of exclusive national jurisdiction.

(3) The nature of the policy being developed within our Federal Government, applicable prior to reaching international agreement on a deep seabed regime, with respect to the regulation of the activities of U.S. nationals related to the exploration and exploitation of seabed resources located beyond the outer limits of the U.S. Continental Shelf;

(4) Whether, since enactment of the Outer Continental Shelf Lands Act of 1953, any problems have arisen concerning the development of Continental Shelf resources and related matters which may warrant amendment of the legislation or other congressional action;

(5) Whether, in the light of the knowledge this subcommittee acquires with respect to any of these study areas, any immediate congressional action may be required.

Although I believe that priority attention should be given to the first two points, I feel that all these areas are related and that investigation of any one should not preclude taking into account possible relationships with others.

Accordingly, as I have told the members of this subcommittee, in order to effectively pursue our investigation of the enumerated areas of study, this subcommittee should initially conduct a set of hearings designed to clarify and make more visible the issues related to the proper resolution of the questions associated with the development of a sound shelf and seabed resource policy.

It is in this context that we welcome our witnesses this morning. We have Mr. Northcutt Ely, who is a member of the Council of Natural Resources Section of the American Bar Association. The subcommittee understands that Mr. Ely is authorized by that section to present a resolution of the House of Delegates of the American Bar Association, and a joint report of the section of natural resources law, the section of international and comparisons law, and the standing committee on world order and law.

We had hoped that Mr. John Laylin who is the chairman of the committee of oceanography of the section of international and comparative law would be here but I understand he is ill and I hope that he will be able to file a statement with the committee.

Before proceeding with the prepared testimony this morning, Mr. Ely, I would like to lay before the subcommittee and before you a matter which has recently arisen and caused me serious concern.

I learned that on Monday, the U.N. General Assembly resolved that no exploitation should take place on the seabed pending establishment of an international regime.

More specifically, the General Assembly * * * declares that, pending establishment of the aforementioned international regime:

(a) States and persons, physical or juridical, are bound to refrain from all activities of exploitation of the resources of the area of the seabed and ocean floor and the subsoil thereof, beyond the limits of national jurisdiction;

(b) No claim to any part of that area or its resources shall be recognized.

I am not an expert on international law. Mr. Ely is. This resolution has raised serious questions. I wonder if the General Assembly has exceeded its lawful authority in passing such a resolution. I wonder if this resolution doesn't fly in the face of the High Seas Convention, which permits absolute freedom of the seas, including reasonable use of the deep seabed. What troubles me most is whether or not this resolution has a binding effect on the United States insofar as it

would prohibit any further development on the part of U.S. companies who are interested in recovering the mineral resources of the deep seabed, such as manganese nodules.

Before you get into your testimony I hope you can pause for a moment to reflect on the question of the moratorium resolution and recommend to this committee what action it should consider taking to protect the interests of the United States against the apparent or intended effect of this moratorium resolution.

If you feel that you could use more time to think about it I would appreciate your thoughts in writing as soon as possible and they will be included in the record as a part of your testimony.

(Senator Metcalf's complete statement follows:)

STATEMENT OF HON. LEE METCALF, A U.S. SENATOR FROM THE STATE OF MONTANA

The romance of the sea is being discovered and rediscovered every day. Writers who have known and studied the sea all their lives remain intoxicated by its mysteries.

One of this Nation's most respected senior statesmen of oceanography recently began an article entitled, "Ocean's Great Age is Here," with these words: ". . . The ocean holds me in an enduring spell. Part of the spell comes from mystery—the four-fold mystery of the shore line, the surface, the horizon and the timeless motion of the sea.

"The thin, moving line between land and water on an open coast presents a nearly impenetrable wall. The ships and fishing boats I watch from my living room window exist in a separate world, as remote as another planet.

"Below the surface there is a multitude of living things, darting and watching, living and dying; theirs is an alien world I cannot see and can hardly imagine.

"At the horizon, where my line of sight touches the edge of the great globe itself, I watch ships slowly disappear. First the hulls and then the tall masts, bound on voyages to unknown ports ten thousand miles away. From beyond the horizon comes the waves that break rhythmically on the beach, sounding now loud, now soft, as they did long before I was born and as they will in the far future. The restless, ever-changing ocean is timeless on the scale of my life, and this also is a mystery."

Many of us on this subcommittee come from land-locked homes, which preclude our discovery of the oceans until later in life. Despite our more senior years, we still revel with child-like amazement at the sight of the sea, and we fantasize about its romance. The romance of the ocean cannot be disputed; it is in fact its major attraction.

But despite its romance, there are serious problems developing in the oceans. Some of these problems stem from conflicts arising out of man's actual use of the ocean and the ocean floor. Others stem purely from some of man's fantasies about who has what rights and who lacks what rights to do business in the ocean and on its floor.

That is why this subcommittee was created. As we begin our inquiries into this topic, we hope to overcome the romance of it long enough to ask some sober questions and make some sober judgments.

This will begin the public hearings of the Special Subcommittee on the Outer Continental Shelf. During the next few weeks we intend to explore in depth issues related to the establishment of the seaward boundary of the United States Outer Continental Shelf.

As we open these hearings, it is appropriate that the record show how and why this Special Subcommittee on the Outer Continental Shelf was established and our jurisdiction and purposes. Therefore, without objection, I will direct that the letter to me of the Chairman of the Senate Committee on Interior and Insular Affairs, dated 23 July 1969, be printed at this point in the record.

Chairman Jackson sets forth the background and legislative history of the Interior Committee's responsibilities affecting the development of the mineral resources of the submerged lands off the coasts of the United States and its off-shore areas. He also outlines some of the current developments that make it

highly desirable for us to continue to exercise our oversight function at this time.

In addition, I will direct that there be incorporated, by reference, into these hearings a Committee Print prepared by the staff of this Committee entitled "Selected Materials on the Outer Continental Shelf." This Print contains some of the basic documents and decisions of the Supreme Court that are highly pertinent to the present position of the United States respecting the outer shelf.

The Marine Science Commission's report, "Our Nation and the Sea," concluded that uncertainties exist with respect to the definition of the Continental Shelf contained in the 1958 Geneva Convention on the Continental Shelf—that due to these uncertainties there is a danger that nations may attempt to claim shelf areas in excess of that contemplated by the Geneva Convention—that such claims would give rise to an additional danger, that rights of exclusive access for one purpose, for example exploring and exploiting shelf resources, may expand to claims of territorial sovereignty or exclusive access for all purposes.

To prevent such dangers from arising, the report recommended that the United States take the initiative to secure international agreement on a redefinition of the Continental Shelf which would be fixed at the 200-meter isobath or 50 nautical miles from the baseline for measuring the breadth of the territorial sea.

During the recent hearings of the Commerce Committee's Special Subcommittee on Oceanography, chaired by Senator Hollings, some witnesses agreed with the conclusions of the Marine Science Commission. Others indicated that the definition of the Shelf in the Geneva Convention was adequate, but subject to several interpretations.

One interpretation is that the legal Continental Shelf presently extends to the point where the continental margin joins the deep ocean floor, but no farther.

A second interpretation is that the shelf ultimately could extend to the point where the continental margin joins the deep ocean floor, and no farther, but that the seaward limits of the shelf presently extend no farther than existing technology.

This Subcommittee opened with a closed hearing on November 19. At that time we joined in an off-the-record discussion with spokesmen for the Departments of State, Defense, Commerce, Interior, Transportation and the scientific community

We talked over the effect of the adoption of each of these three interpretations of the limits of the legal Continental Shelf on the objectives of each of the departments. We discussed the contention that the exercise of exclusive jurisdiction for one purpose may expand to territorial claims of sovereignty or exclusive access for all purposes.

As you know, there has been increased interest in the Senate in these matters, particularly those stimulated by recent activities in the United Nations. I have reviewed the hearings conducted by Senator Pell. As Senator Hollings' invitation, I attended his recent hearings. We, in turn, have invited Senator Hollings, Senator Pell and members of their subcommittees to join us today and at future hearings.

From preliminary study to date, it appears that our Subcommittee can make a useful contribution to the further development of a national policy for seabed and subsoil resources by concentrating initially on the following areas of study:

(1) The adequacy of the 1958 Geneva Convention on the Continental Shelf to protect and enhance, consistent with the national interest, maximum access by the United States to the natural resources of its Continental Shelf;

(2) Whether the policies presently being considered within our Federal Government regarding a regime concerning the development of the natural resources of the deep seabed beyond the outer limits of our national jurisdiction, wherever established, are consistent with the policy objectives of:

(A) insuring maximum permissible exclusive national access to the natural resources of our Continental Shelf, and,

(B) encouraging a viable system for the development of seabed resources located beyond the outer limits of exclusive national jurisdiction.

(3) The nature of the policy being developed within our Federal Government, applicable prior to reaching international agreement on a deep seabed regime, with respect to the regulation of the activities of United States nationals related to the exploration and exploitation of seabed resources located beyond the outer limits of the U.S. Continental Shelf;

(4) Whether, since enactment of the Outer Continental Shelf Lands Act of 1953, any problems have arisen concerning the development of continental shelf re-

sources and related matters which may warrant amendment of that legislation or other Congressional action;

(5) Whether, in the light of the knowledge this Subcommittee acquires with respect to any of these study areas, any immediate Congressional action may be required.

Although I believe that priority attention should be given to the first two points, I feel that all these areas are related and that investigation of any one should not preclude taking into account possible relationships with others.

Accordingly, as I have told the members of this subcommittee, in order to effectively pursue our investigation of the enumerated areas of study, this Subcommittee should initially conduct a set of hearings designed to clarify and make more visible the issues related to the proper resolution of the questions associated with the development of a sound shelf and seabed resource policy.

It is in this context that we welcome our witnesses this morning. With us, we have Mr. John G. Laylin and Mr. Northcutt Ely. Mr. Laylin is chairman of the Committee on Oceanography of the American Bar Association Section of International and Comparative law. Mr. Ely is a member of the Natural Resources Section of the American Bar Association's Marine Resources Committee. The Subcommittee understands that their views will be based on what they have learned from their colleagues and from other sources, and that they will not be speaking for the American Bar Association. It is a pleasure to welcome two experts in this field.

However, gentlemen, before proceeding with your prepared testimony, I'd like to discuss with you a matter which has caused me serious concern.

I learned that on Monday, the U.N. General Assembly resolved that no exploitation should take place on the seabed pending establishment of an international regime.

More specifically, "the General Assembly . . . declares that, pending establishment of the aforementioned international regime:

"(a) States and persons, physical or juridical, are bound to refrain from all activities of exploitation of the resources of the area of the seabed and ocean floor and the subsoil thereof, beyond the limits of national jurisdiction;

"(b) No claim to any part of that area or its resources shall be recognized."

I'm no expert on international law. You gentlemen are. This resolution has raised serious questions in my mind. I wonder if the General Assembly has exceeded its lawful authority in passing such a resolution. I wonder if this resolution doesn't fly in the face of the High Seas Convention, which permits absolute freedom of the seas, including reasonable use of the deep seabed. What troubles me most is whether or not this resolution has a binding effect on the United States insofar as it would prohibit any further development on the part of U.S. companies who are interested in recovering the mineral resources of the deep seabed, such as manganese nodules.

Before you get into your testimony, could you pause for a moment to reflect on the question of the moratorium resolution and recommend to this committee what action it should consider taking to protect the interests of the United States against the apparent or intended effect of this moratorium resolution.

If you feel that you could use more time to think about it, I will appreciate your thoughts in writing as soon as possible, and I will include them in the record of this hearing.

Senator METCALF. Now, Mr. Ely, we are delighted to have you before the committee. I know from long experience what an expert you are on various matters of law. I certainly respect your learning and certainly enjoyed your testimony in the past and look forward to your testimony this morning.

Mr. ELY. Mr. Chairman, thank you for your very gracious introduction.

Senator METCALF. Do you have something, Senator?

Senator STEVENS. No, Mr. Chairman.

I would like to have after the committee material is inserted in the record, a statement I made which was for delivery to the American Bar Association at Dallas, August 12, entitled "A U.S. Policy for the Wet Frontier" to put in the record.

Senator METCALF. It will be inserted at this point.

(The statement referred to follows:)

[From the Congressional Record, Aug. 13, 1969]

A U.S. Policy for the Wet Frontier

(By Senator Ted Stevens to the Section of Natural Resources Law of the American Bar Association, Dallas, Tex., Aug. 12, 1969)

I am here to discuss with you suggestions for modification in United States policy with respect to our interpretation of the 1958 Geneva Convention on the Continental Shelf. In my opinion, a reassessment of claims to exclusive fishing rights and management of the fish and minerals off our coast would be in the best interests of our future utilization of these resources.

For the sake of consistency, in my discussion I have adopted the following terminology: the term "continental shelf" is understood to be that portion of the continent which is covered by the waters up to the point of declivity of the slope or edge of the shelf. The term "continental slope" refers to the slope from the edge of the shelf to the abyssal. "Continental terrace" is understood to be that part of the submerged land mass that forms both the shelf and the slope.

In appraising our nation's right to control the disposition and development of the natural resources on the continental terrace and its right to the marine life that inhabits the waters above the terrace, it is important to remember that a nation's jurisdiction can be likened to a bundle of sticks. Landward of a baseline, which is low water line or straight-line joining points along an irregular coast line, the coastal nation has exactly the power it has on land, a complete bundle of jurisdictional sticks. Outward from the baseline to the limit of territorial waters, say three miles, as our government insists, or six, or twelve, or more, as other nations claim, the coastal nation has most of the sovereign power it has on land. These extend to all four elements of the marine environment—the seabed, the overlying water, the water surface, and the superjacent air space. This near plenary control over territorial waters is subject under international law to the easement in favor of innocent passage of merchant ships and war ships in peacetime, subject to certain restrictions.

Beyond territorial waters, some sticks begin to fall out of the bundle of sovereign powers. Coastal nations, under international law, have some powers beyond the belt of territorial waters, but these are restricted, extraterritorial powers. For example, with respect to the surface, the Convention on the Territorial Sea and Contiguous Zone provides that a contiguous zone may be established to encompass a belt twelve miles wide, measured from the same baseline from which the territorial waters are measured. In this contiguous zone, the coastal nation may, for example, exercise exclusive control of fisheries. Beyond that, the surface of the ocean is part of the high seas over which the coastal nation has no more power than any other nation of the world.

The potential value of the undersea area adjacent to the coast of the United States in terms of mineral resources and food sources is almost beyond estimate.

For instance, the importance of offshore petroleum and natural gas is reflected in estimates that, within two decades, 30% to 40% of the domestic and world production will come from offshore sources. Currently, 15% of United States production of sulfur comes from offshore, and additional sulfur areas have been identified in the Gulf of Mexico. While the potential for offshore solid minerals is still in the exploratory stage, projections show that U.S. consumption of many commodities will double by 1980. Additionally, the demand for sand, gravel, shells, and other construction materials dredged from near shore waters is increasing significantly in areas where rapid urbanization is simultaneously enlarging the need and excluding land sources of supply. The value of all minerals produced from Federal and state offshore waters in the past decade exceeds $7.5 billion, including petroleum production valued at about $6 billion.

Also of some commercial importance are varieties of seaweed to be found off both the Atlantic and Pacific coasts. California kelp, which is machine harvested as a source of algin, is of greatest importance.

In terms of animal resources in the waters superjacent to the continental terrace, the fishing industries that have flourished in our coastal states testify to the wealth of this particular food source. However, these same industries testify to the need for wise management and conservation of a continually diminishing supply of commercially harvestable marine animal life. Of particular concern in my State of Alaska is the management of the salmon harvest. The Japanese, operating a mother-ship fleet consisting of nearly 400 salmon vessels, were taking salmon originating in Alaskan river systems during June and July. During this same period, observations by a U.S. fishery patrol unit revealed that catches of

salmon—mature sockeye salmon on their way to Bristol Bay—were being made by a small fleet of 6 South Korean vessels. In 1967 a total of nearly 1200 Soviet and Japanese vessels were sighted operating in the Bering Sea and the North Pacific. About 500 of these vessels operated in the Eastern Bering Sea on the Alaskan continental shelf.

For me, these activities raise two distinct problems: (1) to what seaward boundary should the United States assert exclusive American jurisdiction over submarine mineral development, and, (2) to what seaward boundary should the United States assert exclusive American jurisdiction over the management and disposition of the food resources of the sea.

Let us look first to the basis for assertion of exclusive American rights to the mineral development of the continental terrace. From all evidence, there is no reason to assume that the value of potential mineral discoveries will end at the edge of the shelf. In addition, there is no way to clearly delineate, satisfactorily, the limits of the shelf for national claims and take into account all specific situations that arise. There is, however, a clear and easily defined manner in establishing a boundary of the terrace, and we shall briefly discuss this point later. Since 1945, when President Truman proclaimed that ". . . the United States regards the natural resources of the subsoil and the 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", it has been the policy of our Government to regard the resources of the continental shelf as within the jurisdictional bundle of sticks that belongs to the United States.

In 1951 the International Law Commission for all intents and purposes gave legitimacy to President Truman's proclamation by recommending that a coastal nation should have control and jurisdiction over the natural resources of a continental shelf, contiguous to the coast but outside the area of its territorial waters "where the depth of the superjacent waters admits of the exploitation of the natural resources of the seabed and subsoil." Neither the International Law Commission nor the Truman proclamation included any reference to depth or defined the term continental shelf.

The first reference to depth or an attempt to define the recommendations of the International Law Commission was made by that body in 1953 when it defined coastal jurisdiction of the shelf lands solely in terms of water depth, using 200 meters as the outside limit. In March of 1956, 20 American nations, which were dissatisfied with the Commission's 1953 recommendations met at Ciudad Trujillo and adopted a resolution that would admit national jurisdiction to a depth of 200 meters, or beyond that limit to a depth of the superjacent waters which would admit the exploitation of the natural resources of the seabed and subsoil. The International Law Commission met a week after the Ciudad Trujillo American meeting and, in essence, adopted the American position which placed national jurisdiction at any depth that admitted exploitation of the resources of the seabed and subsoil.

In 1958, the United Nations Conference on the Law of the Sea convened in Geneva. The Convention on the Continental Shelf was one of the end products of this meeting. The language used in the Convention was the same as that recommended by the 20 American nations at Ciudad Trujillo and that of the 1956 International Law Commission recommendations. The Convention was ratified by the United States in 1960 and went into effect on June 10, 1964, when the 22nd nation ratified that agreement.

Essentially then, the rights of the United States in the continental margin are controlled by the 1958 Convention on the Continental Shelf. This recognizes in the coastal nations exclusive "sovereign rights" to the exploration and exploitation of the natural resources of the "continental shelf". The Convention uses the term continental shelf as shorthand expression which refers to the submarine areas adjacent to the coasts but outside the territorial sea to a depth of 200 meters or, as the Convention asserts in Article I, beyond that limit to where the depth of the superjacent waters admits of exploitation of the natural resources of that area. This, of course, extends coastal jurisdiction beyond the continental shelf, and the Convention does this deliberately. In light of the relative ease with which a geo-legal definition of the continental terrace can be made, it would seem in the best interests of the United States to interpret the wording of the Convention to mean the continental terrace to alleviate possible problems of disputes that may arise from some unforeseeable contingencies. Article II of the Convention asserts that these rights are exclusive in the sense that, if the coastal nation does not explore or exploit these resources, then no one may undertake these ac-

tivities. Again, we can see the desirability of a firmly fixed boundary that is easily definable rather than the fairly fuzzy one of the Convention. Article III of the Convention clearly states that the seabed rights of the coastal state do not affect the status of the superjacent waters as high seas or that of the air space above these waters. There are, however, valuable resources in the overlying water column in the form of food resources which brings us to a discussion of our second question, to what seaward boundary should the United States assert exclusive American jurisdiction over the management of and disposition of the food resources of the sea.

The European Fisheries Convention of 1964, although limiting its effect to the parties of the Convention, represents the first multilateral agreement which recognized that a state is entitled to fix the limits of its territorial sea up to a maximum of 6 nautical miles with a contiguous fishing zone extending not further than 12 nautical miles from the baseline of its territorial sea. The Convention further provides that the fishing vessels of any party, which had made a practice of fishing in the outer 6 miles of a fishing zone, retain these fishing rights for an unlimited period provided that they do not fish for stocks or in any area substantially different from those they have habitually exploited. The United States is not a party to this convention.

Again, as in the case of mineral resources, it is absurd to assert that fish inhabit areas of oceans convenient to the Convention definition of exclusive fishing rights. Indeed, as early as 1938, it was recognized by Anthony Diamond, then Delegate to Congress from Alaska, and others, that the migratory practices of salmon, for instance, carried them far afield from the fishing zone and that the practices of foreign and American fishing vessels outside the fishing zone areas could, in fact do, irreparable harm to that species. Mr. Diamond cited the near destruction of the Siberian fisheries of Siberia in 1937 due to unwise management and conservation practices. At that time, he was concerned lest the same thing happen to the Alaskan salmon industry. Today we face the same problem. As I cited earlier, in 1967 about 500 foreign vessels were observed fishing in the Bering Sea over the continental shelf lands adjacent to Alaska. Any fisherman of fresh water lakes that have been over fished can tell you of the disastrous consequences of uncontrolled management of fishing. Salmon are particularly vulnerable to over fishing because of their migratory habits. Yet there is no way we can now control those nations who are not a party to the North Pacific Fishing Treaty from harvesting salmon beyond our territorial waters.

I suggest it would be in the best interests of this nation and every coastal nation to assert exclusive fishery rights in the waters that lie above their continental terrace lands. I would also suggest that this nation take the lead in seeking international recognition of this right. We cannot continue to allow a pillage of the marine resources above the continental terrace.

In summary, I assert that the United States ought to seek to have the definition of exploitability in the Convention on the Continental Shelf modified so that the term embraces the entire continental terrace. Secondly, I assert it is in the best interests of this nation for the United States to claim exclusively fishery rights in the waters superjacent to the continental terrace and seek international recognition of this claim. Neither of these assertions is inconsistent with the right of innocent passage nor with the basic intent of the Convention on the Continental Shelf.

It is my understanding that the position I have voiced today is in basic agreement with that of the current administration in my home State of Alaska. Today I seek broad federal acceptance of this position and will submit legislation to that effect in the near future.

Mr. ELY. I take it that my prepared statement may appear in the record as though read——

Senator METCALF. As if read.

(The statement referred to follows:)

STATEMENT OF NORTHCUTT ELY, OF ELY & DUNCAN, ATTORNEYS AT LAW, WASHINGTON, D.C.

Mr. ELY. My name is Northcutt Ely. I am a member of the law firm of Ely & Duncan, of Washington, D.C. I am a member of the council of the Section of Natural Resources Law of the American Bar Association, and appear here, in response to your committee's invitation of November 26, 1969, by direction of the chairman and council of that section.

The American Bar Association speaks on policy matters only through resolutions of the house of delegates. The house of delegates adopted a resolution (No. 73) at its Augst 1968 meeting covering some, but not all, of the subjects of the 10 questions contained in your letter of November 26. That resolution is contained in a 1968 Joint Report of the Section of Natural Resources Law, the Section of International and Comparative Law, and the Standing Committee on Peace and Law through United Nations (now the standing committee on world order under law). Resolution No. 73, and the 1968 joint report which contains it, accompany my statement as appendix A.*

At the 1969 meeting of the American Bar Association the same sections and committee adopted another joint report captioned "Non-Living Resources of the Sea: A Summary and Critique of Chapter 4, Part III, of the Report of the Marine Science Commission." This is submitted as appendix B to my statement.

In answering the committee's questions of November 26, I shall make reference, where appropriate, to that resolution and those reports. I participated in drafting those reports and concur in them. Where the committee's questions go further, I shall be answering on my personal responsibility.

I shall accordingly make reference, if I may, to two other appendixes to this statement, which have been prepared under my direction.

Appendix C is captioned "The Legislative History (or Travaux Prepatoires) of the 1958 Convention on the Continental Shelf."

Appendix D is captioned "Coastal State Mineral Jurisdiction and the Continental Margin: Survey of National Practice."

I have had the privilege of participating in two other professional committees which have written reports on the questions now before your committee. They reached conclusions substantially in accord with those of the American Bar Association section reports. They are:

Appendix E: "Interim Report of the Committee on Deep Sea Mineral Resources of the American Branch of the International Law Association." I have the honor to be chairman of that committee.

Report of the National Petroleum Council, "Petroleum Resources Under the Ocean Floor," 1969. I believe that your committee has this in its files.

Appendix F consists of quotations from the North Sea Continental Shelf decision of the International Court of Justice.

I shall endeavor to give categorical answers to the 10 questions stated in the committee's letter to me of November 26, 1969.

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*Resolution 73 "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."

QUESTIONS 1 AND 2

"Is the 1958 Geneva Convention on the Continental Shelf sufficiently precise to permit reasonable interpretation as to the limits of the legal Continental Shelf?

"If so, what is a reasonable interpretation of the ultimate limits of the legal Continental Shelf as defined by the 1958 Geneva Convention on the Continental Shelf?

ANSWERS

The articles of the convention particularly relevant here are articles 1 and 2. Their full text is reproduced in the margin, for ready reference.*

The Convention on the Continental Shelf is sufficiently precise to permit reasonable interpretation as to the limits of the legal Continental Shelf. The convention requires no amendment to determine those limits, or to define new ones.

The proper interpretation of the ultimate limits of the legal Continental Shelf as defined by the 1958 Geneva Convention on the Continental Shelf is stated succinctly, I believe, in the following quotations from the 1969 ABA sections' joint report (pp. 36–38),† which summarize our views on this Nation's rights under the convention, and what should be done to implement those rights:

(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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*Treaties and International Acts Series 5578, United Nations Conference on the Law of the Sea, Convention on the Continental Shelf.

"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 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, this 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."

†All reference and page numbers referred to by Mr. Ely throughout his testimony are in the committee files.

(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 extentions of the continental shelf doctrine, and should be so regarded by the United States.

I invite the committee's attention to the rather full summary of both sides of the narrow shelf-broad shelf debate, on both policy and law, contained in our 1969 joint report (appendix B to this statement, pp. 25–36). After full consideration, we adhered firmly to the conclusion that "the present shelf convention should properly be interpreted to include the submerged continental land mass" (p. 36). Our 1968 joint report had reached the same conclusion (appendix A, pp. 8–9).

The 1968 Interim Report of the Committee on Deep Sea Mineral Resources of the American Branch of the International Law Association stated the boundary problem this way (pp. IX–X):

* * * 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 a strong support for this view in the drafting history of the Convention, although other interpretations have been advanced.

The National Petroleum Council report stated the same conclusion in more detail (p. 57); that is, that under article 1 of the convention:

* * * it can reasonably be concluded that the coastal nations' exclusive jurisdiction over the natural resources of the seabed and subsoil was intended to, and does, encompass in general, the continental mass seaward to where the submerged portion of that mass meets the abyssal ocean floor (including the continental shelf, continental borderland, continental slope, and at least the landward portion of the continental rise overlapping the slope).

The conclusions that I have stated are based on the language of the convention, its legislative history (reviewed in appendix C to this statement), and the practice of states (appendix D). Moreover, articles 1 and 2 of the convention have been held by the International Court of Justice in the *North Sea Continental Shelf* case, 1969 I.C.J. Reports 1, to be declaratory of "inherent rights" of coastal states to the natural resources of the seabed which constitutes a "natural prolongation" of their territory.*

*I agree with British lawyers who believe that the doctrine of the North Sea case is not limited by depth of water, but extends to the whole continental margin. See, notably, the article of Prof. R. Y. Jennings, university lecturer in international law, Cambridge University, "The Limits of Continental Shelf Jurisdiction: Some Possible Implications of the North Sea Case Judgment," 18 I.C.L.Q. 819 (1969). Professor Jennings says (p. 829):

"In short, the convention, like the Court, throws the question of the outer limit back onto geography or geology or both. And both in terms of geology and in terms of geomorphology there would seem to be little room for doubt that the continental slope is just as much a part of and a prolongation of the continental land mass as the Continental Shelf is. For it is not just a question of seabed but a question also of subsoil, viz., of the underlying rock structure. The underlying rock structure of the shelf and the slope is identical. Indeed the only difference between shelf and slope is one of relative gradient; or, to put it another way, the difference is geomorphological, not geological."

And (p. 830):

"To summarize the argument thus far, the position is that considerations of geography and geology—to which the law itself looks for guidance—lead to the conclusion that the continental slope and subsoil are part and parcel of that 'prolongation' of the continent over which the coastal state has exclusive jurisdiction. It may now be added that this

QUESTION 3

"Should the United States stand on its rights under the present language of the Shelf Convention, or should it, as the Marine Science Commission has proposed, take the initiative to secure international agreement on an amendment to the convention providing for a narrow Continental Shelf?

"What reasons do you offer in support of your answer?"

ANSWER

To this, the American Bar Association has given a clear answer. The 1968 resolution of the house of delegates recommended (p. 4):

(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 1968 joint report of the sections said (p. 9):

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

The 1969 joint report of the sections said (p. 37):

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.

Our reasons were stated in the 1968 joint report of the sections (p. 9), as follows:

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.

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a priori conclusion is in process of confirmation by State practice. For State assumption of exclusive jurisdiction in the granting of licenses has already extended in a number of instances to the continental slope. There is nothing secret, nor could there be, about these assumptions of jurisdiction and control; yet, so far as the writer is aware, there have been no protests from other states, although this is a matter in which, were the permissible jurisdiction exceeded, all other states would have an interest.

"There remains the continental rise. This is a different case. For if the principles governing the slope seem reasonably clear, this is not so in regard to the rise. Indeed, it appears difficult even to speculate about the rise with any assurance. The reason is simply that here geology itself speaks with an uncertain voice. * * *"

And, as to the reconciliation between this view and the exploitability criterion of article 1 of the convention (p. 831–32):

"The conclusions would seem to be, then, that the resources of any area which is 'appurtenant,' in the sense of being geomorphologically or geologically a part in physical fact of the land mass, must by general international law be deemed already vested in the coastal state; but, as between states which have ratified the 1958 Geneva Convention on the Continental Shelf, a particular treaty regime applies to that part of the 'appurtenant' area which 'admits of exploitation'—whatever that may mean. For the test of the applicability of the treaty regime is not, of course, actual exploitation, but exploitability; a test which the advances of technology have inevitably rendered more rather than less elusive. Indeed, the remaining margin between the extent of a state's rights and obligations in general law and its rights and obligations under the convention, if it be a party to it, must now be a matter for mainly theoretical speculations; for one who is a party cannot be disbarred by the convention from relying upon the general law, and indeed must do so in relation to nonparties.

"Thus the exploitability test, though it serves to extend the particular treaty regime to areas beyond the 200-meter contour, provides no reasonably practical and clear outer limit, within the limit laid down by general law and embodied in the convention itself in the term 'adjacency.' It may well be, therefore, that the exploitability clause could now for practical purposes be regarded as functus officio, and the extent of Continental Shelf jurisdiction governed by the convention be regarded as approximating to that sanctioned by the general law. This would seem to be a practical as well as a logical solution of the problem." (Professor Jennings' footnotes omitted.)

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.

Our 1969 joint report commented on proposals for a new Continental Shelf Conference, as follows (p. 32) :

A substantial sentiment exists among informed persons in this country that under present circumstances a new UN Conference on the 1958 Geneva pattern would not be advantageous for United States interests. Such a conference might well fail to reach agreement, for political reasons unconnected with the legal merits of the various proposals which would come before it. A result of this kind could well convert present uncertainties into complete chaos. Alternatively, an agreement carried by a majority of small states might embody principles unacceptable to the United States, yet which would be difficult to disregard if formally adopted by such a conference. In either event, no real legal gain would result and quite possibly a retrogression would occur which could undo even some of the progress made in 1958.

Commenting on the recommendation of the Marine Science Commission, 1969 joint report said (p. 38) :

The position stated in these comments necessarily leads us to disagree with the Commission's recommendation . . . 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.

I shall have more to say about the Commission's report as we go along.

QUESTION 4

"If the United States should choose to stand on its rights under the present language of the Convention, would any other affirmative action be required on the part of the United States to secure such rights?

"If so, what action?"

The answer to this question is controlled by article 2 of the convention.

Strictly speaking, no affirmative action need be taken by the United States to secure its rights under the convention, but we do recommend parallel declarations of position by the coastal nations, for reasons which I will state later.

Article 2 tells us in paragraph 1 that

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

Paragraph 2 of article 2 assures us that

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.

Paragraph 3 of article 2 says specifically that

The rights of the coastal State over the continental shelf do no depend on occupation, effective or notional, or on any express proclamation.

The consequence is that exploitation by any foreign nation of the continental margin adjacent to a coast automatically confirms jurisdiction in the coastal nation. If the waters involved are shallower than 200 meters, there is no argument about it. If they are deeper than 200 meters, the very fact that this adjacent area is being exploited automatically confirms the jurisdiction of the coastal State, under the exploitability criterion of article 1. The only problem is, what constitutes "adjacency"?

For reasons spelled out in our 1969 report, we think that under the existing convention coastal jurisdiction is, in general, restricted by the criterion of "adjacency" to the submerged continental land mass. The Commission disagrees, saying (p. 144): "We do not think there is any reasonable way to interpret the convention's definition that would place a precise outer limit on the existing legal 'continental shelf.'"

If there is any uncertainty which justifies international action, the house of delegates' resolution suggests this:

> 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 areas 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.

Our 1968 joint report, which recommended that language to the house of delegates, gave this explanation (p. 9):

> 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.

Our 1969 report, again opposing an international conference, said this (after referring to the commission's allegations of "uncertainties") (pp. 32–33):

> To avoid these hazards, another way to secure a common understanding as to the limit of the Convention shelf has been suggested in our 1968 Joint Report, in the NPC Report, the Interim Report of the Committee on Deep Sea Mineral Resources of the American Branch of the International Law Association, and elsewhere. This proposes that like-minded maritime states should issue unilateral but concerted declarations announcing their intent to observe a particular limit as the boundary of their shelves under the 1958 Convention and to decline recognition of any claims by other states to a greater limit. From such a proceeding a pattern of common practice under the Convention could emerge and might well come to receive general acceptance by the world community. In this connection advantage might be taken of the International Court's recognition of the coastal state's sovereign rights over the natural prolongation of its land territory under the sea.*

QUESTION 5

"If, on the other hand, the United States should choose to secure international agreement or an amendment to the convention for either a broad or a narrow shelf, would it be advisable to take such action before further resolving other international legal problems, such as the development of a regime for exploration and exploitation of the natural resources of the deep seabed; the establishment by international

*In the *North Sea Continental Shelf* case, 1969, I. C. J. Reports, at 31.

agreement of the limits of the territorial sea; the role of coastal States in developing conservation resources related to their offshore fisheries; the conclusion of an arms control agreement affecting the seabed; or other related problems regarding the use of the high seas and the underlying seabed?"

This question has four parts:

First, with respect to the relationship, or lack of it, between a new international agreement on Continental Shelf boundaries, and an international agreement to create a new deep-sea regime to function seaward of the areas of national jurisdiction.

Our 1968 report said this:

> 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.

This being so, the decision to stand on the Convention on the Continental Shelf, the decision not to acquiesce in any new international conference or agreement to replace that convention, should be a firm decision, irrespective of the kind of regime that may be proposed for the areas seaward of the limits of national jurisdiction. By analogy, I would not be influenced in the determination of a boundary between the United States and Canada on the Continental Shelf—a matter now under negotiation—by my opinion of the excellence of Canada's administrative machinery.

Second, as to the territorial sea: There is no justifiable connection between the determination of the boundaries of coastal jurisdiction over the Continental Shelf, and the determination of the boundaries of coastal jurisdiction over the territorial sea, and I would not link the two questions in any way.

Quantitatively, the coastal nation's jurisdiction over the development of Continental Shelf resources may extend seaward hundreds of miles beyond any boundary of the territorial sea recognized by international law, whether 3 or 6 or 12 miles.

But, qualitatively, the coastal State's Continental Shelf jurisdiction is quite restricted, as compared with its plenary jurisdiction over the territorial sea. As to the shelf area beyond the territorial sea, article 2, paragraph 1, limits the coastal State's exclusive jurisdiction to "sovereign rights for the purpose of exploring and exploiting its natural resources." Paragraph 8 of article 5 adds a qualified control over research carried on there. By contrast, the coastal State's powers over the territorial sea, as recognized in the Convention on the Territorial Sea and the Contiguous Zone, amount to full sovereignty (subject to rights of innocent passage), and they extend to the airspace above.

Article 3 of the Convention on the Continental Shelf makes this distinction clear. It says:

> 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 airspace above those waters.

Our 1969 joint report emphasizes this distinction (p. 38):

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

Third, as to the relation between the boundary of Continental Shelf jurisdiction, and the role of coastal States in developing conservation resources related to their offshore fisheries. Again, to my mind, these questions are not related, and should not be artifically linked. As the paragraph last quoted from our 1969 joint report puts it, claims to the control of the water column above the Continental Shelf—and this includes control of fisheries above the Continental Shelf, seaward of the boundaries of the territorial sea recognized by international law—"are invalid extensions of the Continental Shelf doctrine, and should be so regarded by the United States."

Fourth, as to arms control, I do not see any justifiable link between the determination of the boundaries of the jurisdiction of coastal nations over the Continental Shelf (a jurisdiction which, under the convention, is strictly limited to rights with respect to exploration and exploitation of natural resources), and the conclusion of an arms control agreement affecting the seabed (a control which may or may not affect the same geographical areas as are encompassed by the Convention on the Continental Shelf, and which, in any event, relates to totally different uses). A coastal State's military decision to place little black boxes on the Continental Shelf of another country, or to dig up those that it finds emplaced on its own Continental Shelf, is not going to be controlled by the geographical extent of the limited sovereign rights to explore and exploit minerals, recognized by article 2 of the Convention on the Continental Shelf. I would not mix up the two subjects.

I have heard the argument that the United States should advocate a narrow shelf in order to bolster our position in favor of a 3-mile limit on territorial waters. It is argued that if a coastal nation has rights to a broad Continental Shelf, even the limited rights to exploration and exploitation of natural resources, this will be transformed by a sort of juridical osmosis into a claim of broad territorial jurisdiction for all purposes. The argument proves too much. The 200-meter isobath, which no one proposes to retract, already encompass area scores, even hundreds, of miles wider than the 3-mile belt of territorial waters.

QUESTION 6

"What measures should the United States include in the formulation of its position looking toward a deep seabed regime which would achieve the following objectives:

"(A). Recognition that there is an area of the seabed beyond the limits of exclusive national jurisdiction which is not subject to national occupation by claim of sovereignty, by means of use or occupation or by any other means;

"(B). Accommodation among other users of the deep ocean floor and marine environment, including prevention of unjustifiable interference with the exercise of the freedom of the high seas, including navigation, fishing and the conduct of fundamental scientific research carried out with the intention of open publication, by any nation or its nationals;

"(C). The conservation of living and mineral resources of the high seas and deep seabed;

"(D). The encouragement of private investment in exploration and exploitation of the resources of the deep seabed; and

"(E). The formula of work requirements and other procedures associated with the exploration and exploitation of deep seabed resources which would serve to insure responsible and orderly development of these resources, while avoiding waste and other undesirable consequences."

This group of questions deals with the structure of a regime to function seaward of the limits of national jurisdiction.

I would say, in general, that "A" requires no further action at all. Everyone, so far as I know, now agrees that national seabed jurisdiction does not extend to mid-ocean. Our own delegation in the United Nations has stated this explicitly. As to "B," "C," "D," "E," the position of the American Bar Association sections has been that a great deal more factual information must be acquired before any meaningful agreements can be written.

The 1968 resolution of the house of delegates recommended generally:

(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 a study and consultaton 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 . . .

The supporting 1968 joint report said on this subject:

"With respect to the minerals of the dep 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 seabed

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 highseas 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.

Subsequent to that 1968 report, the Marine Science Commission published its 1969 report, "Our Nation and the Sea." It dealt, to a degree, with the subjects covered by your committee's sixth question. Our 1969 joint report summarizes the commission's recommendations, and submits our comments (app. B to this statement). We disagreed with its proposals for an intermediate zone, and gave qualified approval to the principles, but not the details, of its proposals for a registry scheme to govern exploration and exploitation beyond the limits of national juirsdiction. We said this (pp. 40–51):

Under the 1968 Resolution of the House of Delegates, the American Bar Association is committed to support the development as soon as practicable of international arrangements to govern the exploitation of deep-sea resources beyond the limits of national jurisdiction. Such arrangements, the Resolution affirms, must 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. . . ."

Except for the intermediate zone proposal, and subject to the various *caveats* expressed in the foregoing comments, we believe that the Commission's recommendations for a deep-sea regime are broadly in harmony with the principles of the Resolution.

We would reiterate our belief, however, that the details of the Commission's proposed registry plan need careful attention before being submitted as a basis for international discussions. There are, in our opinion, too many loose ends and loopholes which might permit abuse in connection with the requirements for the registration, maintenance and vacating of claims. We are all against a 'race to grab.' It is difficult at present for anyone to 'grab' the deep seabed physically but the concept of registration of paper claims would for the first time create the mechanism to make such a 'grab' possible. Obviously safeguards against such a possibility must be drawn with the utmost care, but the factual data necessary for meaningful draftsmanship are not yet available.

Many of our members strongly believe that the first step, in setting up a deep sea regime, should not be the establishment of a system which recognizes paper claims or purely speculative registrations, but should be, instead, agreement on norms of conduct to be observed by the nations capable of carrying out deep-sea mineral exploration.* Such norms would be designed to minimize interference between expeditions or operators, and to preclude "jumping" of areas which are under actual exploration or development, plus reasonable protective margins. This, they believe, may well evolve into a more formal system of registry of claims, but only after enough information has been acquired to make possible an agreement on criteria with respect to areas, duration, diligence requirements, and other factors historically associated with mining rights. Such consensus on norms of conduct should be without prejudice to any agreement to dedicate some portion of the value of production from deep-sea mineral resources to agreed international purposes.

Your committee may be interested in the somewhat parallel conclusions reached by the Committee on Deep Sea Mineral Resources of the American Branch of the International Law Association. It illustrates the difficulty of giving categorical answers to some portions of your question 6. That committee's 1968 report said (p. XV–XVII):

*This concept was referred to in our 1968 joint report.

(*1*) *The flag nation concept*

One concept is essentially that of *laissez faire:* let the appropriation and development of the minerals of the deep-sea-bed continue to be undertaken by any nation willing to risk its treasure and the lives of its nationals to win those minerals.

(*2*) *Creation of an international licensing mechanism*

At the opposite end of the spectrum is the proposal for establishment of an international licensing authority. This presupposes the creation in some supranational agency of a new competence, not now existing, to grant or refuse reconnaissance permits, exploration licenses, and production concessions just as sovereigns now do within their national jurisdiction on dry land and on the continetal shelf. Presumably the new supranational agency would, or could, control or prohibit production, set prices, control repatriation of capital and profits, and fix and collect taxes and royalties, as some sovereigns do. Neither the United Nations nor any other international entity now has competence to exercise such powers. Presumably the nations of the world, collectively, do have that competence, but they have not, singly or collectively, delegated it to the Assembly of the United Nations.

(*3*) *Registry and code of conduct*

A third and intermediate solution is the ultimate establishment of "norms of international conduct," to be obeyed by every nation whose flag is flown by an exploratory expedition. Coupled with this, the establishment, by international convention, of a central registry system, has been suggested as a refinement of the flag-nation concept. A two-fold concept seems indicated: registry of national claims, and a code of national conduct in the occupation and use of the areas claimed. These concepts find analogies in the existing mineral laws of many countries.

If such arrangements evolved on the pattern of existing national laws, notice would be recorded in an international registry office by the flag nation of the expedition, stating the intended occupation of specified areas, of predetermined permissible size. An exclusive right of occupancy, secured for a known time, would accrue to the recording nation, for the benefit of its licensees, with respect to the published area. The right would remain exclusive, however, only so long as work continued in conformity with specified criteria. If minerals were found, their production would be governed by the laws of the nation which had registered the original notice of intent. In addition, it has been suggested that the availability of areas for mineral development, under the registry scheme, particularly the requisite distance offshore from adjacent states, would be determined by international convention and not by the registry office. Recognition of previously acquired rights is an essential of the scheme, as in the recognition of competing interests in the use of the marine environment, e.g., for fishing and navigation.

* * * * * * *

The algebraic form in which the registry concept is here stated is deliberate. Some of the difficulties, including the problems of competing notices of claims, priorities, areas, duration, work required to keep claims alive, and so on, are self-apparent. No one knows as yet how to put numbers into any of these concepts. No one will know how to do so until after a great deal of deep sea exploration and discovery of minerals has taken place. This exploration, in our view, should be encouraged, not retarded.

While we prefer the intermediate solution (No. 3 above), we decline to characterize the flag nation concept (No. 1 above) as one that invites "anarchy" or "chaos" or "race to grab," as some have contended. This approach is not one characterized by the absence of law. On the contrary, we are of the opinion that under existing law a state has competence to establish limited rights of jurisdiction and control over minerals of the sea-bed by effective use of the area encompassing them. We are of the further opinion that, in the event of conflict between the mineral development projects of two or more nations, there are established principles of international law, now applicable to the high seas, which would be available to resolve such conflicts on an *ad hoc* basis. Nevertheless, we recognize that these existing principles may not provide an adequate basis for long-term development of these resources in an orderly manner. If a comprehensive legislative solution can be designed in advance for this purpose, that possibility should be carefully explored.

We recommend against any attempt at a solution through the creation of an international licensing mechanism (No. 2 above), in the foreseeable future. To create and define the powers of such a supranational authority would be an enterprise rivaling in magnitude the creation of the United Nations itself. It could not be self-created by resolution of the Assembly. It presupposes that the maritime nations of the world would delegate to a super-sovereign the power to prevent their own exercise of powers, no possessed, to occupy and use the bed of the deep sea beyond national jurisdiction.

There is no reason why use of deep sea mineral resources should be made contingent upon the solution of political problems of such magnitude, or why exploration of the deep ocean floor should be prohibited pending the accomplishment of that solution (as some have suggested). It is enough to say that any scheme which adds costs, delays, and international politics to the formidable obstacles which already confront the would-be explorer of the deep sea-bed bears the burden of proving the necessity for its existence.

QUESTION 7

"What sort of an interim policy should be established with respect to the regulation and control of the activities of U.S. nationals related to the exploration and exploitation of resources located on the deep seabed beyond the limits of the Outer Continental Shelf prior to reaching international agreement on a deep seabed regime?"

This subject is dealth with in general terms in the house of delegates resolution, which recommends the following as objectives of any international arrangements (and, hence, by implication, of any domestic regulation and control):

> . . . freedom of exploration by all nations on a non-discriminatory 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 people.

As the interim report of the Committee of the American Branch of the International Law Association, previously quoted, points out, these rights now exist under international law, and there is no reason why use of deep sea resources should be prohibited pending the establishment of a more formal international regime.

In short, to answer your committee's seventh question, U.S. policy, prior to reaching an international agreement, should be to let activities of U.S. nationals on the high seas beyond the Continental Shelf jurisdiction of coastal nations continue, under the traditional principles of freedom of the seas. Everyone is on notice that the Government of the United States has plenary constitutional power to regulate and restrict those activities, by treaty, when and if that becomes necessary.

A wholly different interim policy was proposed by the Marine Science Commission report. It recommended that the U.S. propose a new international agreement which would restrict coastal jurisdiction to the 200-meter isobath or a line 50 miles from the base line, whichever included the greater area. It recommended that exploitation prior to establishment of a shelf limit be without prejudice to the eventual location of that limit, and that the United States propose that, in the interim, no nation should claim sovereign rights beyond the 200-meter line. The commission recommended that development under U.S. leases continue, but that the authorization therefor "explicitly states that any such exploration or exploitation shall be subject to the new international framework agreed upon" (p. 156). It proposed that Congress enact legislation to compensate lessees for loss of investment occasioned by redrawing of the line to put their developments beyond

national jurisdiction. The act would be amended also to declare that developments beyond the 200-meter isobath should not constitute a claim of U.S. sovereign rights beyond that isobath.

On this, our 1969 joint report commented as follows:

> We disagree with the fifth principle and with the recommendations for implementing it (except insofar as these recognize the importance of not suspending deep-sea exploration and exploitation activity).* These proposals, calling in effect for a moratorium on claims beyond the 200-meter line, are in our opinion retrogressive, impractical, and not in the best interests of the United States. The principal reasons for our conclusions may be summed up as follows:
>
> (1) The 200-meter line is out of date. Activities now exist beyond that line, undertaken in justified reliance on the exploitability concept of the Shelf Convention. These are now clearly within the national jurisdiction, and their status should not now be cast in jeopardy.
>
> (2) Under our view of the Shelf Convention and its interpretation by parallel declarations, there is no need for a moratorium on claims. National rights simply extend or will extend to the limit of adjacency and stop.
>
> (3) The possibility of shifting regimes and responsibilities will assuredly discourage the large investment needed to develop resources in deeper and deeper waters. The adverse effect on U.S. interests is obvious.
>
> (4) The proposal for compensation is unrealistic. Even if Congress were prepared to enact such legislation, the suggested measure of compensation is wholly inadequate for the risks involved. The device thus fails to supply the inducement needed to overcome the uncertainties noted in point 3.

QUESTION 8

"What effect does the issuance of leases beyond the 200-meter isobath pursuant to the Continental Shelf Oil Act of 1953 by the Secretary of the Interior have on the establishing of or the extension of a U.S. Continental Shelf boundary claim?"

Issuance by the United States of leases beyond the 200-meter isobath is an example of national practice which is relevant and admissible both in establishing customary international law, and in interpreting the reach of the exploitability criterion of article 1 of the convention. The United States is one of at least 39 nations which have asserted or exercised jurisdiction over submarine areas in waters deeper than 200 meters. The details are stated in appendix D to this statement.

QUESTION 9

"What effect does the aforementioned leasing procedure have on the establishment or extension of boundary claims for other nations' Continental Shelves?"

On this, I can only state my personal views. As I have previously indicated, the practice of the United States in this respect, like that of other coastal nations, is relevant (1) to the establishment of customary international law, and (2) to the construction of the Convention on the Continental Shelf, as recognizing in coastal states exclusive sovereign rights in submarine areas capable of exploitation, irrespective of depth of the overlying water. This, however, is not the same as saying that the scope of U.S. jurisdiction (in the sense of the right to exclude others), depends on the depth to which exploitation has been effected on our continental margin. And it is not the same as saying that the jurisdiction of foreign nations (in the same

*The Standing Committee on World Order Under Law takes no position with respect to the fifth principle here discussed, for want of sufficient qualification to do so.

sense, the right to exclude others), is extended as exploitation on the American continental margin progresses beyond a depth of 200 meters. There are fallacies in both assertions, although they are frequently made. Let me explain.

In answer to your committee's question No. 2, I quoted the opinion stated in our 1969 joint report (p. 36):

> (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.

Under both of these formulations, since (1) the rights of the coastal nation, whether exercised or not, exclude all others from claim to any part of the submerged continental landmass adjacent to its own coasts, and (2) all coastal nations, everywhere, possess similar exclusive rights with respect to the submarine areas adjacent to their own shores, it follows that this inherent right of exclusion is neither enlarged nor diminished by the actual exploitation by any nation of its own continental margin. Article 2 is explicit: the right of exclusion in so many words "does not depend on occupation, effective, or notional."

What, then, is the legal effect of exploitation? The effect of exploitation of successively greater depths of the continental margin of any state beyond 200 meters is, of course, to extend the affirmative application of that state's domestic laws to that specific operation. Examples are domestic laws respecting mineral development (such as our Outer Continental Shelf Lands Act), conservation, taxation, labor, safety, pollution, etc. I personally believe that this domestic effect accrues, on an ad hoc basis, with respect to each enclave which is exploited. But I do not believe that exploitation in Santa Barbara Channel at a depth of 400 meters automatically extended the application of all of the domestic laws of all other coastal nations to the 400 meter isobath. By the same token, I do not believe that our right to exclude foreigners from drilling wells on the American continental margin off New England was ever contingent on our success or failure in drilling a well in deep water off California.

QUESTION 10

"What rights does the United States have pursuant to the relevant Federal law and the 1958 Geneva Convention on the Continental Shelf to regulate United States and foreign commerce and scientific exploration of the seabed on the geological margin in areas beyond either the 200-meter isobath or the most seaward or deepest area in which a United States mining lease has been issued?"

First, as to the regulation of United States and foreign commerce: With one partial exception, the geographical extent of U.S. seabed jurisdiction under the Convention on the Continental Shelf, beyond the limits of the territorial sea, is irrelevant to the regulation of foreign or domestic commerce, either under the convention or under any Federal statute with which I am familiar. This general statement is based on article 3 of the convention, previously quoted, which declares that the rights of the coastal state over the Continental Shelf do not affect the legal status of the superjacent waters as high seas. The partial exception is article 5, paragraphs 2 through 7, which recognize in the

coastal state the right to establish safety zones extending to a distance of 500 meters around each installation, which ships of all nations must respect. But these installations and safety zones may not be established where they would interfere with recognized sealanes.

Second, as to U.S. power of regulation of "scientific exploration" on the continental margin seaward of the deepest area in which exploitation has occurred or a lease has been issued:

This is a difficult question, on which I can only state my personal opinion. I assume that by "exploration" your question refers to research which is not related to exploration for minerals. If, however, "exploration" is meant to include preludes to exploitation, such as magnetometer and sceismic exploration, I would answer that the jurisdiction of the coastal State is exclusive, out to the edge of the submerged continental land mass, and such exploration can be prohibited, even though it is carried on from vessels, without contact with the seabottom. There is plenty of room for difference of views about this, obviously.

But if the "exploration" can be characterized as "fundamental oceanographic or other scientific research carried out with the intention of open publication," as distinct from exploration which is exploitation directed, it falls within two provisions of the convention which are specific but unfortunately somewhat inconsistent.

Article 5, paragraph 1, says that exploration of the Continental Shelf and exploitation of its natural resources shall not "result in any interference" with research answering that description. But article 5, paragraph 8, says:

> The consent of the coastal State shall be obtained in respect of any research concerning the continental shelf and undertaken there. Nevertheless the coastal State shall not normally withhold its consent if the request is submitted by a qualified institution with a view to purely scientific research into the physical or biological characteristics of the continental shelf, subject to the proviso that the coastal State shall have the right, if it so desires, to participate or to be represented in the research, and that in any event the results shall be published.

The question, I take it, is whether the consent of the coastal state must be obtained if research, as so defined, is to be conducted on its continental margin at depths greater than any so far exploited.

In my opinion, the answer is no.

While article 2 protects certain rights of the coastal nation, whether exercised or not, with respect to the adjacent submerged continental land mass, irrespective of depth, and does so to the exclusion of all other nations, those rights, and therefore the scope of that exclusion of foreigners, are restricted to the exploration and exploitation of the natural resources of these submarine areas. And I take it that "exploration," in this sense, must be read in conjunction with "exploitation," as contrasted with "scientific research carried out with the intention of open publication," referred to in article 5. As to the rights to carry on that latter sort of research, the protection runs the other way, in favor of the foreigner's right of research.

Whatever doubt there may be about this can be cleared up by parallel declarations of parties to the convention a good deal more readily than by negotiation of a new convention among new participants.

CONCLUSION

In closing, let me repeat the conclusions stated in our 1969 joint report, conclusions which were reached after exhaustive review of the Continental Shelf problems now before your committee:

(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.

APPENDIXES TO STATEMENT OF NORTHCUTT ELY

Appendix A. Resolution (No. 73) of the House of Delegates of the American Bar Association, together with the 1968 Joint Report of the Sections of Natural Resources Law, International and Comparative Law, and the Standing Committee on Peace and Law Through United Nations.

Appendix B. 1969 Joint Report of the Section of Natural Resources Law, the Section of International and Comparative Law, and the Standing Committee on World Order Under Law.

Appendix C. Legislative History (or "Travaux Prepatoires") of the 1958 Convention on the Continental Shelf.

Appendix D. Coastal State Mineral Jurisdiction and the Continental Margin: A Survey of National Practice.

Appendix E. Interim Report of the Committee on Deep Sea Mineral Resources of the American Branch of the International Law Association, 1968.

Appendix F. Extracts from the judgment of the International Court of Justice in the North Sea Continental Shelf Cases, 1969 Rep. I.C.J. 1.

Mr. ELY. I am honored by the committee's invitation to appear here as a spokesman for the American Bar Association. I must add a caveat in accepting that invitation. I am a member of the council of the Section of Natural Resources Law of the American Bar Association, and I appear here, as my prepared statement indicates, in response to your committee's invitation on November 26 by direction of the chairman and the council of that section.

The American Bar Association, as the committee doubtless recognizes, speaks on policy matters only through resolutions of the house of delegates. The house of delegates adopted a resolution, No. 73, at its August 1968 meeting which covered some but not all of the subjects of the 10 questions addressed to me in your letter of November 26. That resolution is contained in a 1968 joint report of the section of natural resources law, the section of international and comparative law, and the standing committee on peace and law through United Nations which is now the standing committee on world order under law.

Resolution No. 73, and the 1968 joint report which contains it, accompany my statement as appendix A and I would appreciate it if you print it.

(Appendix A follows:)

(Appendix A)

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 National 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 of 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 #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 asigned 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 nature.

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 rquested 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 threshold 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."

Interpretation 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 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 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 soverign 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 apears 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 seabed 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 highseas 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 Committee 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 plunge 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.

JESSE P. LUTON, Jr.,
Chairman, Section of Natural Resources Law.
JOE C. BARRETT,
Chairman, Section of International and Comparative Law.
EBERHARD P. DEUTSCH.
Chairman, Standing Committee on Peace, and Law Through United Nations.

ELY & DUNCAN,
COUNSELLORS AT LAW.
Washington, D.C., January 30, 1970.

Hon. LEE METCALF,
Chairman, Special Subcommittee on Outer Continental Shelf of the Committee on Interior and Insular Affairs, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: When I testified before your Committee on December 17, 1969, you called attention to four interrelated resolutions which had been adopted by the General Assembly of the United Nations on December 15, 1969, and invited me to answer certain questions relating thereto. The operative paragraphs of the resolutions (numbered Resolution 2574–A through D) are as follows:

I. UNITED NATIONS GENERAL ASSEMBLY RESOLUTIONS OF DECEMBER 15, 1969

Resolution A [1]

". . . 1. *Requests* the Secretary-General to ascertain the views of Member States on the desirability of convening at an early date a conference on the law of the sea to review the regimes of the high seas, the continental shelf, the territorial sea and contiguous zone, fishing and conservation of the living resources of the high seas, particularly in order to arrive at a clear, precise and internationally accepted definition of the area of the sea-bed and ocean floor which lies beyond national jurisdiction, in the light of the international regime to be established for that area;

"2. *Requests* the Secretary-General to report on the results of his consultations to the General Assembly at its twenty-fifth session."

Resolution B [2]

". . . 2. *Invites* the Committee [3] to consider further the questions entrusted to it under resolution 2467 (XXIII) with a view to formulating recommendations on these questions, in the light of the reports and studies to be made available to it and taking into account the views expressed in the General Assembly at its twenty-fourth session;

". . . 4. *Requests* the Committee to expedite its work of preparing a comprehensive and balanced statement of these principles and to submit a draft declaration to the General Assembly at its twenty-fifth session;

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[1] The vote in the General Assembly was 65 in favor, 12 against with 30 abstentions. The United States voted against the resolution.
[2] The vote in the General Assembly was 109 in favor, none against, with one abstention. The United States voted in favor of the resolution.
[3] The Committee on Peaceful Uses of the Sea-Bed Beyond the Limits of National Jurisdiction.

". . . 6. *Requests* the Committee to formulate recommendations regarding the economic and technical conditions and the rules for the exploitation of the resources of this area in the context of the regime to be set up."

Resolution C [4]

". . . 1. *Requests* the Secretary-General to prepare a further study on various types of international machinery, particularly a study covering in depth the status, structure, functions and powers of an international machinery, having jurisdiction over the peaceful uses of the sea-bed and the ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction, including the power to regulate, co-ordinate, supervise and control all activities relating to the exploration and exploitation of their resources for the benefit of mankind as a whole, irrespective of the geographical location of States, taking into account the special interests and needs of the developing countries, whether landlocked or coastal;

"2. *Requests* the Secretary-General to submit his report thereon to the Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor beyond the Limits of National Jurisdiction for consideration during one of its sessions in 1970;

"3. *Calls upon* the Committee to submit a report on this question to the General Assembly at its twenty-fifth session."

Resolution D [5]

". . . *Declares* that, pending the establishment of the aforementioned international regime:

"(*a*) States and persons, physical or judicial, are bound to refrain from all activities of exploitation of the resources of the area of the sea-bed and ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction;

"(*b*) No claim to any part of that area or its resources shall be recognized."

II. THE COMMITTEE'S QUESTIONS

The Chairman's question to this witness related primarily to Resolution 2574–D. That question read:

"* * * 1 This resolution has raised serious questions in my mind. I wonder if the General Assembly has exceeded its lawful authority in passing such a resolution. I wonder if this resolution doesn't fly in the face of the High Seas Convention, which permits absolute freedom of the seas, including reasonable use of the deep seabed. What troubles me most is whether or not this resolution has a binding effect on the United States insofar as it would prohibit any further development on the part of U.S. companies who are interested in recovering the mineral resources of the deep seabed, such as manganese nodules.

"Before you get into your testimony, could you pause for a moment to reflect on the question of the moratorium resolution and recommend to this committee what action it should consider taking to protect the interests of the United States against the apparent or intended effect of this moratorium resolution."

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[4] The vote in the General Assembly was 100 in favor, none against, with 11 abstentions. The United States voted in favor of the resolution.

[5] The recorded vote in the General Assembly was 62 in favor, 28 against, with 28 absentions, as follows:

In favor: Afghanistan, Algeria, Argentina, Barbados, Bolivia, Brazil, Burundi, Central African Republic, Ceylon, Chad, Chile, Colombia, Congo (Brazzaville), Congo (Democratic Republic of), Costa Rica, Cyprus, Dahomey, Dominican Republic, Ecuador, Ethiopia, Finland, Guatemala, Guinea, Guyana, Haiti, Honduras, India, Iraq, Jamaica, Jordan, Kenya, Kuwait, Lesotho, Malaysia, Maldives, Mali, Mauritania, Mauritius, Mexico, Morocco, Nepal, Nicaragua, Niger, Pakistan, Panama, Paraguay, Peru, Rwanda, Singapore, Somalia, Southern Yemen, Sweden, Thailand, Trinidad and Tobago, Tunisia, Uganda, United Republic of Tanzania, Uruguay, Venezuela, Yemen, Yugoslavia, Zambia.

Against: Australia, Austria, Belgium, Bulgaria, Byelorussia, Canada, Czechoslovakia, Denmark, France, Ghana, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Malta, Mongolia, Netherlands, New Zealand, Norway, Poland, Portugal, South Africa, Ukraine, U.S.S.R., United Kingdom, United States.

Abstaining: Burma, China, Cuba, El Salvador, Greece, Indonesia, Iran, Israel, Ivory Coast, Laos, Lebanon, Liberia, Libya, Madagascar, Malawi, Nigeria, Philippines, Romania, Saudi Arabia, Sierra Leone, Spain, Sudan, Switzerland, Syria, Togo, Turkey, United Arab Republic, Upper Volta.

Absent: Albania, Botswana, Cambodia, Cameroon, Equatorial Guinea, Gabon, Gambia, Senegal.

III. CONCLUSIONS AND RECOMMENDATIONS

For the reasons hereinafter stated, in my opinion:

The authority of the General Assembly to pass resolutions in the field of the "progressive development of international law and its codification" is restricted to the making of recommendations. Resolution 2574–D is a resolution in that field. It has no greater force than a recommendation, despite its apparent attempt to legislate a prohibition.

The subject matter is cognate with that of the Convention on the High Seas, which, by its terms, required ratification by 22 nations to become effective. Resolution 2574–D, in like manner, would require reduction to the form of a treaty, and ratification thereof, to become effective, and it would only be effective then as against the ratifying States.

Customary international law now imposes no prohibition on exploitation of seabed resources.

The passage of the resolution did not and could not create instant customary law. The existence of this resolution, however, may be a deterrent to investment by U.S. nationals in exploration and exploitation of the bed of the abyssal ocean floor seaward of the continental margin.

I recommend that the United States Government, through its executive or legislative branches or both, announce that it does not regard itself as bound by this moratorium resolution, but, to the contrary, will continue to encourage the exploration and exploitation by its nationals of the seabed beyond national jurisdiction, under the international law applicable to the high seas, with due regard to the similar rights of all other nations, and subject to ultimate regulation by whatever international regime may be created by a treaty to which the United States becomes a party.

IV. THE U.N. GENERAL ASSEMBLY HAS ONLY VERY LIMITED LEGISLATIVE AUTHORITY WHICH DOES NOT EXTEND TO GOVERNING THE OTHERWISE LAWFUL ACTIVITIES OF MEMBER STATES

The Charter of the United Nations vests authority in the General Assembly to exercise four kinds of functions. The Charter first provides authority for the General Assembly to manage the business and internal operations of the United Nations and its constituent bodies.[6] Second, the General Assembly has the authority, in conjunction with the Security Council, to determine who shall gain and lose membership in the United Nations.[7] Third, the General Assembly has authority to administer the United Nations trusteeship system.[8] All of these types of authority are related either to the internal functioning of the United Nations as an organization, or to performance of duties with regard to trust territories specifically placed under its jurisdiction. In these three fields, the Assembly's resolutions have legislative effect, self-executing.

A fourth and distinct type of authority is provided in Articles 10 through 14 whereby the General Assembly may consider matters within the scope of the Charter and make "recommendations" on them to member States. The Charter is quite clear that these matters may include the maintenance of international peace and security.[9] Article 13, however, is devoted to a different matter and establishes a basis for the General Assembly to consider far ranging topics. The text follows:

"1. The General Assembly shall initiate studies and make recommendations for the purpose of:

"a. promoting international cooperation in the political field and encouraging the progressive development of international law and its codification;

"b. promoting international cooperation in the economic, social, cultural, educational, and health fields, and assisting in the realization of human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion.

"2. The further responsibilities, functions and powers of the General Assembly with respect to matters mentioned in paragraph 1(b) above are set forth in Chapters IX and X." [10]

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[6] U.N. Charter, arts. 17, 19, 21, 22, 60, 61, 63, 66, 93, 96, 97.
[7] U.N. Charter, arts. 4(2), 5, 6.
[8] U.N. Charter, art. 16 and chs. XII and XIII.
[9] U.N. Charter, arts. 11, 12, 14.
[10] Chs. IX and X of the U.N. Charter discuss international social and economic policies and establish the U.N. Economic and Social Council.

While this subject is treated in greater detail below, it is clear from a literal reading of Article 13(1)(a), that the General Assembly has authority to consider matters which are within the realm of, or subject to, regulation by international law. It also follows that the General Assembly may make its views known on these matters through "recommendations" to member States. But this is a far cry from competence to legislate, as Resolution D purports to do, a prohibition against the exercise by a State of powers which it may otherwise lawfully exercise.

V. RESOLUTION 2574–D, WHICH WOULD PROHIBIT EXPLOITATION OF SEABED RESOURCES BEYOND THE LIMITS OF NATIONAL JURISDICTION HAS NO LEGISLATIVE EFFECT BINDING ON THE MEMBERS OF THE UNITED NATIONS. A TREATY WOULD BE REQUIRED TO GIVE IT EFFECT

As indicated above, by the terms of Article 13 of the Charter, the function of the Assembly includes "recommendations" to encourage "the progressive development of international law and its codification." It was under this authority that the Assembly in 1949 requested the International Law Commission to undertake codification of the law of the sea, and convened the 1958 Law of the Sea Conference which produced the four Conventions on (1) the Continental Shelf, (2) the High Seas, (3) Fishing and Conservation of the Living Resources of the High Seas, and (4) the Territorial Sea and the Contiguous Zone. But each of these Conventions, by its terms, was to come into effect only upon ratification by 22 nations. Resolution 3574–D concerns itself, as does the Convention on the High Seas, with the areas "beyond national jurisdiction" (national jurisdiction with respect to the seabed being the subject of the Convention on the Continental Shelf, and national jurisdiction with respect to the water column and surface of the sea being the subject of the Convention on the Territorial Sea and the Contiguous Zone). Resolution 2574–D either contravenes the Convention on the High Seas, by prohibiting an activity which is now lawful beyond the limits of national jurisdiction, or, in the light most favorable to that resolution, it legislates in a field not covered by any Convention. In either event, no one has ever suggested until now that the General Assembly, by fiat, can achieve a result which, in the case of the subjects covered by those four Conventions, required a treaty and the ratifiction of that treaty by at least 22 nations. Indeed, Resolution 2574–A concedes the the necessity for a new convention to arrive at a "definition of the area of the seabed and ocean floor which lies beyond national jurisdiction." If a treaty is required to do this, it seems strange that the Assembly should consider itself empowered by Charter to legislate in a binding fashion with respect to that same area without a treaty.

The legislative history of Resolution 2574–D contains ample warnings that the resolution could not lawfully impose a prohibition on seabed exploitation (although it must be added that there is plenty of confusion in the record).

Resolution 2574–D was introduced in the First Committee of the General Assembly by Mexico and explained by its representative, Mr. Garcia Robles, as follows:

"I would only repeat that the primary objective of the draft resolution can be summed up as follows: it is an attempt to reconcile the need to have the Committee (on the Peaceful Uses of the Sea-Bed and the Ocean Floor Beyond the Limits of National Jurisdiction) given enough time to carry out its difficult task of establishing an international regime, with the equally important need to prevent the time alloted to the Committee from being used by States and persons, physical or juridical to exploit the resources of the sea-bed for their own purposes." [11]

Mr. Robles makes quite clear the position of the supporters of the resolution. Apart from the wisdom or logic of the resolution (which was vigorously disputed by many representatives), it was designed not to enunciate any principle of international law or advance the codification of an existing rule of customary international law (the subjects confided by the Charter to the Assembly), but rather to postpone a hypothetical "gold rush" pending the creation of an international seabed agency. This attempt at expediency assumes that the temporary measures adopted are within the competence of the General Assembly.

Both the Norwegian and United Kingdom representatives pointed out in the First Committee of the General Assembly that the moratorium resolution is in

[11] U.N. doc. A/C. 1/PV. 1708 at 7–10 (1969)

part meaningless, for no nation may under existing international law lay claim to any area of the sea-bed beyond the limits of national jurisdiction.[12] The U.K. representatives further stated that in fact the U.N., by this resolution, may well cast doubt on the non-appropriation concept heretofore recognized.

Another co-sponsor of the resolution in the First Committee, Representative Amerasinghe of Ceylon, bluntly stated that he believed the resolution would have no binding effect.

"In other words, the effect, at the moment, is purely psychological. This draft resolution will have no legally binding effect whatsoever. If a moratorium is finally to be established, the step would have to be taken to draft a convention or an international agreement." [13]

He was quite right.

VI. IF RESOLUTION 2574–D WERE TREATED AS ACCOMPLISHING INTERNATIONAL LEGISLATION, THIS WOULD REQUIRE READING INTO THE CHARTER OF THE UNITED STATES AN IMPLIED DELEGATION OF LEGISLATIVE POWERS NOT ONLY INCONSISTENT WITH THE LANGUAGE OF THE CHARTER, BUT WHOLLY INCONSISTENT WITH THE CONSTRUCTION OF PRIOR TREATIES WHICH ESTABLISHED INTERNATIONAL BODIES WITH QUASI-LEGISLATIVE POWERS

As a matter of collateral interest, we note below some examples of other international bodies as well as the legislative history and practice of the United Nations Charter and the failure of consensus on Resolution 2574–D.

(1) *Organizations Providing for Decision by Unanimous Vote of All Members.*—The traditional method of international decision-making has been to require unanimity among all member States before a resolution may have binding effect. Examples of this method date back over 100 years to the creation of the Central Commission for the Navigation on the Rhine,[14] and include important provisions of the European Economic Community,[15] and the Economic Union between Belgium, the Netherlands, and Luxembourg,[16] and the Economic Association between El Salvador, Honduras, and Guatemala.[17]

(2) *Organizations Providing for Decision by less than Unanimous Vote.*—A relatively new form of international organization also exists which provides for potentially binding decisions to be arrived at by a vote of less than all member States. The effect of the resolutions of these organizations may, however, be avoided by individual member States by "contracting-out" of the specific regulatory situation while at the same time retaining other rights as a member of the organization. In other words, sovereignty may be preserved, but at some loss of benefits.

Examples of this type of international organization, which allows member States to "contract-out" of the effects of joint decisions include the International Civil Aviation Organization,[18] the World Health Organization, [19] the World Meteorological Organization,[20] and the North Atlantic Fisheries Commission.[21]

Binding majority rule is only an emerging feature of certain organizations within the European communities and can not be said to have established itself in international law as yet.[22] Certainly no precedent exists to find that in the absence of a very clear and specific grant of authority, resolutions arrived at by groups of nations either unanimously or otherwise could have any binding legal effect on other nations' otherwise lawful acts.

(3) *The United Nations.*—With respect to establishing general rules of conduct in peacetime for member States, the authority provided in the U.N. Charter for the General Assembly to alter or affect the rights or obligations of member States as sovereigns is much more limited than in the organizations referred to above. Articles 10 through 14 empower the General Assembly *only* to make "recommendations" to member States.

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[12] U.N. doc. A/C. 1/PV. 1709 at pp. 16 and 42 (1969).
[13] U.N. doc. A/C. 1/PV. 1708 at 46 (1969).
[14] Mannheim Convention of October 17, 1868, Martens, 20 Nouveau Recueil General 355, as revised by the Strausbourg Convention of November 20, 1963, 11 European Yearbook 175 (1963).
[15] 261 U.N.T.S. 11.
[16] 381 U.N.T.S. 165.
[17] 383 U.N.T.S. 3.
[18] 15 U.N.T.S. 295.
[19] 14 U.N.T.S. 185.
[20] 66 U.N.T.S. 25.
[21] 175 U.N.T.S. 215.
[22] K. Skubiszewski, "Enactment of Law by International Organizations," 41 Brit. Y. B. Int'l L. 198 (1965–66).

While no authoritative definition of the term "recommendation" was adopted by the original parties to the Charter, there is very strong evidence that recommendations were not to be deemed binding on member States. The Philippine delegation suggested in San Francisco, during discussions leading to the creation of the United Nations, that the General Assembly be given power to enact rules of international law which would be binding on member States once approved by the Security Council.[23] Committee 2 of Commission II defeated the proposal by a vote of 26–1.[24] A further proposal to empower the General Assembly to impose conventions on member States was also defeated.[25]

Recommendations made by the General Assembly are also not required to be recognized as sources of international law by the International Court of Justice. The statute declares that the court shall consider conventions, international custom, and the general principles of international law recognized by civilized nations in arriving at decisions.[26] The statute also recognizes national judicial decisions and the writings of international law scholars as a subsidiary means of determining rules of international law. However, no reference is made to recommendations of the General Assembly or resolutions passed by international conferences.

The fact that some actions taken by the General Assembly pursuant to specific provisions in the Charter may bind member States cannot be used to support the view that General Assembly recommendations create legal duties for member States. It is true, of course, that various resolutions passed by the General Assembly, which are based on these specific sources of Charter authority, are binding for the enumerated purposes as discussed above. However, these activities involve only the internal management of the U.N. and the administration of Trusteeship agreements.

Other types of General Assembly actions are also said to bind member States but the binding agent is *not* the resolution. For example, resolutions may have a binding effect on certain parties if the parties specifically agree to be bound by the General Assembly's decision as in the case of the disposal of Italian Territorial Possessions under the allied peace treaty with Italy.[27] Further, writers often refer to resolutions which are based upon or embody the customary rules of international law or general principles of international law as recognized by civilized nations as being binding on States.[28]

But in each of these cases the resolutions are not the source of a State's obligation. The source is either a very specific treaty provision giving the resolution its legal consequence or a pre-existing rule of international law which does not depend on being embodied in a General Assembly recommendation for its legal effect.

Writers and government officials often find that General Assembly recommendations, while having no legal effect on States, do constitute force, moral authority, moral power, and moral judgment.[29] The U.S. has used all of these terms at one time or another. It has been said that recommendations contain "nascent legal force," [30] that they constitute "a rich source of evidence" of customary international law,[31] that they constitute an important step in the development of customary international law,[32] or that they may acquire "a normative status in international life." [33]

However, none of these scholars claims that the General Assembly can prescribe binding rules of conduct for nations by merely passing a resolution pursuant to Article 13 of the Charter. There have been some attempts to formulate factors which will indicate the degree of importance a U.N. resolution might hold for member States,[34] but in the most comprehensive work on the subject Rosemary Higgins concludes that:

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[23] Doc. 2 G/14(k) 2–3, U.N.C.I.O. docs. 536–7 (1945).
[24] Doc. 507, II/2/22, at 2, 9 U.N.C.I.O. docs. 70 (1945).
[25] Doc. 571, II/2/27, at 2–3, 9 U.N.C.I.O. 80–81 (1945).
[26] I.C.J. Stat. art. 38.
[27] F. Sloan, "The Binding Force of a 'Recommendation' of the General Assembly of the United Nations," 25 Brit. Y. B. Int'l L. 1, at 16–18 (1948), hereafter cited as *Sloan*.
[28] Id., at 19 and Bliecker, "The Legal Significance of Re-citation of General Assembly Resolutions," 63 Am. J. Int'l L. 444 at 449–452 (1969).
[29] *Sloan*, p. 31.
[30] *Id.* at 31 and on.
[31] Higgins, "The Development of International Law Through the Political Organs of the United Nations 5," (1963) hereafter cited as *Higgins*.
[32] K. Baily, proceedings of the Am. Soc'y of Int'l L. 233, at 236 (1967).
[33] R. Faulk, "On the Quasi-Legislative Competence of the General Assembly," 60 Am. J. Int'l L. 782 at 784 (1966).
[34] See generally sources cited in notes 27, 28, 32, and 33.

"While there seems to be every reason for examining the law-developing role of political organs, it must be admitted that this entails a quantitative problem of some magnitude. That is to say it is often far from easy to see, when analysing the practice of states, the point at which a repeated practice has hardened into a rule of law. How many resolutions incorporating the same legal doctrine must be passed before that doctrine is deemed an international custom? How many states must vote in favour of those resolutions?—a simple majority?—a two-thirds majority? Must all the major Powers be in favour of the implied legal prescription? The problems revealed by these questions is in reality the familiar one of where to draw the line between usage and customary international law; and it admits of no easy answer.

* * *

". . . The only possible answer to the problem of at what stage a usage becomes law must be *at that point at which states regard themselves as legally bound by the practice*—a point which can only be ascertained by the close examination of states' attitudes and public statements." [35]

(4) *Failure of Consensus on Resolution 2574–D.*—With respect to the degree of consensus or acceptance by member States of Resolution 2574–D, it can be said that States which considered and voted on the resolution were certainly not of one mind. The resolution was adopted on December 15, 1969, by the General Assembly by a vote of 62 to 28 with 28 nations abstaining,[36] however, only 15 States party to the Geneva Convention on the Continental Shelf supported it, while 16 such States opposed the resolution including the U.S., U.K., and U.S.S.R. Similar divisions of opinion occurred among States party to the three other 1958 Geneva Conventions dealing with the law of the sea. With such divided opinion among interested parties there can be no basis for a claim that the resolution represents any rule of customary international law or embodies any general principle of international law recognized by civilized nations.

It may therefore be concluded with confidence that Resolution 2574–D has no binding effect on U.N. member States. Resolutions adopted by majority vote in international organizations are not accorded obligatory legal status under customary international law and there is no basis for imputing such status in the U.N. Charter. Legal scholars do not impute binding status to General Assembly resolutions and based upon the lack of consensus surrounding passage of Resolution 2574–D, there is no reason to expect the resolution can develop into any recognizable rule of international law.

VII. RESOLUTION 2574–D CONTRAVENES THE PRINCIPLES OF FREEDOM OF THE HIGH SEAS

In view of what is said above, it is unnecessary to consider whether Resolution 2574-D contravenes the Convenion on the High Seas. The resolution's prohibition is *ultra vires* and ineffective, no matter what that Convention says. But if it were necessary to decide whether that resolution contravenes the Convention on the High Seas, we would answer that it does. In more accurate terms, the resolution contravenes the principles of international law relating to the high seas, only part of which is codified in the Convention on the High Seas.

Article 2 of the Convention on the High Seas reads as follows:

"The high seas being open to all nations, no State may validly purport to subject any part of them to its sovereignty. Freedom of the high seas is exercised under the conditions laid down by these articles and by the other rules of international law. It comprises, *inter alia*, both for coastal and non-coastal States:

"(1) Freedom of navigation;

"(2) Freedom of fishing;

"(3) Freedom to lay submarine cables and pipelines;

"(4) Freedom to fly over the high seas.

"These freedoms, and others which are recognized by the general principles of international law, shall be exercised by all States with reasonable regard to the interests of other States in their exercise of the freedom of the high seas." [37]

The work of the International Law Commission served as the basis for the Geneva Conference which adopted the Convention, and Article 2 of the Convention embodies much of the Commission's suggested language. The Commission commented on Article 2 of its draft rules (similar to the language above) as follows:

"The list of freedoms of the high seas contained in this article is not restrictive the Commission has merely specified four of the main freedoms. It is aware

[35] *Higgins*, 5–6.
[36] U.N. doc. A/PV. 1833 at 18 (1969).
[37] 450 U.N.T.S. 82.

that there are other freedoms, such as the freedom to explore or exploit the subsoil of the high seas and freedom to engage in scientific research therein." [38]

The Commission's final report contained the following comment on the analogous article:

"(2) The list of freedoms of the high seas contained in this article is not restrictive. The Commission has merely specified four of the main freedoms, but it is aware that there are other freedoms, such as freedom to undertake scientific research on the high seas—a freedom limited only by the general principle stated in the third sentence of paragraph 1 of the commentary to the present article. The Commission has not made specific mentio nof the freedom to explore or exploit the subsoil of the high seas. It considered that apart from the case of the exploitation separately in section III below—such exploitation had not yet assumed sufficient practical importance to justify special regulation." [39]

While there was a shift in attitude between the two reports it can be clearly seen that in fact the subject of exploitation of the subsea resources beyond the limits of national jurisdiction was certainly considered to be free from any constraints at the time. Thus being free from limitation at the time, it could only become the subject of restraint or limitation since that time through treaty or subsequent development of customary international law. In fact, quite the opposite has occurred since 1956 with the continuing expansion of deep sea technology and there is no basis for action by the U.N. General Assembly to restrict freedom of the seas in this regard.

Article 24 of the 1958 Geneva Convention on the High Seas makes even more clear the intention of the parties that the sea-bed beyond the limits of national jurisdiction is included in the traditional concepts of freedom of the seas. In discussing pollution control the Article addresses itself to activities over *all* areas of the sea-bed and not only the continental shelf areas.

"Every State shall draw up regulations to prevent pollution of the seas by the discharge of oil from ships or pipelines or resulting from *the exploitation and exploration of the seabed and its subsoil*, taking account of existing treaty provisions on the subject." [40] (Emphasis added)

The Interim Report of the Committee of the American Branch of the International Law Association (1968) pointed out that the rights now exist under international law to the exploration and exploitation of the seabed beyond the limits of national jurisdiction, and there is no reason why use of deep sea resources should be prohibited pending the establishment of a more formal international regime. That Committee's 1968 report said in part (p. XVI–XVII):

". . . we are of the opinion that under existing law a state has competence to establish limited rights of jurisdiction and control over minerals of the sea-bed by effective use of the area encompassing them. We are of the further opinion that, in the event of conflict between the mineral development projects of two or more nations, there are established principles of international law, now applicable to the high seas, which would be available to resolve such conflicts on an *ad hoc* basis. Nevertheless, we recognize that these existing principles may not provide an adequate basis for long-term development of these resources in an orderly manner. If a comprehensive legislative solution can be designed in advance for this purpose, that possibility should be carefully explored . . .

"There is no reason why use of deep sea mineral resources should be made contingent upon the solution of political problems of such magnitude, or why exploration of the deep ocean floor should be prohibted pending the accomplishment of that solution (as some have suggested). It is enough to say that any scheme which adds costs, delays, and international politics to the formidable obstacles which already confront the would-be explorer of the deep sea-bed bears the burden of proving the necessity for its existence."

VIII. SUMMARY

Perhaps the U.K. Representatives to the United Nations best summarized the effect, or lack thereof, of U.N. Resolution 2574–D when he told the First Committee:

"We do not believe that the General Assembly can or should by its recommendations purport to modify existing international law. If the members of this Committee wish to modify or add to existing international law, they can

[38] International Law Commission, Report, U.N. General Assembly, Official Records, 10th Session, Supplement No. 9 (A/2934) at p. 3, (1955).
[39] 2 Y. B. International Law Commission 253 at 278 (1956), U.N. doc. A/CN. 4/Ser. A/1956.
[40] 450 U.N.T.S. 82.

recommend appropriate procedures. To take decisions which have limited support does not have any effect but merely registers dissent and disagreement. In our view, moreover, not only is such action inappropriate, but it can be damaging." [41]

As to the substantive policy question involved in U.N. Resolution 2574–D, we again commend to the attention of the Committee the views of the American Bar Association as stated in Resolution No. 73 of the House of Delegates (1968). Discussing international arrangements regarding the oceans beyond national jurisdiction, the House of Delegates endorsed these policy objectives:

". . . *freedom of exploration* by all nations on a non-discriminatory 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 people." (Emphasis added)

The supporting 1968 Joint Report of the American Bar Association Sections of Natural Resources Law, International and Comparative Law, and the Standing Committee on Peace and Law Through United Nations said on this subject:

"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."

What is needed is more, not less, knowledge about the mineral resources of the deep ocean floor. Adherence to the traditional principles of freedom of the high seas will insure that we gain that essential knowledge, so that our future policy decisions will be made on the basis of fact and not speculation.

Faithfully yours,

NORTHCUTT ELY.

Mr. ELY. At the 1969 meeting of the American Bar Association the same sections and committee adopted another joint report captioned "Non-Living Resources of the Sea: A Summary and Critique of Chapter 4, Part III of the Report of the Marine Science Commission." This is submitted as appendix B to my statement and I trust may also be printed.

(Appendix B follows:)

(Appendix B)

NON-LIVING RESOURCES OF THE SEA

A Summary and Critique of Chapter 4, Part III of the Report of the Marine Science Commission

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JOINT REPORT OF THE SECTION OF INTERNATIONAL AND COMPARATIVE LAW, THE SECTION OF NATURAL RESOURCES LAW, AND THE STANDING COMMITTEE ON WORLD ORDER UNDER LAW OF THE AMERICAN BAR ASSOCIATION, AUGUST 1969

Note—This Report was approved by the Section of International and Comparative Law, by the Section of Natural Resources Law, and (with the qualifications noted on pp. 6 and 56) by the Standing Committee on World Order Under Law at their meetings in Dallas on August 10–11, 1969. It is not to be construed as representing the opinions or views of the American Bar Association.

INTRODUCTION

On January 9, 1969, the Commisison on Marine Science, Engineering and Resources, created pursuant to Public Law 89–454 enacted June 17, 1966, submitted its Report to the President and Congress. This Report, entitled *Our Nation and the Sea*, is a document of major significance in the formulation of United States policy with regard to all aspects of the sea, its resources, and its uses.

The Commission Report, together with the supporting papers from the Commission's various panels and consultants, is not only a comprehensive study but a positive program for future action. Many of its proposals are controversial, but

[41] U.N. doc. A/C. 1/PV. 1709 at 41 (1969).

all represent serious efforts to solve difficult and often novel problems. They merit careful attention from all concerned about national ocean policy.

The present Joint Report is confined to those legal and institutional aspects of the Commission's Report which are of common concern to the Sections and Committees joining herein. It deals with that part of the Commission's Report (Chapter 4, Part III) which relates to non-living marine resources beneath the sea. In particular, it examines the Commission's proposals regarding an international legal-political framework for the development of such resources in the light of the Resolution on this subject adopted by the House of Delegates of the American Bar Association at its meeting in Philadelphia in August 1968 and the Joint Report submitted to the House of Delegates.[1]

Other parts of the Commission's Report contain proposals of significant legal interest which are not discussed here. In particular, the Commission's elaborate proposals for the administrative reorganization of oceanographic activities within the Federal Government have not been dealt with. The omission of any of these matters from the present Joint Report should not be taken as indicating either approval, disapproval, or lack of concern with respect thereto on the part of any of the sections or committees participating herein.

I. The Development of Non-Living Marine Resources

(p. 121)[2]

The Report of the Marine Science Commission divides non-living marine resources into four categories: oil, gas, hard minerals and fresh water. Recovery of each of these has its unique problems. All have common problems, such as a need for reconnaissance surveys, the role of Federal agencies, and a national and international legal framework.

A. Petroleum (p. 122)

The Report notes that investments of the U.S. offshore oil industry now run more than $1 billion annually and will grow about 18% per year for the next ten years. Offshore sources on a world-wide basis will probably produce at least a third of world production in ten years. It is unlikely that oil exists in comparable quantities in the deeper ocean basins beyond the foot of the continental terrace or slope.

1. *Technical Considerations* (p. 123)

Regarding technical considerations applicable to petroleum, the Report contains this recommendation (p. 124):

"* * * that appropriate mechanisms be established to assure timely exchange of scientific and technological information among the Federal Government, the petroleum industry and the scientific community consistent with security and proprietary considerations."

We agree generally with this recommendation, but feel that it should be broadened to include other mineral industries as well as the petroleum industry. Moreover, special attention should be given to the phrase "consistent with security and proprietary considerations." Private industry should not be required to make public highly confidential information which it has assembled at high cost, such as interpretations of, and certain classes of, geological and geophysical information. To do so would retard research, development and exploration.

2. *U.S. Legal and Regulatory Considerations* (p. 124)

In discussing legal and regulatory considerations applicable to petroleum, the Report contains this recommendation (p. 127):

"The Commission recommends that leasing and regulatory policies for offshore oil be geared to a rate of development reflecting all aspects of national interest. Strong support should be given to accomplishing the analysis necessary to provide a basis for decisions on development rates. In scheduling its Federal lease sales the Government should give adequate consideration to industry's need to plan its exploration and development programs in an orderly and effective fashion. For example, it is recommended that longer periods of advance notice be provided for Federal lease sales."

We agree generally with this recommendation. However, as to rate of

[1] The text of the resolution appears in the appendix to the present joint report.
[2] Page numbers in parentheses refer to the printed commission report.

development, private industry, which will undertake this development, should have a significant voice in the decision-making process. With respect to the scheduling of Federal lease sales, we agree that longer periods of advance notice should be provided, but flexibility should be retained so that when companies have expended huge sums of money in conducting geological and geophysical surveys in the offshore areas, they should be afforded the opportunity of bidding on the acreage for the purpose of acquiring leases.

We believe, moreover, that the Federal leasing for oil and gas should have as its principal objective not the short-run maximizing of Federal income, but rather the long term objective of finding and developing adequate petroleum reserves within this nation's control. Experience under the Outer Continental Shelf Lands Act does not indicate that development of oil and gas on the U.S. continental shelf has been too rapid. Because of the declining reserves to production ratio for both oil and gas on the land areas of the United States, a continuing and accelerated effort to discover petroleum reserves in the offshore areas under the jurisdiction and control of the United States is needed in our national interest and security.

B. NATURAL GAS (p. 127)[3]

The Report points out that offshore gas is chiefly explored for and produced by oil companies. Transportation (in pipelines) is regulated by the Federal Power Commission, and distribution to consumers is regulated by State or local governments. Sales are predicted to increase about 4% per year for the next ten years, and with declining reserves on land it is important to encourage a greater rate of exploration and development. To this end FPC policies should be modified in two respects.

First, with respect to new natural gas pipeline construction, the Report states that the Federal Power Commission should reexamine its policies to determine the extent to which efforts to establish proven reserves result in disclosures adverse to a company, and the FPC should devise methods by which such impact, if any, might be legitimately minimized (p. 128).

We agree with this suggestion.

Second, with respect to wellhead price regulation, the Report recommends (p. 128):

". . . that the Federal Power Commission reexamine its differential price policies for natural gas and make such adjustments as it deems advisable to reflect adequately the increased cost of offshore production."

We agree with this recommendation.

With respect to the regulation of interstate natural gas pipelines, the Report also recommends (p. 129):

". . . that in order to encourage innovative research and development activities, the Federal Power Commission review its accounting regulations relating to research and development to determine whether such regulations are consistent with the legitimate need of the gas transmission industry for clear and realistic guidelines."

We agree with this recommendation.

C. HARD MINERALS (130)

World demand projections for many key minerals are such that the U.S. must ensure itself an adequate and dependable supply by increasing the rate of discovery. The Commission finds that the present supply outlook does not raise an urgent necessity to develop seabed minerals at maximum speed regardless of cost. However, an early start in offshore exploration and technology development is warranted, and in the Commission's view it is proper for government to play a large role because of the lead time required, the very great costs involved and the diverse nature of the benefits.

1. *The Seabed as a Potential Source of Hard Minerals* (p. 130)

The Report affirms that for the foreseeable future the economics of extracting metals—other than salt, bromine and magnesium—from sea water are such that there is little likelihood of commercial production.

A more promising source is placer deposits, which are confined mainly to the

[3] The Standing Committee on World Order Under Law is of the opinion that this section should be deleted on the ground that it largely involves matters beyond the appropriate scope of this Report.

inner edge of the continental shelf. It is unlikely that significant placer deposits exist on the continental slope or beyond. The Commission states that serious reconaissance is warranted of the placer prospects off U.S. coasts.

Very little is known about the mineral potential of buried consolidated rock deposits in the substrata of the continental shelf and slope. Unless accessible by tunneling from shore or artificial islands, exploration of these deposits lies well in the future.

As to the abyssal ocean floor, the only deposits which now seem to the Commission to have potential economic importance are nodules, crusts and oozes on the ocean floor. The rocks beneath the abyssal ocean floor are far beyond present technical capacity to explore.

We agree with this general estimate of potentialities.

2. *The State of Ocean Mining* (p. 132)

The Report notes that the marine mining industry is in its infancy. Worldwide there were in 1967 about 300 marine mining operations of all types. All were near shore; almost all were outside the U.S. However, U.S. Government agencies and private firms are engaged increasingly in exploration and technological development. But further progress toward commercial exploitation involves overcoming certain economic, technological, and institutional (legal and regulatory) obstacles.

3. *Economic Considerations* (p. 133)

The Report takes note of the fact that basic economic differences between offshore oil and hard minerals have important government policy implications. Geological structures controlling the distribution of oil deposits generally extend seaward from land. This keeps down the cost of reconnaissance for exploration and of seaward extension of existing technology. This is not so with hard minerals. Also, mineral exploration techniques are more expensive because the horizontal dimensions of mineral deposits are smaller. The steps from discovery to production of minerals involve more effort and more costly technology.

4. *Technological Considerations* (p. 133)

The steps from discovery to production of minerals offshore involve much effort and novel technology. The lack of operating experience increases the risks of ocean mining ventures. The present practical depth of ore recovery in calm water is 150 feet. Beyond that depth technological activities are thus far exploratory. Technological developments will be very costly. The Commission anticipates that industry will wish to develop mineral recovery technology if the risks against an acceptable rate of return are not excessive; its recommendations are designed to encourage industry to do so, with Government help to the extent required.

To this end the Report recommends (p. 135):

". . . that strong Federal support be provided for a program to advance the fundamental technology relevant to marine minerals exploration and recovery. Government and industry should work in close cooperation to develop more rapid geophysical exploration tools and improved marine sampling equipment. The Government should have the function of testing new tools and equipment developed mainly by private industry and in cooperation with industry should be responsible for setting standards for the mining industry."

We understand that some companies in the mining industry agree with this recommendation. The petroleum industry, on the other hand, feels generally that industry, not the Government, should test new tools and equipment which that industry has developed.

5. *Legal and Regulatory Considerations* (p. 135)

Domestic legal and regulatory considerations are matters of either State or Federal jurisdiction. The Commission recognizes that exploration and development of seabed hard minerals will be a very high risk speculation for the foreseeable future and will require strong State and Federal policy incentives.

The Commission suggests (p. 136) the following guidelines for an offshore mining legal and regulatory regime:

(1) Encouragement of exploration.

(2) Maximizing net economic return to the nation rather than maximizing near-term income from rents, royalties or bonuses.

(3) Recognition that favorable mining laws of other nations compete for U.S. industry investment dollars.

We agree with these general principles.

The Commission refrains from taking a position on the claim-staking system versus the leasing system for hard minerals. But it states that since important questions have been raised before the Public Land Law Review Commission as to the desirability of continuing claim-staking on public lands ashore, it hesitates to recommend extention of this system offshore. At the same time it observes that the procedures established under the Outer Continental Shelf Lands Act "have worked well . . . and should not be lightly abandoned" (p. 136). The Report concludes that diversified situations will call for diversified policies, even if a leasing system is followed offshore. It recommends (p. 137) that:

". . . when deemed necessary to stimulate exploration, the Secretary of the Interior be granted the flexibility to award rights to develop hard minerals on the outer continental shelf without requiring competitive bidding."

We agree with this recommendation, although we reach it from a different direction. Contrary to the Commission's view, the Outer Continental Shelf Lands Act has not worked well in promoting hard mineral development offshore, largely because of the economic burden imposed by its competitive bidding requirements. But regardless of approach, if the legal framework is to promote development, some flexibility in the terms for acquiring rights is highly desirable.

D. FRESH WATER

As to fresh water resources, the Report recommends that the Department of the Interior continue an aggressive and diversified desalination research and development program (p. 139).

We agree with this recommendation with the observation that cooperative effort between Government and private industry should be encouraged.

E. PRE-INVESTMENT SURVEYS

The Report recommends that the proposed National Oceanic and Atmospheric Agency undertake reconnaissance surveys and prepare maps of the geological configuration of the continental shelves and slopes adjacent to the United States, such surveys to be conducted by the Government and by industry and universities under contract with the Government (p. 140).

The objectives of this recommendation have merit. Existing technical agencies, particularly the Geological Survey (as the Report notes at p. 141), should be fully utilized in any such effort.

II. An International Legal-Political Framework for Seabed Mineral Resources

A. OBJECTIVES

Under the heading "An International Legal-Political Framework for Exploring and Exploiting the Mineral Resources Underlying the High Seas," the Report cites (p. 141) as a principal objective of such a framework the principle, first officially stated by President Johnson, that an international "race to grab and hold lands under the high seas" must be avoided.

This declaration of the President, as the context clearly indicates, referred to the ocean bottoms beyond the limits of national jurisdiction. Thus understood, the objective accords with the paragraph in the 1968 ABA Resolution which supports efforts to protect the deep ocean floor from claims of sovereignty by any nation or group of nations.

Any such framework should also be judged, in the Commission's view, by the extent to which it achieves the following additional objectives (pp. 141–143):

(1) Encourages scientific and technological research, and capital investment for exploration and exploitation, by making it possible for these activities to be carried on in an orderly and economic manner.

(2) Affords a fair chance to all states to engage in minerals exploration and exploitation.

(3) Minimizes the "creation of vested interests that will inhibit changes" in the framework which may be deemed desirable in the light of unfolding experience.

(4) Promotes avoidance of international conflict.

We agree with the first, second, and fourth of these statements. We find the third unclear. If it means that the international framework would result in leases and concessions being subject to revision because of some future

change in the regime, we are opposed to it. If it merely means that caution should be exercised in the creation of an immutable legal framework, it is less objectionable.

The Report states that in order for the international framework to achieve the desirable objectives it—

"must provide means to recognize exclusive claims to explore and exploit the mineral resources of large enough sub-sea areas for long enough periods of time to furnish the incentive to undertake this activity. It must protect recognized claims and at the same time require the relinquishment of claims that are not properly explored or developed within fixed reasonable periods of time. It also must provide for the peaceful settlement of disputes that arise" (p. 143).

These principles are unexceptionable.

B. ADEQUACY OR INADEQUACY OF THE EXISTING REGIME

The Commission concludes (p. 143) that the objectives summarized above cannot be achieved within the existing international framework. In essence, this framework is described as providing that each coastal state presently has exclusive access to the non-living resources of its territorial sea space. It has "sovereign rights" over its treaty continental shelf "for the purpose of exploring it and exploiting its natural resources," but it must not interfere unduly with other uses of ocean space. Beyond the legal shelf, only general principles of law apply, and these are declared to "abound with uncertainty."

The chief areas of uncertainty which deter development are seen by the Commission as two: (1) the seaward boundary of the continental shelf under the 1958 Geneva Convention, and (2) the fact that beyond that line existing principles are insufficient to assure security and protect important national and international interests (p. 146). These will be discussed in turn below.

C. BOUNDARY OF THE TREATY CONTINENTAL SHELF

1. *Text of Articles 1 and 2 of the Convention*

The articles of the Convention on the Continental Shelf particularly relevant to this discussion are Articles 1 and 2, which provide:

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 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."

2. *The Commission's Position*

The Commission's conclusion (p. 144) is:

"We do not think that there is any reasonable way to interpret the Convention's definition that would place a precise outer limit on the existing legal 'continental shelf'."

Indeed, the Report goes so far as to indicate that the shelf jurisdiction of the coastal state "up to the 200-meter isobath is not entirely free of doubt because in some parts of the world, the geological continental shelf extends to a depth

less than 200 meters yet to a distance so far from the coast that at some point, it may reasonably be argued, it is no longer 'adjacent' to it and, therefore, not within the Convention's definition." [4]

To resolve the problem which it thus finds to exist, the Commission recommends (p. 145) :

". . . that the United States take the initiative to secure international agreement on a redefinition of the 'continental shelf' for purposes of the Convention on the Continental Shelf. The seaward limit of each coastal nation's 'continental shelf' should be fixed at the 200-meter isobath, or 50 nautical miles from the baseline for measuring the breadth of its territorial sea, whichever alternative gives it the greater area for purposes of the Convention."

We disagree. The reasons for our view can best be stated after a brief examination of various arguments advanced by those who support and those who oppose the Commission's position.

3. *Previous Bar Association Reports and the NPC Report*

The Commission refers generally to other suggested interpretations of the shelf definition contained in the Convention but deems it important (p. 144) to single out and differ especially with the Interim Report of the National Petroleum Council (NPC) dated July 9, 1968.

It would be inappropriate, however, to characterize this as a difference of views solely as between the Commission and the National Petroleum Council.

The Joint Report to the House of Delegates of the Sections of Natural Resources Law and International and Cooperative Law and the Standing Committee on Peace and Law through United Nations (August 1968) said (pp. 8–9) :

"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.' "

The 1968 Interim Report of the Committee on Deep Sea Mineral Resources of the American Branch of the International Law Association said (p. IX–X) :

". . . 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."

Our own report, and that of the Committee on Deep Sea Mineral Resources of the American Branch of the International Law Association, joined in substantially identical Conclusions and Recommendations.

The Commission's report does not take specific cognizance of the reports of these Bar groups, but refers exclusively to the NPC report.

The NPC 1968 Interim Report took the position that under the Convention's adjacency and exploitability criteria, coastal nations are vested with exclusive sovereign rights over the natural resouces of the submerged continental land mass seaward to the point where the submerged continent meets the deep ocean floor, including the geological continental shelf, continental borderland, continental slope, and at least the landward portions of the continental rise. It further

[4] It seems clear to us that areas out to a depth of 200 metres, regardless of distance from shore, are within the shelf jurisdiction of the coastal state subject to the corresponding rights of other states with which the shelf may be shared.

proposed that this interpretation of the Convention be proclaimed through unilateral declaration by the United States and other coastal nations as their understanding of the text.[5] A more precisely defined boundary based on this principle could be determined later as required.

The Commission Report rejects the 1968 NPC position on both legal and policy grounds. With respect to the NPC's suggested reading of the Convention, the Report observes (p. 144) :

"On the basis of the studies of its International Panel, the Commission concludes that the NPC position is not warranted either by the language of the definition of the 'continental shelf' or its history."

It then goes on (p. 144) to state the Commission's judgment that the NPC proposal would be "contrary to the best interests of the United States."

The differences of opinion which currently exist over the proper limit of the continental shelf are well brought out by this conflict between the position of the Commission and the positions taken in the 1968 reports of the A.B.A. sections, the I.L.A. Committee, and NPC.

The issue is controversial and complex. Because of its importance, we think it may be informative to review (in necessarily abbreviated form) some of the considerations advanced by the opposing sides and then to indicate the bases of our position. These considerations may be conveniently divided into those relating to the construction of the present Convention language, those involving the question of what is desirable policy, and those concerning the manner in which a more precise definition of the treaty shelf might be obtained.

4. *Construction of the Convention Text*

It is common ground between the Commission, the positions of the Bar groups, and the NPC positions that the language of the Shelf Convention does not support the so-called "national lake" concept—that a coastal state may extend its claims indefinitely over the deep-sea floor until it reaches some mid-ocean median line with another state. The differences between them relate to the proper location of a seaward limit for national jurisdiction which is acknowledged to exist.[6]

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[5] Subsequent to the Commission Report, the NPC in March 1969 published its final report, entitled, "Petroleum Resources under the Ocean Floor." On this point the text of the final NPC report said (pp. 56–57) :

"For the purpose of determining the outer limit of coastal-nation jurisdiction, the definition of the 'continental shelf' as set forth in Article 1 of the Convention is controlling. The key words in this definition, in turn are :

"1. *'Submarine areas,'* i.e., not just the Continental Shelf in its strict geomorphic sense, but *any* submarine areas lying off the coast and otherwise meeting the requirements of Article 1 ;

"2. *'Adjacent to the coast,'* i.e., not to midocean, but in sufficient proximity or appurtenance to the coast to qualify as 'adjacent.' Adjacency is, of course, a relative concept and what is proximate or appurtenant must be determined in the context of the vast expanses of the oceanic submarine areas of the world and not in a narrow sense ;

"3. *'To a depth of 200 meters,'* i.e., this far presently and unconditionally, without regard to the existence of a capability to exploit ;

"4. *'Or beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas,'* i.e., as much farther beyond the 200 meters depth, within the outer limit of adjacency, as developing technology can be shown at any particular time to make such exploitation possible. In other words, this is not a static limit, conditioned upon exploitability as of a specific point in time, but is an elastic one, expanding with developments in technology.

"It is thus apparent as noted in point 3 immediately above that the coastal nations have (a) a present and unconditional jurisdiction to the depth of 200 meters without regard to the existence of a capability to exploit, and (b) a further jurisdiction over the submarine areas specified in point 4 above whenever developing technology admits of the exploitation of said areas. Article 2, par. 2, of the Convention preserves the exclusive rights of the coastal nations throughout whatever period of time is needed to permit the art of exploitation to achieve its ultimate depth capability within the limits of adjacency. As seems apparent, in light of technological advances to date, there will be an eventual capability to exploit any submarine area. Thus the test of adjacency alone determines the ultimate limit of national jurisdiction of coastal nations under Article 1 of the Convention and hence it is this test that fixes the boundary between national and international jurisdiction.

"Accordingly, it is the outer limit of adjacency which will now be considered.

"When the four key phrases, which have been analyzed above, are considered in light of the deliberations that led to their inclusion in the definition of the term 'continental shelf' in Article 1 of the Convention, it can reasonably be concluded that the coastal nations' exclusive jurisdiction over the natural resources of the seabed and subsoil was intended to, and does, encompass in general, the continental mass seaward to where the submerged portion of that mass meets the abyssal ocean floor (including the continental shelf, continental borderland, continental slope, and at least the landward portion of the continental rise overlapping the slope).

"In addition, it is clear that in particular locales where the continent drops off abruptly from near the coastline to the abyssal ocean floor, it was intended that this exclusive jurisdiction should include an area of that floor 'adjacent to the continent.' "

[6] It has also become clear in the U.N. debates on this subject that there is a wide consensus favoring the principle that there is some such limit of coastal state jurisdiction.

One body of opinion takes the view that the shelf definition in Article 1 of the 1958 Convention properly interpreted means that the limit of adjacency may be regarded as coinciding with the foot of the submerged portion of the continental land mass. Evidence from the drafting history is cited in support of this interpretation, with particular emphasis being placed on the conclusions of the Inter-American Conference at Ciudad Trujillo in 1956. At that conference a resolution was adopted specifically affirming the exclusive appurtenance to the coastal state of—

" . . . the continental shelf, continental and insular terrace, or other submarine areas, adjacent to the coastal state . . . 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 . . ." [7]

Since this resolution was an important precursor of the Shelf Convention, it is said that Article 1 of the Convention should be read as embracing the same concept even though Article 1 omits all reference to the "continental terrace." [8] Those adhering to this view cite the explanation given to the Senate by the Chairman of the U.S. delegation which participated in the Geneva Convention conferences:

" 'The clause which protects the right to utilize advances in technology at greater depths beneath the oceans was supported by the United States and was in keeping with the Inter-American conclusions at Ciudad Trujillo in 1956. It was included in the I.L.C. 1956 draft.' " [9]

Reliance is also placed on the recent holding by the International Court of Justice in the *North Sea Continental Shelf Cases* that under the continental shelf doctrine as it exists in customary law a coastal state is entitled to "all those parts of the continental shelf that constitute a *naural prolongation* of its land territory into and under the sea." [10] [Emphasis supplied.]

Opposed to this view is a second body of opinion, exemplified in the Reports of the Commission and of its International Panel, that the drafting history of the Convention does not support this broad interpretation. This group relies, *inter alia*, on the facts that no express reference was made in Article 1 to the continental Terrace or slope, that an effort to include such a reference was voted down in the Conference, and that the drafters retained throughout the basic term "continental shelf."

There are considerable intramural differences within this second group, but the weight of opinion within it views the language of Article 1 as setting a minimum limit of 200 meters and an ultimate limit in terms of adjacency. Between these extremes the actual jurisdiction of the coastal state at any given time is governed by the limit of exploitability at that time—i.e., by the state of the art. This view, its proponents claim is essentially what was intended by the authors of the Convention. The ultimate limit defined by adjacency, they say, may well be equivalent to the foot of the continental slope, but until exploitability reaches that point the jurisdiction of the coastal state remains *in futuro*.

With regard to the *North Sea Continental Shelf Cases*, this group finds the holding of the International Court to be of limited significance in the present context. The Court was there dealing with the allocation of areas entirely within the 200-meter line and with the inequitable results produced by equidistant lateral boundaries under certain geographical circumstances. It had no reason to consider or pass upon problems relating to the continental terrace or slope.

5. *Policy Considerations*

Distinct from the question of the proper construction of the Convention text is the question of what is a desirable limit for the legal shelf in terms of the broad national interests of the United States. The Commission Report, as noted above, concludes that a shelf claim of the kind advocated in the NPC Report, would not promote these interests. Among the arguments which have been adduced to support this view, in the Report and elsewhere, are the following:

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[7] 4 Whiteman, *Digest of International Law*, 836–837. The United States voted for the resolution, which was adopted unanimously.

[8] The full arguments about the drafting history advanced by the proponents of this view are set forth in detail in the 1968 and 1969 NPC Reports. A contrary view is expressed in Oxman, "The Preparation of Article 1 of the Convention on the Continental Shelf" (a study prepared for the Marine Science Commission).

[9] Hearings before the Committee on Foreign Relations of the U.S. Senate on Conventions on the Law of the Sea, 86th Cong., 2d Sess., Jan. 1960, pp. 108–109.

[10] Judgment of February 20, 1969. I.C.J. *Reports*, 1969, p. 3, at 53; 8 *International Legal Materials* 340, at 384 (1969).

(1) A broad shelf doctrine would benefit other nations proportionately more than the United States, subjecting large areas to national jurisdictions which could then exclude or impede U.S. access to such areas.

(2) Enterprises based in developed countries can compete advantageously in the areas adjacent to their shores, making a broad treaty shelf unnecessary for them. But a broad shelf in the rest of the world could effectively exclude activities by American enterprises or expose them to the same hazard of expropriation as exists on land. Looking at the world as a whole, enterprises interested in exploring and exploiting the resources of a seabed stand to gain by a narrow shelf provided a satisfactory regime for the deep sea is established without undue delay. Such a limited regime would be preferable to national regimes in many parts of the world.

(3) A wide shelf doctrine would encourage enlarged national claims to the superjacent waters and their resources and to the airspace above. This could be detrimental to U.S. fishing interests. The excessive claims of this kind made by some states after the Truman Proclamation of 1945, and the troubles ensuing therefrom, are cited as a warning of what can be expected.

(4) A wide shelf doctrine would run counter to the U.S. policy to maintain the traditional maximum freedom of the high seas in the interest of the multiple uses, including military uses, which the United States makes of the oceans.

(5) Persons concerned with scientific research favor a narrow shelf, believing that a broad shelf could result in national interference with research expeditions.

(6) To the extent that a policy of import quotas is warranted to protect the domestic oil extraction industry, a narrow shelf is required to prevent nullification of that policy.

Leading points made in reply to these contentions may be summarized as follows:

(1) If the "broad" interpretation of the Shelf Convention is correct, the United States already possesses vested rights to the foot of the continental slope. To surrender these rights to an international regime would be an abandonment of potentially vast resources and revenues which no imaginable *quid pro quo* could justify.

(2) The "disproportionate benefit" argument is beside the point. The important fact is the great amount of resources, in and under the United States' own continental margin, which are brought under direct U.S. control on this "broad" theory. These nearby reserves could be of immense economic and strategic value to this country.

(3) The argument that a broad shelf claim will encourage excessive claims of other kinds by other states is also misdirected. The Convention expressly protects the high seas status of waters above the shelf. Those coastal states which have made or intend to make further claims to the superjacent waters or to exclusive fishery rights are not likely to retract their present claims or refrain from future ones merely because the U.S. opts for a narrow shelf.

(4) Some states (the Soviet Union for one) are so strongly opposed to any supranational deep-sea regime and to the concept of common ownership that any early agreement appears unlikely. That being so, the area of national jurisdiction should be as wide as the 1958 Convention can be construed to permit. Practical working arrangements on this basis should not be difficult to reach with the Soviet Union.

(5) Assuming for the sake of argument that agreement is possible, it would have to be on a compromise basis and of necessity would involve some kind of international administration. Past experience suggests that this could lead to a system of rationing and possible discrimination against American companies. Furthermore, the time lag before any international regime can come into effect means continued uncertainty and consequent discouragement to exploitation.

(6) If small U.S. producers on land need protection against an influx of new off-shore oil, there are better ways to accomplish this particular purpose than by giving up potential U.S. resources.

(7) Scientific research is already being impeded off some coastal states even under a "narrow" shelf doctrine. If it is to be adequately protected and encouraged the necessary rights and obligations should be dealt with in separate international arrangements made specifically for that purpose.

(8) The seaward edge of the continental margin is a natural dividing line and hence a much more logical choice for a jurisdictional limit than a purely arbitrary line somewhere on the slope.

6. *Methods of Defining a More Precise Shelf Limit*

The Commission recommends (p. 145) that the United States should "take the initiative to secure international agreement on a redefinition of the 'continental shelf.'" It is unclear from this language whether the Commission is proposing a formal international convention to this end, or whether the "international agreement" envisaged is to be read as an "international consensus" reached through less formal means.

A substantial sentiment exists among informed persons in this country that under present circumstances a new UN Conference on the 1958 Geneva pattern would not be advantageous for United States interests. Such a conference might well fail to reach agreement, for political reasons unconnected with the legal merits of the various proposals which would come before it. A result of this kind could well convert present uncertainties into complete chaos. Alternatively, an agreement carried by a majority of small states might embody principles unacceptable to the United States, yet which would be difficult to disregard if formally adopted by such a conference. In either event, no real legal gain would result and quite possibly a retrogression would occur which could undo even some of the progress made in 1958.

To avoid these hazards, another way to secure a common understanding as to the limit of the Convention shelf has been suggested in our 1968 Joint Report, in the NPC Report, the Interim Report of the Committee on Deep Sea Mineral Resources of the American Branch of the International Law Association, and elsewhere. This proposes that like-minded maritime states should issue unilateral but concerted declarations announcing their intent to observe a particular limit as the boundary of their shelves under the 1958 Convention and to decline recognition of any claims by other states to a greater limit.[11] From such a proceeding a pattern of common practice under the Convention could emerge and might well come to receive general acceptance by the world community. In this connection advantage might be taken of the International Court's recognition of the coastal state's soverign rights over the natural prolongation of its land territory under the sea.[12]

7. *Previous ABA Action on a Shelf Limit*

A number of the considerations noted above as affecting the boundary of the treaty shelf have already been the subject of study, recommendation, and action within the American Bar Association. In the Resolution adopted by the House of Delegates at its August 1968 meeting, it was noted that "the boundary between the area of exclusive sovereign rights and the deep ocean floor needs to be clarified by an agreed interpretation." The Resolution then recommended that such an interpretation be sought by the United States through the "parallel declarations" method or by other means, and that within the area of exclusive sovereign rights off its coasts the interests of the United States be protected to the full extent permitted by the 1958 Shelf Convention.

In the Joint Report which accompanied this Resolution, the contention that the Convention definition permitted extension of national jurisdiction to mid-ocean, and the contention that it restricted it to the 200-meter line, were both rejected. The better view, the Report said, was that the "exploitability" factor of the Convention was limited by the element of "adjacency." The Report then continued:

"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."

The quoted conclusion, which reflects the "continental margin" interpretation of the Convention, represented and continues to represent an opinion widely held among our members.

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[11] The 1968 ABA Joint Report stated this point as follows:

"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."

[12] In the *North Sea Continental Shelf Cases*, I.C.J. *Reports*, 1969, at 31.

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 construed 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 make 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 effected by its national or by a foreigner;[13] (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.

8. *Comments and Conclusions Regarding a Shelf Limit*

In the light of the discussion above 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.

(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 stated 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.

D. THE REGIME BEYOND THE TREATY SHELF

The Commission Report recommends (p. 147)

". . . that the United States seize the opportunity for leadership which the present situation demands and propose a new international legal-political

[13] Article 2 provides that "if the coastal State does not explore the continental self 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 these rights "do not depend on occupation, effective or notional.

framework for exploration and exploitation of the mineral resources underlying the deep seas, that is, the high seas beyond the outer limits of the continental shelf as redefined in accordance with the Commission's recommendations."

It then proposes that new international agreements be negotiated to embody six main provisions (each of which is described and discussed below). The Report emphasizes (p. 147) that these proposals are interrelated, and that rejection of any one "would raise serious questions in the minds of the Commission as to the advisability of continuing with the others."

Before proceeding to examine the Commission's specific proposals, we would note that a preliminary question exists as to the urgency for creating an international regime for resources beneath the deep sea. Many of our members feel that it is premature to seek establishment of such a regime at this time. They stress that technology for deep-sea exploitation on a significant scale is not yet available, that not enough is yet known about the character or extent of deep-sea resources, and that an ill-conceived regime can smother development indefinitely.

On the other hand, other members point out that the question of a deep-sea regime is inevitably entangled with the question of the shelf limit. Since it is bound to arise, it should not be disregarded. Further, particularly with respect to hard minerals, the advent of adequate technology to reach deep-sea resources may not be as remote as some think. Finally, the creation of an international framework will require several years of negotiation at least, and the result may be ready none too soon. During the same period great advances may be expected in our knowledge of the oceans, and these can be taken into account as negotiations proceed.

Whichever view is preferable in the abstract, the fact remains that active efforts looking toward an international regime are now under way in the United Nations. The United States must have a policy and position with respect to these efforts. If only for this reason, the proposals for such a regime made by the Commission call for careful scrutiny now.

1. *International Registry Authority* (p. 147)

The Commission's Report proposes a claim-registration scheme, under which only a state or an association of states would be eligible to register a claim but the registrant may choose anyone to do the work or transfer its claim to another state.

All states should be free to engage, or authorize, preliminary investigation to decide whether to register a claim to explore. An exclusive right to explore or exploit would be acquired by registry with an International Registry Authority. The membership of the Authority and manner of choosing its governing body would be specified in the agreements embodying the new framework. "The Authority should find its place in the family of the United Nations but should be as autonomous as the World Bank" (p. 149).

The Authority should be required to register claims on a "first-come, first-registered" basis, without discretion to deny it except on the ground that the explorer or exploiter is not able and willing to develop the claim.

Upon proof of discovery the Authority would be required to register a claim to exploit for a large enough area and for a long enough time (fixed by the Authority) to enable economic operation and assure the producer time to recover his investment and an "adequate return thereon." Failure to comply with work requirements would be ground for revocation.

Upon expiration of the registration period, further exploration or exploitation of the subject resources or area should be subject to the regime as it then exists, without any re-registration preference.

To cover the Authority's administrative costs, it should be empowered to fix registration fees.

Comments.—Our 1968 Report (pp. 12–13) suggested consideration of a registry scheme as a long-range objective in contrast with proposals for vesting jurisdiction in a supranational agency to grant or deny mineral concessions in the areas beyond national jurisdiction. We consequently approve the Commission's similar conclusion, which avoids vesting of "title" to deep-sea resources in the United Nations (p. 147) and which seeks to create an administrative organ of limited but useful scope. In varying degrees, however, we have misgivings over specific details of the Commission's proposal, including the following:

(1) The structure of the Authority. Its organization must reflect the realities of ocean capabilities, and must be insulated from caprices of the moment in the General Assembly.

(2) The power of the Authority to veto claims and to fix their size and duration. In order to avoid the abuses which can arise from monopoly power, the rights of claimants in all essential respects should be established in the treaty creating the regime.

(3) The denial of any re-registration preference to a state which had developed the area concerned. Such a policy could seriously impair incentive to exploit.

(4) The provision that claims must be registered by a state or states. This presents problems in situations where private enterprise has invested in preliminary exploration and seeks to perfect its rights in an area before claim-jumpers can take advantage of its work. It should be made certain that the principle of "first-come, first-registered" would apply as of the date the applicant gave proper notice to the Authority that it had filed with a member state an application that it register on the applicant's behalf.

(5) The concept of "paper claims," i.e., speculative registrations. A realistic concept to apply to the extractive industries, where risks are high and many unsuccessful attempts have to be paid for out of the small percentage of successful ventures.

(6) Scientific research. Care must be exercised to prevent the registration system from being used to impede genuine scientific research.

(7) The concept of "paper claims," i.e., speculative registrations. A speculative race to the registry office, a "race to grab," is inevitable if the reward for being first in line, without any prior exploratory effort, is to receive a power to exclude all others from a large area for a period of several years. Experience with mineral laws on land has proven this.

2. *International Fund* (p. 149)

This proposal is intended to compensate the world community as common owner of the resources by using the "economic rent" for purposes that the world community agrees will promote the common welfare. The Commission wisely declares that these purposes must be other than general purposes of the U.N.

The International Registry Authority would fix a rate of payment (not so high as to kill incentive) of a portion of the value of production which it would turn over to the International Fund. The Authority should have no voice in the Fund's management. The membership of the Fund should be determined by the U.N. General Assembly.

Comment.—We endorse the principle here recognized, that the agency concerned with production should be separated from the agency distributing the proceeds. It is probably the best way to give practical recognition to the proposition that the resources are the legacy of mankind and to the fact that all states should be entitled to participate in the benefits. However, the question arises whether it is justifiable discrimination to require royalty-type payments from the mineral extractive industries when other users of ocean space (*e.g.*, fishing and merchant marine) are not so burdened.

Our other comments are:

(1) If there are to be royalty-type payments, the Commission is to be commended for the formula "a portion of the value of production" rather than "net return on investment." *Cf.* Comment (5) on the Registry, above.

(2) It is questionable whether the Authority should have unrestricted power to fix the rate of payment to the Fund. We believe that this should be settled in the basic agreement creating the regime, or at least that the agreement should set limits to the Authority's discretion. Clearly the Fund should not have power to set the rate.

(3) Determination of the membership of the Fund should be made by the parties to the proposed convention and should not in any event be delegated to the U.N. General Assembly.

3. *Powers and Duties of Registering States* (p. 150)

Each state registering a claim must enact domestic legislation to assure compliance with the terms and conditions of the international regime, payments and protection of exploration and exploitation activities. Failure to do this should be a ground of registry revocation by the Authority. The registering state would be free to apply its domestic law not inconsistent with the international regime, *e.g.*, concerning working conditions, marketing of production and taxation.

Comment.—We agree in principle.

4. *Policing Functions of the Registry Authority* (p. 150)

The Report does not recommend that the Authority have any general policing functions. However, since the Authority would have the power to cancel registered claims for cause, it should have the power, according to the Report, to inspect and hold hearings.

Comment.—We agree, subject to provisions for review of possible arbitrary action by the Authority, as provided for in the next proposal.

5. *Despute Settlement* (p. 150)

The Report recommends that the International Registry Authority should initially settle disputes arising under the international regime. However, at the request of any party to a dispute, the Authority's initial decision, including its revocation of claim registration, should be subject to review by an independent arbitral agency.

Comment.—We agree. We would note that the possibility of recourse to the International Court of Justice should not be ruled out.

6. *Intermediate Zone* (p. 151)

In the Commission's view, mineral resources of the deep sea do not in fairness or law belong to the coastal states to the exclusion of other states from their benefits.

However, the Commission recognizes that some coastal states may regard themselves as having preferential rights to resources of a reasonable subsea area beyond the treaty shelf and also have a national security interest in adjacent offshore areas. For these reasons, some coastal states might be reluctant to agree to a narrow treaty shelf without recognition of their particular interests in the area immediately beyond.

As a compromise of the foregoing opposing views, the Report recommends the creation of an intermediate zone of seabed, seaward of the treaty shelf as defined by the Commission, to the 2,500 meter isobath or 100 nautical miles from the baseline of the territorial sea, whichever gives the greater area. The boundary would be permanently fixed as in the case of the shelf. The Commission assumes that the 2,500 meter isobath is the average depth at the foot of the geological continental terrace or slope and 100 miles is the average width of the shelf and slope or terrace. (Geologists do not all agree that these assumptions are true or relevant).

Only the coastal state or its licensees would be authorized to explore and exploit resources therein. It need not do so, but if it does so, its claims must be registered with the Authority and would come under the other terms and conditions of the international regime.

Comment.—This proposal is essentially an effort by the Commission to propitiate the proponents of a "broad" treaty shelf. Many of the arguments summarized earlier with regard to the proper limit of the shelf are also applicable, pro and con, to this intermediate zone concept. If the Commission's "intermediate zone" proposal were adopted, in conjunction with a "narrow" shelf, foreign coastal nations would have exactly the same power to exclude American companies, or to demand burdensome concession terms, as they would have if their jurisdiction were commensurate with a "broad" shelf extending to the 2,500 meter isobath or other outer limit of the proposed intermediate zone. Such a zone has, however, other drawbacks, of which the most weighty is perhaps its sheer awkwardness. Areas subject to divided responsibility are rarely viable, as the history of condominia and internationalized zones in international law indicates.

On balance, we are opposed to this proposal.

An alternative proposal which has been put forward would call for complete coastal state authority over the zone but would provide for some kind of payments to the International Fund. Such an arrangement would be less objectionable, but it might lessen the incentives to the coastal state and its licensees to push on with development. It is also possible to foresee administrative difficulties under this system as well.

7. *Conclusion With Respect to Areas Beyond National Jurisdiction.*

Under the 1968 Resolution of the House of Delegates, the American Bar Association is committed to support the development as soon as practicable of international arrangements to govern the exploitation of deep-sea resources beyond the limits of national jurisdiction. Such arrangements, the Resolution affirms, must 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. . . ."

Except for the intermediate zone proposal, and subject to the various *caveats* expressed in the foregoing comments, we believe that the Commission's recommendations for a deep-sea regime are broadly in harmony with the principles of the Resolution.

We would reiterate our belief, however, that the details of the Commission's proposed registry plan need careful attention before being submitted as a basis for international discussions. There are, in our opinion, too many loose ends and loopholes which might permit abuse in connection with the requirements for the registration, maintenance and vacating of claims. We are all against a "race to grab." It is difficult at present for anyone to "grab" the deep seabed physically but the concept of registration of paper claims would for the first time create the mechanism to make such a "grab" possible. Obviously safeguards against such a possibility must be drawn with the utmost care, but the factual data necessary for meaningful draftsmanship are not yet available.

Many of our members strongly believe that the first step, in setting up a deep sea regime, should not be the establishment of a system which recognizes paper claims or purely speculative registrations, but should be, instead, agreement on norms of conduct to be observed by the nations capable of carrying out deep-sea mineral exploration.[14]

Such norms would be designed to minimize interference between expeditions or operators, and to preclude "jumping" of areas which are under actual exploration or development, plus reasonable protective margins. This, they believe, may well evolve into a more formal system of registry of claims, but only after enough information has been acquired to make possible an agreement on criteria with respect to areas, duration, diligence requirements, and other factors historically associated with mining rights. Such consensus on norms of conduct should be without prejudice to any agreement to dedicate some portion of the value of production from deep-sea mineral resources to agreed international purposes.

E. RELATIONS BETWEEN GOVERNMENT AND PRIVATE ENTERPRISE, AND THE INTERNATIONAL REGISTRATION SYSTEM (P. 153)

The Commission points out that the relations of the United States, as a registering nation under the international regime, with the business entities on whose behalf it will register claims are a matter of purely domestic concern. The recommendations which it makes for U.S. domestic procedures to deal with these relations are summarized below.

1. Policies Applicable to All Registered Claims

The Report recommends that the Department of the Interior be the U.S. agency which would register U.S. claims with the International Authority. Companies would apply to the Department of the Interior, paying to it the fees specified by the international regime to be forwarded to the Authority. The companies' royalty-type payments for exploitation should take the place of both the annual rent and the royalty now paid for mineral leases on the Outer Continental Shelf.

We agree in general, but would recall our comment in regard to the Authority about the danger of delay in domestic registration channels which could lose an applicant his "first-come" position before the Authority.

2. Additional Intermediate Zone Policies

The Report recommends (p. 154) that the Secretary of the Interior should have power to award mineral rights without requiring competitive bidding, on the same basis as it recommended such procedure for the Outer Continental Shelf.

This problem only arises if the intermediate zone proposal is adopted.

3. Additional Policies Beyond the Intermediate Zone

If the U.S. uses competitive bidding to select the companies to explore and exploit claims registered by it with the International Authority, U.S. companies would have an incentive to request states which charge less to register claims on their behalf. This would create a "flag of convenience" problem unless the U.S. prevented its nationals from applying to other states. The latter would be undesirable. Therefore, the Report recommends (p. 155) that the U.S. follow

[14] This concept was referred to in our 1968 Joint Report.

the "first-come, first-registered" policy in selecting the companies on whose behalf it registers claims with the Authority.

We agree with this recommendation.

F. A COURSE OF INTERIM ACTION

The Report observes (p. 155) that it will take years to arrive at a new framework. In the meantime, it is important to seek early agreement on principles to guide states in interim exploration and exploitation of deep-sea resources. The Commission therefore announces its support for the principles proposed by the United States in the United Nations in June 1968,[15] which it summarizes as follows:

(1) A "redefinition of the outer limits of the continental shelf."[16]

(2) Exclusion of any claims to national sovereignty or sovereign rights over the deep-sea floor beyond the shelf limit.

(3) Dedication to international purposes of a portion of the value of the resources recovered.

(4) Call for a new international regime to be established as soon as practicable.

(5) Exploitation prior to the establishment of a shelf limit to be without prejudice to the eventual location of that limit.

To implement this last principle, the Commission recommends a U.S. proposal that in the interim, no nation should claim sovereign rights beyond the 200-meter line. Exploration and exploitation should, however, be permitted to continue beyond that line, provided that the authorization therefor "explicitly states that such exploration or exploitation shall be subject to the new international framework agreed upon" (p. 156).

Recognizing the uncertainties which such a rule would create for the private entrepreneur who would not know when his landlord and the terms of his lease might be switched, the Commission recommends (p. 156):

". . . that Congress enact legislation to compensate private enterprise for loss of investment or expenses occasioned by any ned international framework that redefines the continental shelf so as to put the area in which is it engaged in mineral resources development beyond the shelf's outer limits."

A final recommendation from the Commission (p. 156) is that the Outer Continental Shelf Lands Act be amended to require permission from the Secretary of the Interior:

". . . to engage in mineral resource exploration or exploitation in any subsea area beyond the 200-meter isobath upon such terms and conditions as the Secretary deems appropriate. The amendment should make clear that this requirement is not intended to constitute a U.S. claim to exercise sovereignty or sovereign rights over any subsea area beyond the 200-meter isobath."

In exercising this authority, the Secretary of the Interior should be guided by the Secretary of State's judgment as to foreign policy implications (p. 157). It is our understanding that the scope of this proposal would not be confined to areas off the U.S. coast; it would apply to activities by U.S. nationals off any coast, in order to assure Government control of the evolving worldwide situation pending adoption of the new international framework.

On these interim measures proposed by the Commission, we agree in part and disagree in part.

Of the five principles put forward in the United Nations, we find the first four acceptable (on the understanding, with respect to the first, that redefinition of the shelf limit be taken as equivalent to arriving at an agreed interpretation of the Convention definition rather than a new convention). These principles are also in harmony with the 1968 ABA Resolution.

We disagree with the fifth principle and with the recommendations for implementing it (except insofar as these recognize the importance of not suspending deep-sea exploration and exploitation activity).[17] These proposals, calling in effect for a moratorium on claims beyond the 200-meter line, are in our opinion retrogressive, impractical, and not in the best interests of the United States. The principal reasons for our conclusions may be summed up as follows:

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[15] UN Doc. A/AC.135/25; also in 59 Dept. of State Bulletin 152 (August 5, 1968).

[16] We do not read the U.S. proposal this way. It did not, in our view, propose a "redefinition" of the outer limits of the continental shelf, but merely proposed that the limit be fixed in accordance with the existing Convention on the Continental Shelf.

[17] The Standing Committee on World Order Under Law takes no position with respect to the fifth principle here discussed, for want of sufficient qualification to do so.

(1) The 200-meter line is out of date. Activities now exist beyond that line, undertaken in justified reliance on the exploitability concept of the Shelf Convention. These are now clearly within the national jurisdiction, and their status should not now be cast in jeopardy.

(2) Under our view of the Shelf Convention and its interpretation by parallel declarations, there is no need for a moratorium on claims. National rights simply extend or will extend to the limit of adjacency and stop.

(3) The possibility of shifting regimes and responsibilities will assuredly discourage the large investment needed to develop resources in deeper and deeper waters. The adverse effect on U.S. interests is obvious.

(4) The proposal for compensation is unrealistic. Even if Congress were prepared to enact such legislation, the suggested measure of compensation is wholly inadequate for the risks involved. The device thus fails to supply the inducement needed to overcome the uncertainties noted in point 3.

Resolution (American Bar Association)

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 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 areas 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.

Mr. ELY. I participated in drafting those reports, and I concur in them. Where the committee's questions go beyond the resolutions of the House of Delegates or these reports I shall, of course, be answering on my personal responsibility, and I shall attempt to point that out from time to time where necessary.

I have also asked, in my prepared statement, to annex appendix C which is a legislative history of the 1958 Convention on the Continental Shelf. This was prepared under my direction, but this is not an American Bar Association document.

Appendix D is captioned "Coastal State Mineral Jurisdiction and the Continental Margin, a Survey of National Practice." This is also prepared under my direction but it is not a Bar Association paper.

Senator METCALF. Your various appendixes will be incorporated in the record.

Mr. ELY. Thank you.

(Appendixes referred to follow:)

Appendix C to Statement of Northcutt Ely

THE LEGISLATIVE HISTORY (OR "TRAVAUX PREPARATORIES") OF THE 1958 CONVENTION ON THE CONTINENTAL SHELF[1]

The background and history of the Convention comprises primarily these events:

1. On September 28, 1945, President Truman signed a proclamation[2] whose operative language read:

". . . the United States regards the natural resources of the subsoil and the sea bed 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."

[1] The writer is indebted to Luke W. Finlay, Cecil J. Olmstead, and Oliver L. Stone for access to their research materials in preparing this appendix on legislative history, and the following appendix on national practice. A more complete account appears in the Report of the National Petroleum Council's Committee on Petroleum Resources Under the Ocean Floor, March 1969.

[2] The Truman Proclamation of September 28, 1945, titled "Policy of the United States with respect to Natural Resources of the Subsoil and Seabed of the Continental Shelf," 10 Fed. Reg. 12303.

The reasons he gave were these:

". . . the exercise of jurisdiction over the natural resources of the subsoil and sea bed 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 with the 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 the utilization of these resources."

President Truman's proclamation did not relate these reasons to any specified depth of water. At that time, except for wells drilled from piers off California, no offshore well was in production in this country. The first one was brought in, in 50 feet of water, in Louisiana, in 1947.

Some two score nations quickly followed suit with proclamations of offshore jurisdiction.

2. In 1951 the International Law Commission, which had been established by the Assembly of the United Nations to promote the development and codification of international law, submitted a report on the high seas after its third session. This 1951 report recommended that the coastal nations should have control and jurisdiction over the natural resources of a "continental shelf," defined as referring to

". . . the seabed and subsoil of the submarine areas contiguous to the coast, but outside the areas of territorial waters, where the depth of the superjacent waters admits of the exploitation of the natural resources of the seabed and subsoil." [3]

3. The same Commission, in 1953, following its fifth session, produced another report. In this 1953 report the Commission reversed itself, and defined coastal jurisdiction solely in terms of water depth, using 200 metres as the outside limit, as follows:

". . . the seabed and subsoil of the submarine areas contiguous to the coast, but outside the area of the territorial sea, to a depth of two hundred metres." [4]

The exploitability criterion was dropped.

4. This new limitation proved unacceptable to the Organization of American States.

In March 1956, the 20 American nations convened at Ciudad Trujillo to consider the Commission's 1953 draft. These 20 nations were wholly dissatisfied with the International Law Commission's about-face. They unanimous adopted a resolution reciting that:

"The seabed and subsoil of the continental shelf, *continental and insular terrace*, or other submarine areas, adjacent to the coastal state, outside the area of the territorial sea, and 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 sea-bed and subsoil, appertain exclusively to that state and are subject to its jurisdiction and control." (Emphasis added.) [5]

The conference's report, underlying that resolution, explained "continental terraces" as meaning this:

". . . 'Continental terrace' is understood to be that part of the submerged land mass that forms the shelf and the slope." [6]

In turn, it defined the "slope" to mean this:

". . . Scientifically, the term 'continental slope,' or 'inclination,' refers to the slope from the edge of the shelf *to the greatest depths*." (Emphasis added.)

The report made explicit just what the 20 American nations were objecting to in the International Law Commission's proposed restriction of their national jurisdiction to a water depth of 200 metres. It said:

"I. The American states are especially interested in utilizing and conserving the existing natural resources *on the American terrace (shelf and slope)*.

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[3] International Law Commission (ILC) Yearbook (1951), Vol. II, p. 141.

[4] ILC Yearbook (1953), Vol. II, p. 212. The Commission's records make it clear that the motivation for this action was not the conclusion that the coastal nations had no rights beyond the 200 metre depth, but rather that there was no urgency for allowing exploitation beyond that depth, and that a 200 metre depth limit had a desirable element of certainty.

[5] Resolution of Ciudad Trujillo, Inter-American Specialized Conference on Conservation of Natural Resources: The Continental Shelf and Marine Waters, Ciudad Trujillo: March 15–28, 1956.

[6] Committee I Report, Inter-American Specialized Conference, Conferences and Organizations Series No. 50, Pan American Union, at 34 (March 1956).

"III. The utilization of the resources of the shelf cannot be technically limited, and for this reason the exploitation of the *continental terrace* should be included as a possibility in the declaration of rights of the American states." (Emphasis added.)

The American representative concurred in this report and resolution, with the concurrence of the Department of State.[7]

5. In 1956 the International Law Commission convened its eighth session, a few weeks after the close of the Ciudad Trujillo conference. The American position won. The Commission added to its 1953 definition (200 metres) the language proposed by the American nations, which extended coastal jurisdiction "beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources" of said areas. The spokesman for the 20 American nations, having won his point, dropped his request for specific reference to the continental terrace. The official report of the session states it this way:

". . . He did not wish to press the part of his amendment introducing the concept of the continental terrace, since the adoption of the second point relating to the depth at which exploitation was practical would automatically bring that area within the general concept." [8]

Professors McDougal and Burke, in their definitive work, "The Public Order of the Oceans," report the 1956 debate in the International Law Commission in this fashion:

"Some controversy attended the suggested elimination of the continental shelf term and the references to the 'continental and insular terrace,' but this became muted when it was realized that a criterion embracing both a 200-meter depth and the depth admitting exploitation would embrace such areas if they were in fact exploitable or came to be." (p. 683.)

The International Law Commission's 1956 report accordingly recommended to the United Nations Assembly draft articles for a convention which would recognize coastal jurisdiction not only to 200 metres (about 100 fathoms), but, as proposed by the American nations, "beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas."

The full text of the language recommended by the Commission to the General Assembly on this subject was contained in Article 67 of a proposed treaty dealing with other phases of the Law of the Sea as well as the continental shelf. It read:

"For the purposes of these articles, the term 'continental shelf' is used as referring 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 (approximately 100 fathoms), or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas." [9]

This final report of the Commission to the Assembly emphasized that this was in response to the Ciudad Trujillo declaration of the American states. The Commission said:

"At its eighth session, the Commission reconsidered this provision [i.e., the 200 metre limit agreed on by the Commission in 1953]. It noted that the Inter-American Specialized Conference on 'Conservation of Natural Resources: Continental Shelf and Oceanic Waters,' held at Ciudad Trujillo (Dominican Republic) in March 1956, had arrived at the conclusion that the right of the coastal State should be extended beyond the limit of 200 metres, 'to where the depth of the superjacent waters admits of the exploitation of the natural resources of the seabed and subsoil.' Certain members thought that the article adopted in 1953 [the 200 metre limit] should be modified. . . . While maintaining the limit of 200 metres in this article as the normal limit corresponding to present needs, they wished to recognize forthwith the right to exceed that limit if exploitation of the sea-bed or subsoil at a depth greater than 200 metres proved technically possible. . . . Other members contested the usefulness of the addition, which in their opinion unjustifiably and dangerously impaired the stability of the limit adopted. The majority of the Commission nevertheless decided in favor of the addition." [10]

The Commission went on to say:

"While adopting, to a certain extent, the geographical test of the 'continental

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[7] Whiteman's Digest of International Law (Department of State, 1965), Vol. 4, p. 837.
[8] ILC Yearbook (1956), Vol. I, p. 136.
[9] ILC Yearbook (1956), Vol. II, p. 296.
[10] ILC Yearbook (1956), Vol. II, pp. 296–97.

shelf" as the basis of the juridicial definition of the term, the Commission therefore in no way holds that the existence of a continental shelf, in the geographical sense as generally understood, is essential for the exercise of the rights of the coastal State as defined in these articles . . . Again, *exploitation of a submarine area at a depth exceeding 200 metres is not contrary to the present rules, merely because the area is not a continental shelf* in the geological sense." [11] (Emphasis added.)

6. The United Nations Conference on the Law of the Sea convened in Geneva in February 1958 to consider the recommendations of the International Law Commission. Representatives of 82 nations attended. The conference separated out the Commission's articles into four conventions, one on the High Seas, another on the Territorial Sea and Contiguous Zone, another on the Living Resources of the Sea, and the Convention on the Continental Shelf.

In support of the language recommended by the Commission, with respect to coastal nations' jurisdiction beyond the 200 metre isobath, a member of the American delegation told the Conference:

"The definition of the rights of the coastal State to the continental shelf *and continental slope* adjacent to the mainland proposed by the International Law Commission would benefit individual States and the whole of mankind." [12] (Emphasis added.)

The Conference approved the recommended language of Article 67 of the Commission draft, as Article 1 of the Convention on the Continental Shelf, after eliminating the parenthetical reference to 100 fathoms as equivalent to 200 metres, and adding language making the convention applicable to submarine areas adjacent to the coasts of islands.

In one of the final acts of the Conference, in plenary session, a motion was made to cut coastal jurisdiction back to the 200 metre isobath, as recommended by the Commission in 1953. It was rejected by the Conference by a vote of 48 to 20, with two abstentions.[13]

Representatives of our Nation and 45 others then signed the Convention.

7. Article 11 of the Convention provided that it should come into force on the 30th day following deposit of the 22nd ratification or accession with the United Nations. This required until June 10, 1964.[14]

The State Department submitted the Convention to the President on September 2, 1959. It told him that the Convention "combines both the depth and exploitability tests as did the International Law Commission's draft." [15]

In submitting the Convention to the Senate in 1960 the Department was even more explicit. Its spokesman was Arthur H. Dean, who had been chairman of the United States delegation at the 1958 conference. He told the Senate Committee on Foreign Relations:

"The clause which protects the right to utilize advances in technology at greater depths beneath the oceans was supported by the United States and *was in keeping with the inter-American conclusions at Ciudad Trujillo in 1956. It was included in the I.L.C. 1956 draft.*" [16] (Emphasis added.)

The Senate accordingly gave its consent, and the President ratified the Convention March 24, 1961.[17]

CONCLUSION

Article 2(1) of the Convention on the Continental Shelf states that the coastal State exercises over the "continental shelf" sovereign rights for the purpose of exploring it and exploiting its nature resources.

Article 1 defined the term "continental shelf" as referring:

". . . 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*

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[11] ILC Yearbook (1956), Vol. II, p. 297.

[12] Official Records of the U.N. Conference on the Law of the Sea, Vol. VI: Fourth Committee, U.N. Doc. A/Conf. 13/42 (1958), p. 40.

[13] Official Records of U.N. Conference on the Law of the Sea, Vol. II: Plenary Meetings, U.N. Doc. A/Conf. 13/38 (1958), p. 13.

[14] See Proclamation of President Johnson so stating, May 25, 1964; T.I.A.S. 5578, p. 55. Article 13 provides that after expiration of five years from the date on which the convention enters into force, a request for revision may be made by any contracting party by notice in writing to the Secretary General of the United Nations. This date is thus June 10, 1969.

[15] Letter of Acting Secretary of State Dillon transmitting the Convention to President Eisenhower, September 2, 1959.

[16] Hearings before the Senate Committee on Foreign Relations, "Conventions on the Law of the Sea," 86th Cong., 2d Sess., Jan. 20, 1960, pp. 108–09.

[17] See T.I.A.S. 5578.

that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas. . . ." (Emphasis added.)

It is clear that the emphasized language (1) was added on the demand of the 20 American states; (2) was in response to their insistence that exclusive coastal jurisdiction should encompass the continental terrace, both shelf and slope, "to the greatest depths"; (3) was concurred in and advocated by the State Department in the 1956 Ciudad Trujillo conference of the American states, with the interpretation that this language accomplished that result; (4) was accepted by the International Law Commission in 1956 as recognizing exclusive jurisdiction in the coastal State in adjacent waters to whatever depth is exploitable; (5) was recommended by the State Department to the 1958 conference which produced the Convention on the Continental Shelf with the explanation that it encompassed both "shelf and slope"; and (6) was represented by the State Department to the President and Senate as being "in keeping with the inter-American conclusions at Ciudad Trujillo in 1956."

Appendix D to Statement of Northcutt Ely

Coastal State Mineral Jurisdiction and the Continental Margin

Survey of National Practice

To date, 102 nations,[1] including 98 coastal nations, have recognized the principle of the coastal state's jurisdiction over adjacent offshore mineral resources. Forty nations (36 of them coastal) have asserted this principle by ratifying the Convention on the Continental Shelf.[2] The other countries have done so by one or more of the following methods: (1) by domestic legislation, (2) by agreement with other nations, or (3) by granting offshore concessions.[3]

Of the 98 coastal nations which have asserted their general jurisdiction over offshore minerals, at least 39 have done so with respect to specific submarine areas which, according to available information, appear to be beneath waters deeper than 200 metres. In most cases, this has been done by the issuance of deep-water leases;[4] in others by decree,, agreements with neighboring states or offers of such agreements,[5] or announcements of national policy.[6] At least 14 coastal nations have granted leases which include areas beyond both the 200-metre isobath and 50 nautical miles from shore.[7]

A summary of this national practice appears below. Compilation of this information is complicated by (1) the variety of ways in which assertions of offshore seabed jurisdiction have been made, (2) apparent inconsistencies between law and practice in several nations, and (3) the fact that some nations have asserted seabed jurisdiction by more than one method. This summary is not limited to the practice of members of the United States.

ANNEXED LISTS

I. Parties to Geneva Convention on the Continental Shelf (40)
II. States, not parties to the Convention, which have made declarations or enacted legislation concerning jurisdiction over the continental shelf (49)
  A. Adopted the Convention's definition (8)
  B. Adopted the exploitability criterion (3)
  C. Adopted other definitions (15)
  D. Adopted shelf concept in general legislation or proclamation, but no precise definition (23)

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[1] These 102 are identified in Parts I, II, and III of this Appendix. To these 102 nations may be added 5 territories which are partially self-governing, making a total of 107 jurisdictions. See note 9 *infra*.

[2] These 40 are identified in Part I of this Appendix.

[3] These 63, plus 5 territories which are partially self-governing, are identified in Parts II and III of this Appendix.

[4] 31 nations which have apparently authorized or undertaken development in water deeper than 200 meters are identified in Part IV of this Appendix.

[5] Decrees or international agreements or tenders of international agreements have been found to include water deeper than 200 meters in instances which involve eight nations, in addition to the 31 nations which have issued deep-water leases. These eight are: Chile (200 miles); Dahomey (100 miles); East Germany (Baltic Sea Decree); Ecuador (200 miles); El Salvador (200 miles); Poland (Baltic Sea Decree); Saudi Arabia (Red Sea Decree); U.S.S.R. (Baltic Sea Decree). See also Soviet announcement in the U.N. of drilling in Caspian Sea at depths of 300 to 600 metres (Press release GA/3929, 13 March 1969, p. 4).

[6] For example, Canada.

[7] These 14 are identified in Part IV of this Appendix.

III. Other states and territories, not parties to the Convention, which have granted offshore concessions in apparent absence of general legislation (19)

IV. States (whether or not parties to the Convention) which have granted offshore concessions for areas in which waters deeper than 200 metres have been provisionally identified (31)

V. Practice of the United States.

I. PARTIES TO GENEVA CONVENTION ON THE CONTINENTAL SHELF (40)[8]

1. Albania
2. Australia
3. Bulgaria
4. Byelorussian SSR
5. Cambodia
6. Colombia
7. Czechoslovakia
8. Denmark
9. Dominican Republic
10. Finland
11. France
12. Guatemala
13. Haiti
14. Israel
15. Jamaica
16. Kenya
17. Madagascar
18. Malawi
19. Malaysia
20. Malta
21. Mexico
22. Netherlands
23. New Zealand
24. Poland
25. Portugal
26. Romania
27. Senegal
28. Sierra Leone
29. South Africa
30. Sweden
31. Switzerland
32. Thailand
33. Trinidad and Tobago
34. Uganda
35. Ukrainian SSR
36. USSR
37. United Kingdom
38. United States
39. Venezuela
40. Yugoslavia

II. STATES, NOT PARTIES TO THE CONVENTION, WHICH HAVE MADE DECLARATIONS OR ENACTED LEGISLATION CONCERNING JURISDICTION OVER THE CONTINENTAL SHELF (49)

A. Adopted the convention's definition (8)

1. Argentina: National Executive Power, Law No. 17,094–M. 24 of 29 Dec. 1966 (U.N. Doc. A/AC 135/11 at p. 10).
2. Germany: Federal Republic: Proclamation on the Continental Shelf, 20 Jan. 1964.
3. Honduras: Congressional Decree No. 21 of the Constituent National Assembly, 19 Dec. 1957.
4. India: Petroleum and Natural Gas Rules, 1959, Art. 3 (U.N. Doc. A/AC 135/11/Add. 1 at p. 13).
5. Italy: Act No. 613 of 21 July 1967, Law for Exploration and Production of Liquid and Gaseous Hydrocarbons in the Territorial Sea and Continental Shelf (U.N. Doc. A/AC 135/11 at p. 38).
6. Morocco: Petroleum Code, Dahir No. 1–58–227, 21 July 1958.
7. U.A.R.: Decree on the Continental Shelf, 3 Sept. 1958 (54 Am. J. Int'l L. 497 (1960)).
8. Uruguay: Decree, 16 July 1963.

B. Adopted the exploitability criterion (3)

1. Brazil: Boletim Especial #196, 20 Oct. 1967, Embassy of Brazil.
2. Norway: Provisional Act of 21 June 1963 relating to the Exploitation and Exploration of Submarine Natural Resources (U.N. Doc. A/AC 135/11 at p. 46).
3. Philippines: Proclamation No. 370 of 20 Mar. 1968 (U.N. Doc. A/AC 135/11 at p. 47).

C. Adopted other definitions (15)

1. Canada: Statement of Canadian representative before U.N. Ad Hoc Committee on March 11, 1968 (U.N. Doc. A/AC 135/1, at p. 33), confirmed by Canadian Embassy, Washington, D.C. ("at least to the abyssal depths").
2. Chile: Presidential Declaration Concerning the Continental Shelf, 23 June 1947 (U.N. Doc. A/AC 135/11 at p. 26); Declaration Over the Maritime Zone, Santiago, 1952, ratified by Decree 432, 23 Sept. 1954 (200 miles).

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[8] U.S. State Department, *Treaties in Force*, January 1, 1969 (Publication 8432).

3. Costa Rica: Article 1 of Decree-Law No. 803 of 2 Nov. 1949 and Article 6 of the Constitution ("submarine shelf and continental base").

4. Dahomey: Decree No. 74 of 7 March 1968 (100 miles) (U.N. Doc. A/AC 135/11/Add. 1 at p. 11).

5. Ecuador: Art. 630, Civil Code, 20 Aug. 1960 (U.N. Doc. A/AC 135/11 at p. 30) (200 metre isobath), but compare Declaration of Santiago, 1952, ratified by Executive Decree No. 275, 7 Feb. 1955 (200 miles), and Supreme Decree No. 1542 of 10 Nov. 1966, amending Art. 633 of Civil Code (200 miles). (Inconsistency in article numbers appears in U.N. and P.A.U. documents).

6. El Salvador: Arts. 1 and 8, Constitution of 1962 (200 miles).

7. Germany: Democratic Republic: Declaration on the Continental Shelf of the Baltic Sea, Moscow, October 23, 1968 ("the surface and subsoil of the bed of the Baltic Sea as a shallow sea are a continuous continental shelf").

8. Ghana: Act No. 175, The Territorial Waters and Continental Shelf Act, 19 April 1963 (U.N. Doc. A/AC 135/11 at p. 34) (100 fathoms).

9. Indonesia: Government Regulations substituting Law No. 44 of 26 Oct. 1960 on the Mining of Petroleum and Natural Gas (Continental Shelf of the Indonesia Archipelago).

10. Ivory Coast: Offshore Law, Decree 67–334 of 1 August 1967 (200 metres).

11. Nicaragua: Declaration in May 1949 under Constitution of 1948 (200 metres). Executive Decree of 5 April 1965 (200 miles) appears to apply only to living resources. The Constitution of 1 Nov. 1950 states that the National Territory includes the "continental shelf" and "submerged foundation."

12. Panama: Law No. 31 of 2 Feb. 1967 (200 miles).

13. Pakistan: U.N. Legis. Series ST/LEG/SER. B/6, Dec. 1956, at 38 (100 fathoms adopted in 1950).

14. Peru: Presidential Decree No. 781 of 1 Aug. 1947 (200 miles); Petroleum Law No. 11780 of 12 March 1952 (200 miles).

15. South Korea: Presidential Proclamation of Sovereignty Over Adjacent Seas, 18 Jan. 1952 (Continental Shelf regardless of depth of water).

D. *Adopted shelf concept in general legislation or proclamation, but no precise definition (23)*

1. Bahamas (U.K.): Bahamas (Alteration of Boundaries) Order in Council No. 2574, 26 Nov. 1948.

2. British Honduras (U.K.): Oil Mining Regulations, 2 Sept. 1949.

3. Brunei: The Petroleum Mining Enactment, 1963.

4. Burma: Concession Rules. 1962.

5. Greece: Petroleum Law (Law 3948) of 10 April 1959.

6. Iran: Law of 19 June 1955.

7. Iraq: Proclamation of 24 Nov. 1957 (U.N. Doc. A/AC 135/11 at p. 36).

8. Jamaica: Jamaica (Alteration of Boundaries) Order in Council (No. 2575) of 26 Nov. 1948.

9. Kuwait: Proclamation of 12 June 1949 (U.N. Doc. A/AC 135/11 at p. 39).

10. Libya: Petroleum Law of 1955.

11. Nigeria: Mineral Oil (Amendment) of 17 Dec. 1959.

12. Saudi Arabia: Royal Pronouncement of 28 May 1949; Regulations for the Ownership of Red Sea Resources, Royal Decree No. M/27 of 1 October 1968.

13. Spain: Hydrocarbons Act of 26 Dec. 1958.

Persian Gulf States

14. Bahrain: Proclamation of 5 June 1949.

15. Muscat & Oman: Offshore activity, Petroleum Press Service, June 1968 at 204.

16. Qatar: Proclamation of 8 June 1949.

Trucial States:

17. Abu Dhabi: Proclamation of 10 June 1949.

18. Ajman: Proclamaiton of 20 June 1949.

19. Dubai: Proclamation of 14 June 1949.

20. Fujairah: Offshore activity, Petroleum Press Service, July 1966 at 274.

21. Ras al Khaimah: Proclamation of 17 June 1949.

22. Sharjah: Proclamation of 16 June 1949.

23. Umm al Qaywayn: Proclamation of 20 June 1949.

III. OTHER STATES AND TERRITORIES, NOT PARTIES TO THE CONVENTION, WHICH HAVE GRANTED OFFSHORE CONCESSIONS IN APPARENT ABSENCE OF GENERAL LEGISLATION: (DATA FROM ANNOUNCEMENTS AND PRESS REPORTS)[9]

1. Angola (Portugal): Boletim Oficial Sept. 12, 1964. See also Petroleum Press Service, June 1968 at 204. (The jurisdiction of Portugal outside of its territorial seas is set forth in Law 2080 of March 21, 1956. This law applies to all overseas territories of Portugal. Basis II limits concessions to the 200-metre isobath, except "when a special law otherwise disposes.")
2. Cameroon: Petroleum Press Service, June 1968 at 204.
3. Cuba: Concession map of October 1957, reproduced in Barrows, Petroleum Legislation. Presumably expropriated.
4. Equatorial Guinea (Fernando Poo, Rio Muni): See Decreto 1043/1968 of 2 May 1968 re: Rio Muni (published 27 May 1968); Petroleum Press Service, June 1968 at 204.
5. Ethiopia: Several offshore concessions are in effect.
6. Gabon: Decree No. 375 of July 5, 1968.
7. Guyana: Two offshore concessions are in effect.
8. Japan: Petroleum Press Service, August 1968 at 305. Two offshore concessions are in effect.
9. Mauritania: Two concessions are in effect; "Oil & Gas Discoveries," February 1968, at 33–34.
10. Mozambique (Portugal): Petroleum Press Service, Nov. 1967 at 420. See Diario do Governo 11 Oct. 1967, "Bases Anexas ao Decreto," No. 47,990.
11. Somalia: Concession granted 29 May 1961.
12. Spanish Sahara (Spain): Petroleum Press Service, Nov. 1966 at 427.
13. Sudan: Exploration licenses have been granted for deep-water metal-containing brines in the Red Sea.
14. Surinam (Netherlands): Petroleum Press Service, July 1966 at 275.
15. Timor (Portugal): Petroleum Press Service, June 1968 at 204.
16. Togo: Petroleum Press Service, June 1968 at 204.
17. Tunisia: Petroleum Press Service, Jan. 1967 at 33.
18. Turkey: Three offshore concessions were in effect in 1966.
19. Yemen: One offshore concession was granted in 1961.

IV. STATES (WHETHER OR NOT PARTIES TO THE CONVENTION) WHICH HAVE GRANTED OFFSHORE CONCESSIONS, OR UNDERTAKEN DEVELOPMENT, IN AREAS PROVISIONALLY IDENTIFIED AS INCLUDING WATERS DEEPER THAN 200 METERS

NOTE a.—This listing is based in part on examination of published concession agreements, concession maps, decrees, etc., and in part on unpublished information from sources believed to be reliable.

NOTE b.—In countries marked with an asterisk (*), the seaward boundary of concessions appears to approximate the 100-fathom isobath, but lies beyond that isobath in one or more areas.

NOTE c.—In the 14 countries marked (#), the seaward boundary of at least one concession appears to be beyond the 200-metre isobath and more than 50 nautical miles from shore.

1. Australia#
2. British Honduras*
3. Canada#
4. Cuba (concession outstanding in 1957)
5. Denmark*
6. Equatorial Guinea
7. Ethiopia*
8. Gabon#
9. Ghana
10. Guyana#
11. Honduras*#
12. Indonesia*#
13. Italy
14. Jamaica#
15. Japan#
16. Malaysia#
17. Mauritania*
18. Norway#
19. Oman#
20. Panama*
21. Peru*#
22. Philippines*
23. Senegal#
24. Spanish Sahara
25. Sudan
26. Surinam#
27. Trinidad
28. Turkey
29. United Kingdom
30. U.S.A.
31. U.S.S.R.

[9] Of the 19 jurisdictions listed here, 5 are territories (Angola, Mozambique, Spanish Sahara, Surinam and Timor).

On March 13, 1969, the U.S.S.R. representative stated in the United Nations Committee on the Peaceful Uses of the Seabed Beyond the Limits of National Jurisdiction that, "In the Soviet Union drilling was being carried out in the Caspian Sea at depths of from 300 to 600 metres. . . ." (U.N. Press Release GA/3929, 13 March 1969, at p. 4).

V. PRACTICE OF THE UNITED STATES

The Department of the Inteiror, in 1961, granted a phosphorite lease off the California coast in water depths ranging from 240 to 4,000 feet (1,340 metres). This lease was subsequently surrendered.[10]

In 1963 and 1964, the Department issued oil and gas leases in water depths ranging up to 1,500 feet (457 metres).[11] In 1968, oil and gas leases issued in Santa Barbara Channel included an area in 1,800 feet of water (550 metres).

In 1968, a United States oil company drilled a well in 1,299 feet of water (395 metres), penetrating rock to a depth of 13,622 feet. This well was plugged and abandoned.

The Department has published leasing maps for areas off the California coast as far as 100 miles from the mainland, at depths as great as 6,000 feet.[12]

In 1967, the Department granted a permit to Humble Oil and Refining Company to drill 21 coreholes beneath the Atlantic Ocean in water ranging in depth from 650 feet to 5,000 feet on "the continental slope beyond the continental shelf off Florida and northward to points seaward of Cape Cod and Georges Bank." The areas in which drilling was authorized lie as far as 300 miles from the coast.

The United States has asserted jurisdiction over resource development on the Cortes Banks about 100 miles from the California mainland, separated from the mainland by a trench about 1,500 metres deep.[14]

The permit was not exclusive, and does not include rights to any mineral leases.[13]

Mr. ELY. I have had the privilege of participating in two other professional committees which have written reports on the questions now before your committee. They reach conclusions substantially in accord with the American Bar Association section reports. The report of one of the committees I refer to is the Interim Report of the Committee on Deep Sea Mineral Resources of the American Branch of the International Law Association which I annex as appendix E. I had the honor to be the chairman of that committee.

(The report referred to as appendix E follows:)

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[10] *Interim Report on the United Nations and the Issue of Deep Ocean Resources*, by the Subcommittee on International Organizations and Movements of the House Committee on Foreign Affairs, H.R. Rep. No. 999, 90th Cong., 1st Sess. (1967) at 151. The memorandum opinion of the Associate Solicitor, Department of the Interior, dated May 5, 1961, concerning the application of the Outer Continental Shelf Lands Act to the lease area, is printed in the *Interim Report* at 165–68.

[11] These leases arelisted in the *Interim Report* at 164.

[12] Barry, *The Administration of the Outer Continental Shelf Lands Act*, 1 Natural Resources Lawyer 38, 47 (July 1968).

[13] Geological Survey Release, "Core Drilling To Begin on Continental Slope Off Atlantic Coast," (No. 94,229–67) May 26, 1967.

[14] Barry, note 12 *supra*, at 47.

APPENDIX E

Committee on Deep Sea Mineral Resources

OF

THE AMERICAN BRANCH OF THE INTERNATIONAL LAW ASSOCIATION

Interim Report

JULY 19, 1968

(67)

MEMBERSHIP OF THE COMMITTEE ON DEEP SEA MINERAL RESOURCES OF THE AMERICAN BRANCH OF THE INTERNATIONAL LAW ASSOCIATION

Woodfin Butte
Luke W. Finlay
Alternate: Carlos J. Angulo
Stanley N. Futterman
William L. Griffin
G. W. Haight
Bruce Harlow
Louis Henkin
Ralph Johnson
Douglas M. Johnston
John G. Laylin
John E. McCracken
Myres McDougal
Joseph W. Morris
Cecil J. Olmstead
Oscar Schachter
Richard Young
William T. Burke, Rapporteur
Northcutt Ely, Chairman

(Mr. Henkin dissents to this report. See p. XXI. Mr. Finlay, for opposite reasons, dissents in part. See p. XII. Messrs. Schachter and Futterman, because of their official positions, ask that their names not be included as sponsors.)

I. INTRODUCTION

1. *Subject Matter of this Report*

Heightened interest in and concern over the availability of new sources of ocean minerals, both fuel and non-fuel, are common around the globe. It is clear that a serious, and probably prolonged, process of international debate and decision is now in its initial stages and that states are moving to clarify their common interests in ocean resources development. The purpose of this Report of the American Branch Committee on Deep Sea Mineral Resources is to discuss considerations relating to the exploration for, and the exploitation of, mineral resources beneath the world oceans, and to make recommendations concerning the legal framework for such exploration and exploitation.

2. *I.L.A. Action at Helsinki (1966)*

The International Law Association is indebted to the foresight of the Executive of the Netherlands Branch in taking the initiative of establishing a committee to study the legal regime of deep sea mining, whose report at the Helsinki Conference brought to the attention of all the looming importance of this subject. Thereafter, the Executive Council on 12 November 1966 set up a working group on "Deep Sea Mining," with the late Rear Admiral M. W. Mouton (Netherlands) as Chairman, for the study of this subject.* The American Branch Committee presents this Report in furtherance of that inquiry.

3. *Current Activities*

(1) *United Nations*

On the international level marine science affairs engage the attention of at least 100 different public and private organizations, but most public attention is devoted currently to the events taking place in the United Nations itself, including especially the General Assembly and the Economic and Social Council. The latter in 1966 adopted Resolution 1112 (XL) which requested the Secretary-General:

> (a) to make a survey of the present state of knowledge of these resources of the sea, beyond the continental shelf and of the techniques for exploiting these resources . . . ;
>
> (b) as a part of that survey, to attempt to identify those resources now considered to be capable of economic exploitation, especially for the benefit of developing countries;

* Admiral Mouton was succeeded by Prof. D. H. N. Johnson, of Great Britain.

(c) to identify any gaps in available knowledge which merit early attention by virtue of their importance to the development of ocean resources, and of the practicality of their early exploitation.

(Pursuant to this request the Secretary-General in early 1968 released two reports dealing with mineral resources and living resources other than fish.) In 1966 the General Assembly also adopted Resolution 2172 (XXI) endorsing the ECOSOC Resolution, requesting a comprehensive survey of activities in marine science and technology around the globe, and further requesting the Secretary-General in cooperation with UNESCO and FAO to formulate proposals for:

(a) Ensuring the most effective arrangements for an expanded programme of international cooperation to assist in a better understanding of the marine environment through science and in the exploitation and development of marine resources, with due regard to the conservation of fish stocks;

(b) Initiating and strengthening marine education and training programmes, bearing in mind the close interrelationship between marine and other sciences; . . . .

In implementing this request the Secretary-General appointed a Committee of Experts and his report and proposals are at this writing expected to be released momentarily.

Most recently, in December of 1967, the General Assembly adopted Resolution 2340 (XXII) entitled "Examination of the question of the reservation exclusively for peaceful purposes of the sea-bed and ocean floor, and the sub-soil thereof underlying the high seas beyond the limits of the present national jurisdiction and the uses of their resources in the interest of mankind." The Resolution established an Ad Hoc Committee on the Oceans which was to prepare for the 23rd General Assembly a study which would include:

(a) A survey of the past and present activities of the United Nations, the specialized agencies, the International Atomic Energy Agency and other inter-governmental bodies with regard to the sea-bed and the ocean floor, and of existing international agreements concerning these areas;

(b) An account of the scientific, technical, economic, legal and other aspects of this item;

(c) An indication regarding practical means to promote international co-operation in the exploration, conservation and use of the sea-bed and the ocean floor, and the sub-soil thereof, as contemplated in the title of the item, and of their resources, having regard to the views expressed and the suggestions put forward by Member States during the consideration of this item at the twenty-second session of the General Assembly; . . . .

This Ad Hoc Committee, on which 35 nations are represented, has constituted two working groups. One deals with technical and economic matters, one with legal matters. The plenary Committee and the two working groups have held a number of meetings, but, as of this writing, their reports are not yet available.

(2) *U. S. Government*

The Congress of the United States has devoted several years of increasingly closer study to the requirements of a national effort to harness the resources of the sea to the benefit of the United States and mankind. The culmination of this Congressional activity came with the adoption of the Marine Resources and Engineering Development Act of 1966.

The major significance of the Act lies in the creation of a cabinet-level body, called the National Council on Marine Resources and Engineering Development, charged with the responsibility, *inter alia,* of developing a comprehensive program of marine science activities. Of equal, if not more, importance the Act called for the establishment by Presidential appointment of a Commission on Marine Science, Engineering and Resources which was to "make a comprehensive investigation and study of all aspects of marine science in order to recommend an overall plan for an adequate national oceanographic program that will meet the present and future national needs." The Commission is composed primarily of private citizens; only five of the fifteen members may be from the Federal Government.

In addition to stimulating intensive activities within the many federal agencies involved in marine science affairs, an important effect of the creation of these two bodies has been both to provide a much sharper focus upon marine science affairs in the United States and to establish a means by which new ideas can be generated and important initiatives identified and set in motion. Thus far in its two annual reports the Council has devoted predominant attention to this latter task, in each instance selecting programs deserving priority and designating the lead

federal agency for implementation. The Report of the Commission is formally due in January 1969, and is expected to be available late in 1968.

Among the most important results thus far of the Council's work is the concept of the International Decade of Ocean Exploration (IDOE) which was initially proposed by President Johnson in March 1968. A White Paper on the Decade issued by the Council in May offers the following elaboration:

> The Decade is envisioned as a period of intensified collaborative planning, development of national capabilities, and execution of national and international programs of oceanic research and resource exploration. Knowledge of the ocean and its resources is exceedingly limited. Because of the very size, complexity and variability of the marine environment, scientific investigations of vast scope will be necessary if knowledge of this environment is to increase within a reasonably short interval. At the same time excellence, experience, and capabilities in marine science and technology are shared by many nations. Hence, a broad program of ocean exploration can be carried out only through a cooperative effort by many nations. The success of such an endeavor will depend in large measure on the extent to which various nations contribute their particular expertise and capabilities, assume a share of responsibility for the program, develop their manpower and facilities, and disseminate to others the results of scientific discoveries.

(3) *Bar Association and other groups*

Paralleling this greatly intensified governmental activity are numerous private groups whose activities include technical, economic and legal consideration of marine resources. Among these are the Committee on Oceanography of the Section of International and Comparative Law of the American Bar Association, the Committee on Marine Resources of the Section of Natural Resources Law, and the Standing Committee on Peace and Law through United Nations, of that Association, and the National Petroleum Council's Committee on Petroleum Resources under the Ocean Floor. Each of these has published, or circulated, drafts of important reports.

(4) *Questions Discussed*

These various events on the international level, and within the United States and in governmental and private bodies within other countries,

set the framework for this present Report of the American Branch Committee. These activities emphasize that there are great deficiencies and gaps in basic knowledge of the marine environment and its resources which must be remedied if wise decisions are to be made. In all international and national considerations and expressions thus far made, overwhelming emphasis is placed upon the need for intensified scientific and technical research and legal analysis.

In light of these considerations the Committee's Report and recommendations deal both with the procedural question of when to attempt revision of the law of the sea and with the two substantive questions now most frequently discussed: (i) the limit of the exclusive jurisdiction of the coastal states with respect to the exploration and exploitation of the natural resources of the sea-bed and sub-soil of submarine areas adjacent to their coasts, pursuant to the principles recognized in the 1958 Convention on the Continental Shelf, and (ii) the choice of regimes best adapted to the development of the natural resources of the deep ocean floor seaward of the areas encompassed by the jurisdiction of the coastal states.

This report does not discuss military and security questions because we assume that the deep sea floor, by common accord, will be regarded as not subject to acquisition of territorial sovereignty, and will be reserved for peaceful purposes.

II. NEED FOR FURTHER STUDIES AND EXPERIENCE BEFORE CONVENING AN INTERNATIONAL CONFERENCE TO REVISE LAW OF THE SEA RELATING TO MINERAL DEVELOPMENT

After careful review of developments in ocean use, the Committee believes that it is not in the common interest immediately to seek international agreement, by means of an international conference, on the issues of the limit of the continental shelf and of a regime for the deep ocean regions beyond the limit on the rights of coastal states. Rather, the present need is for the careful studies and inquiries required in preparation for negotiation of such agreements as may eventually be required as we gain knowledge of, and experience in, the marine environment. A number of major considerations indicate that to attempt legal regulation for mineral exploitation through a large multilateral conference would probably hamper rather than promote wise use of ocean resources.

These considerations include:

1. There is widespread misunderstanding or lack of knowledge of the extent and distribution of ocean resources and of the conditions required for their productive use;
2. There is resultant inability to identify anticipated legal and political problems with useful precision;
3. Many, if not all, states are unable presently to determine their national interests in the development of ocean mineral resources and associated issues;
4. Provision of an adequate jurisdictional and regulatory framework for management of ocean mineral resources is dependent upon a major international effort at research and exploration in the oceans;
5. Satisfactory accomplishment of a comprehensive program in scientific research and exploration requires an intensive effort on the part of many states over a period of many years.

In sum, these factors strongly urge that states refrain from any immediate action toward convening a new law of the sea conference or toward revision of the Geneva Conventions. It is, however, conceivable that the required majority of states does not or will not similarly weigh these factors and that an international conference on the law of the sea will again be convened in the near future. The Ad Hoc Committee of the United Nations may or may not recommend such a course. It is also quite conceivable that means other than formal treaty revision may appear desirable for clarifying certain problems, particularly concerning the continental shelf.

In either event, it is incumbent upon those concerned with the protection of the common interests of the states to offer their views on the legal areas which will best provide for those common interests.

Accordingly, the remainder of this Report is devoted to the system of law which, in our view, does or should govern the exploration, development, and production of the mineral resources underlying the high seas (for this discussion, the term "high seas" refers to the oceans beyond the territorial sea).

The choice of a legal regime involves two groups of problems:

1. What geographical restrictions, if any, ought to be imposed on the exclusive jurisdiction which the Continental Shelf Convention rec-

ognizes in the coastal nation with respect to the mineral resources in and beneath the adjacent bed of the sea?

2. Seaward of the exclusive jurisdiction of the coastal state, determined by the Convention on the Continental Shelf, is it necessary at this time to establish any formal regime to govern mineral exploration and production? If so, what should be the objectives and structure of such a regime?

III. CRITERIA FOR OPTIMUM MINERAL DEVELOPMENT

1. *Objectives of mineral legislation*

Our principal concern in this Report is to identify the requirements for bringing into productive use the minerals located beneath the oceans. The mineral deposit which remains undiscovered, or, being discovered, remains undeveloped, is as useless to man as though it did not exist.

The world-wide experience of nations has demonstrated that a successful system of mineral development laws, whether operating on land or under the sea, should have these objectives:

(1) To encourage the discovery and putting to work of the world's minerals at the lowest cost to consumers consistent with a fair return to the investor and with the maximum ultimate recovery of those minerals, having in mind the needs of future generations as well as our own.

(2) To bring about maximum ultimate recovery by encouraging conservation—in the sense of wise use—both of the minerals themselves and of the natural forces, such as reservoir energy, which are required for their production; conversely, to deter the physical waste of the world's mineral estate.

(3) To facilitate access to minerals, on a non-discriminatory basis, by all responsible interests.

(4) To reconcile competing uses of the environment and minimize the adverse effect of mineral operations on that environment.

2. *The essentials which a mineral regime must offer to bring about development*

To accomplish the objectives that we have identified, it is not enough to articulate them in statutes or conventions.

Men must be induced to risk life and treasure to find and win minerals. The business of discovering and producing them is hazardous enough on land. Under sea, it is much more costly and risky, both financially and physically. Capital must be attracted to the deep sea mineral business in competition with other demands upon it, and in competition with safer mineral investments on shore and in shallower waters.

Successful mineral laws offer three general types of inducement to attract capital and talent:

(1) The mineral regime must offer encouragement to look for minerals, that is, to undertake reconnaissance or prospecting in the hope of finding areas promising enough to justify later expenditures on concentrated exploration.

(2) Security of tenure is essential. The enterprise which drills wells or sinks shafts in search of minerals is gambling large sums, with the odds heavily against the finding of a mineral deposit of value justifying the amount of money invested. It requires the exclusive right to occupy a stated area for exploration and the exclusive right to produce minerals discovered in that area, and to do so for an assured period of time—both the area and the time being commensurate with the character of the risk taken and the amount hazarded.

(3) The mineral venture must have a reasonable prospect that, in the event of success, the exactions of the granting authority, in royalties and taxation, will not be so oppressive as to stifle the undertaking or discourage its continuance.

3. *The application of the foregoing principles to undersea mineral development*

It does not appear to require argument that if the foregoing principles for the protection of the public interest and the recognition of the miner's necessities are essential to a successful mineral regime on land, they must be essential elements of a successful regime undersea, where risks are immensely greater. At sea, the geology is hidden, no outcrops are visible; the expenses in all phases of exploration are much larger; if minerals are discovered, the costs of development, production, lifting, and transportation are enormously increased. The undersea mineral venture is even more capital-intensive than a comparable venture on land, and, if a mineral deposit is found, it must therefore have greater producibility or higher unit value than need be shown by the economically producible onshore deposit.

The problem to be considered here, therefore, can be restated as follows: What kind of undersea mineral regime will best encourage prospecting, guarantee security of tenure, and fairly balance governmental financial exactions with the risks of the enterprise, while bringing about the maximum ultimate recovery of minerals at the lowest ultimate cost to the consumer, and with an acceptable level of dislocation of other uses of the marine environment?

The problem, as indicated earlier, divides itself into two phases: one related to the jurisdiction of the coastal state, the other to the regime (whatever it may be) seaward of the coastal state's area of competence.

IV. THE AREA OF COASTAL STATE EXCLUSIVE JURISDICTION

The jurisdicion of coastal states with respect to the natural resources of the sea-bed and sub-soil areas under the high seas is determined by the Geneva Convention on the Continental Shelf. By that instrument the community of nations has decided that the interests of mankind are best served by reserving to coastal states exclusive sovereign rights in the natural resources of the sea-bed and sub-soil of the submarine areas adjacent to their coasts, not only to the 200 meter depth, but beyond that depth "to where the depth of the superjacent water admits of the exploitation of the natural resources." The basis for this recognition of exclusive mineral jurisdiction is twofold: the predominant interest of the coastal state in the bed of the sea adjacent to its shores, and the necessity for certainty as to what law is applicable to that sea-bed. To date, some three-score nations have given recognition to the principles of that Convention, 36 by ratifying it, the others by adopting major provisions of it in domestic legislation or regional agreements. From the wide acceptance of the principles set forth in the Convention, even by states which are not parties, it is clear that they constitute part of customary international law.

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

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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. From the geological standpoint, this interface at the submerged continental margin is a profound natural boundary. Characterized by a marked change of structure between the continental mass and the crust of the deep ocean basins, it is generally to be found at a depth of from 2,000 to 3,000 meters. As stated recently by the United States representative in the Technical and Economic Working Group of the United Nations Ad Hoc Committee:

> "The composition of the continents, including their submerged parts, is basically different from that of the oceanic crust of the deep ocean basins. The boundary between the two is one of the most profound natural interfaces. It is gradational in many places and not easily established by direct observation, but generally occurs near the base of the continental slopes at a depth of about 2500 meters.
>
> * * * * *
>
> " . . . The gradational interface between the submerged parts of the continents and the ocean basins naturally fixes the seaward limit of any continental feature, and is from the scientific point of view the conceptual boundary between continental and oceanic seabed resources. It is important to recognize, however, that neither this nor any other geologic or topographic boundary is sufficiently distinct and consistent to serve by itself as the means of defining a precise juridical boundary."

In view of the fact that this feature is thus often difficult to locate from direct observation, it would seem reasonable and convenient to equate it generally, for the time being at least, with the 2,500 meter isobath. This would be in approximate accord with the geological realities.

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* See Appendix to this Report.

We are advised informally by scientists of the U. S. Geological Survey that about 7.5 percent of the area of the ocean floor is encompassed by the 200 meter isobath. Similarly, about 16 percent of the area of the ocean floor is included within the 2,000 meter contour. While no comparable estimates are available for the 2,500 meter isobath, adjacent to the continents, an estimate has been made for the 3,000 meter isobath (world-wide, not merely adjacent to the continents), and the percentage of the area of the world's ocean basins found to be included by that isobath is about 25 percent. It would appear, therefore, that if coastal state mineral jurisdiction is equated geographically with the submerged continental land mass (the continental margin, including the geological concepts of the continental shelf, the continental slope, and the landward portion of the continental rise), and if this, in turn, is equated provisionally with an average water depth of 2,500 meters, adjacent to the continents, the result is that substantially less than 20 percent of the area of the world's sea-beds is within the exclusive mineral jurisdiction of the coastal states, and more than 80 percent of the total sea-bed area is outside the coastal regime with respect to mineral development.

In particular instances, as where there is a very narrow or ill-defined continental margin, it may be equitable to regard the limit of adjacency as extending beyond this line. In such situations, the adjacency concept gives the coastal state exclusive mineral jurisdiction in an area of deep ocean floor which is reasonable with regard to all relevant circumstances. In general, a reasonable measure of this jurisdiction might well be the average width of the continental margins of the world's oceans, or approximately 100 miles, though there might be situations, as in the case of some of the smaller seas, in which a different standard would be more appropriate.

Special problems may also occur with respect to islands.

On the view proposed above, a sufficiently definite seaward limit for the exclusive jurisdiction of the coastal state may be persuasively derived from the language of the Convention as it now stands. Any doubts or differences can be resolved on an *ad hoc* basis as they arise. Hence there would seem to be at this time no need to consider possible changes in the Convention in anticipation of the time when it becomes open to proposals for revision in June 1969. Likewise, it does not now seem desirable to urge the convening of a new international conference, which might well raise more problems than it would settle.

Nevertheless, in view of current debate over the limit of coastal state jurisdiction under the present Convention, it may be desirable that this

limit be explicitly clarified. Rather than attempt such clarification through an international conference, it would appear preferable to deal with the matter by means of parallel ex parte declarations in which the states concerned would voluntarily recognize limits on their exclusive jurisdiction along the lines suggested in this Report. Such declarations might well contain not only an express recognition of the proposed definition of adjacency, but also an affirmation of intent not to recognize more extensive claims by others—e.g., to the middle of the great oceans. By such means it would be possible to build up a pattern of concordant state practices by which the meaning of the existing Convention language may be authoritatively determined.

In connection with the ex parte declarations above mentioned, states may also wish to give serious consideration to provision, in accordance with internal law and constitutional procedures, for allocation of a portion of the revenues derived from part of the area of coastal control to an international fund earmarked for expenditure for generally approved international purposes. Different conclusions might be reached by different states depending upon current levels of foreign aid expenditures and policies relating to dedication of revenues derived from specific sources for specific purposes. In the United States, such policy decisions must be made by the Congress.*

V. THE DEEP OCEAN FLOOR BEYOND THE AREA OF COASTAL CONTROL

1. *The need for a sound beginning*

We turn now to consider the deeper ocean areas, those seaward of the coastal regime established by the Convention on the Continental Shelf. Inasmuch as the coastal regime controls mineral development on the continents, including the submerged continental land mass, and this, generally speaking, extends to depths of the order of 2,500 meters, it seems valid to expect that the opportunities in the areas under coastal control (contrasted with the formidable technical and economic problems attending mineral development beneath deeper water) will occupy the creative and productive energies of scientists and engineers for several decades to come. Mineral developments will move out to very deep

* Mr. Finlay dissents with respect to this paragraph, saying: "I see no more reason for a nation's allocating a portion of the revenues derived from offshore operations than for allocating a portion of the revenues from onshore operations to international purposes and the very making of the suggestion casts an implied cloud on the title of the coastal states to the mineral resources of their continental margins."

waters only when net costs of exploration and production there will compete favorably with like costs for obtaining those minerals on land or beneath shallower waters, or with the costs of obtaining acceptable substitutes.

The hard minerals most frequently mentioned as deep sea resources are those found in so-called manganese nodules (i.e., manganese, copper, nickel, cobalt). The known onshore deposits of manganese superior to the average grade found in the nodules exceeds 100 years of supply of the world's consumption at present rates. The known onshore deposits of the other components of the nodules is less, in terms of years of consumption, but is still measured in four to ten decades, and these metals are not immune to competition from substitutes—aluminum for copper, for example. This is without reference to the formidable technical problems involved in mining beneath water depths nearly twice as great as that which crushed the submarine "Thresher"; delivering the ore in very large daily tonnages; receiving it on board a floating smelter or beneficiating plant which must operate in the open stormy sea in fixed positions (or lose contact with the submarine hoisting device); and processing it by metallurgical techniques not yet available, but which must be devised if these metals are to be separated from the highly refractory material containing them.

With respect to oil and gas, the geologists believe that the major opportunities lie in the sediments of the continental margin—the areas which are now subject to coastal jurisdiction—and not in the floor of the deep oceans, which is of quite different geologic origin. Aside from this, it is valid to expect that development of petroleum resources beneath the oceans will first take place in the shallower areas, for economic reasons. Experience to date has shown that the outlay for moving out into deeper water has risen almost in geometric proportion, as related to depth. Competition of non-conventional onshore substitutes, such as tar sands, oil shale, and hydrogenation of coal, as well as other energy sources, such as nuclear fission (and, potentially, nuclear fusion) will impose limitations on incentives for petroleum production from the deep ocean floor. For example, it has been estimated by Chairman Seaborg of the United States Atomic Energy Commission that:

> " . . . fusion of the atoms of heavy hydrogen available in the oceans of the world will open up an energy resource equivalent to 500 Pacific oceans filled with high grade petroleum."*

* Dr. Glen T. Seaborg, "The Proliferation of the Peaceful Atom," before the American Public Power Association, May 11, 1967.

This is not to say that the development of the minerals of the deep ocean floor beyond the continental margins will not occur. But the assertion,* frequently repeated, that some six billion dollars of gross annual income from undersea mineral development could accrue by 1975 to the United Nations or other international agency which might control access to the ocean floor is a wholly unsupported factual assumption, and an unacceptable premise for urgency in devising a regime to govern the deep ocean floor. It is significant that this estimate was based in part on the assumption that the sovereign rights of coastal nations should terminate at the 200 meter isobath, or at 12 miles from the nearest coast. As we have indicated, this would require agreement of the coastal nations to relinquish their exclusive rights in the minerals of the submerged continental land mass seaward of the 200 meter isobath, now recognized in them by the Convention on the Continental Shelf. As coastal nations comprise five-sixths of the membership of the United Nations, this does not seem a viable premise, quite aside from the illusory amount associated with it.

While it thus appears that there is no precipitate necessity for the structuring of a regime to govern the development of the minerals beneath the oceans seaward of the existing mineral jurisdiction of the coastal states, it is appropriate to recognize the necessity for studying and agreeing on a formulation of international legal principles based on existing customary international law which will encourage exploration and protect exploitation of the resources of the deep sea floor.

In the meantime, such initial mining operations as may occur in the deep ocean are unlikely to be the occasion for conflict which cannot be disposed of satisfactorily by available international legal principles and institutions. Deferment of attempted alteration of the regime has also the great virtue, surely to be considered an important objective, of delaying action until the dimensions of the problem are far more clearly apprehended than is presently the case. Experience gained with exploitive operations within the area of coastal control may well furnish us with the guidelines by which problems in the deeper regions beyond may be resolved in accord with the common interests of all.

2. *Possible regimes or arrangements to control mineral development of the deep ocean floor*

In view, however, of the very long time which will be required, or should be required, for negotiating a new international agreement for

* Statement of the Ambassador of Malta, H. E. Dr. A. Pardo, United Nations General Assembly, November 1, 1967.

the deep sea-bed (if such agreement is believed to be required), it is appropriate to investigate various alternatives. Three major choices are most frequently suggested.

(1) *The flag nation concept*

One concept is essentially that of *laissez faire*: let the appropriation and development of the minerals of the deep sea-bed continue to be undertaken by any nation willing to risk its treasure and the lives of its nationals to win those minerals.

(2) *Creation of an international licensing mechanism*

At the opposite end of the spectrum is the proposal for establishment of an international licensing authority. This presupposes the creation in some supranational agency of a new competence, not now existing, to grant or refuse reconnaissance permits, exploration licenses, and production concessions just as sovereigns now do within their national jurisdiction on dry land and on the continental shelf. Presumably the new supranational agency would, or could, control or prohibit production, set prices, control repatriation of capital and profits, and fix and collect taxes and royalties, as some sovereigns do. Neither the United Nations nor any other international entity now has competence to exercise such powers. Presumably the nations of the world, collectively, do have that competence, but they have not, singly or collectively, delegated it to the Assembly of the United Nations.

(3) *Registry and code of conduct*

A third and intermediate solution is the ultimate establishment of "norms of international conduct," to be obeyed by every nation whose flag is flown by an exploratory expedition. Coupled with this, the establishment, by international convention, of a central registry system, has been suggested as a refinement of the flag-nation concept. A two-fold concept seems indicated: registry of national claims, and a code of national conduct in the occupation and use of the areas claimed. These concepts find analogies in the existing mineral laws of many countries.

If such arrangements evolved on the pattern of existing national laws, notice would be recorded in an international registry office by the flag nation of the expedition, stating the intended occupation of specified areas, of predetermined permissible size. An exclusive right of occupancy, secured for a known time, would accrue to the recording nation, for the benefit of its licensees, with respect to the published area. The

right would remain exclusive, however, only so long as work continued in conformity with specified criteria. If minerals were found, their production would be governed by the laws of the nation which had registered the original notice of intent. In addition, it has been suggested that the availability of areas for mineral development, under the registry scheme, particularly the requisite distance offshore from adjacent states, would be determined by international convention and not by the registry office. Recognition of previously acquired rights is an essential of the scheme, as is the recognition of competing interests in the use of the marine environment, e.g., for fishing and navigation.

It would be appropriate in the development of a treaty covering these provisions to give consideration to the recommendation advanced by the United States Representative on June 20, 1968, to the Legal Working Group of the U. N. Ad Hoc Committee to Study the Peaceful Uses of the Sea Bed and Ocean Floor Beyond the Limits of National Jurisdiction for the "dedication as feasible and practicable of a portion of the value of the resources recovered from the deep ocean floor to world or regional community purposes."

The algebraic form in which the registry concept is here stated is deliberate. Some of the difficulties, including the problems of competing notices of claims, priorities, areas, duration, work required to keep claims alive, and so on, are self-apparent. No one knows as yet how to put numbers into any of these concepts. No one will know how to do so until after a great deal of deep sea exploration and discovery of minerals has taken place. This exploration, in our view, should be encouraged, not retarded.

While we prefer the intermediate solution (No. 3 above), we decline to characterize the flag nation concept (No. 1 above) as one that invites "anarchy" or "chaos" or "race to grab," as some have contended. This approach is not one characterized by the absence of law. On the contrary, we are of the opinion that under existing law a state has competence to establish limited rights of jurisdiction and control over minerals of the sea-bed by effective use of the area encompassing them. We are of the further opinion that, in the event of conflict between the mineral development projects of two or more nations, there are established principles of international law, now applicable to the high seas, which would be available to resolve such conflicts on an *ad hoc* basis. Nevertheless, we recognize that these existing principles may not provide an adequate basis for long-term development of these resources in an orderly manner. If a comprehensive legislative solution can be

designed in advance for this purpose, that possibility should be carefully explored.

We recommend against any attempt at a solution through the creation of an international licensing mechanism (No. 2 above), in the foreseeable future. To create and define the powers of such a supranational authority would be an enterprise rivaling in magnitude the creation of the United Nations itself. It could not be self-created by resolution of the Assembly. It presupposes that the maritime nations of the world would delegate to a super-sovereign the power to prevent their own exercise of powers, now possessed, to occupy and use the bed of the deep sea beyond national jurisdiction.

There is no reason why use of deep sea mineral resources should be made contingent upon the solution of political problems of such magnitude, or why exploration of the deep ocean floor should be prohibited pending the accomplishment of that solution (as some have suggested). It is enough to say that any scheme which adds costs, delays, and international politics to the formidable obstacles which already confront the would-be explorer of the deep sea-bed bears the burden of proving the necessity for its existence.

VI. CONCLUSIONS AND RECOMMENDATIONS *

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 conti-

* Members of the Committee have exchanged views with members of similar Committees of the American Bar Association, in preparation of these Conclusions and Recommendations.

nents 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 sea-bed mineral jurisdiction, pursuant to the exploitability and adjacency factors of the Continental Shelf Convention, to (i) the submerged portions of the continental land mass, limiting this provisionally to a depth of, say, 2,500 meters, or (ii) to a stated distance (say 100 miles) from the base line, whichever limitation encompasses the larger area.* Such declarations might appropriately recognize special cases. Two such classifications suggest themselves: (i) In the case of states whose coasts plunge precipitously to the ocean floor (e.g., on the west coast of South America), the suggested 100-mile limit on sea-bed 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 sea-bed minerals, on the one hand, and, on the other hand, the non-exclusive status of the sea-bed 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.

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* Mr. McCracken, while joining in the report, would prefer not to suggest figures.

3. *With respect to the regime which should be applicable to the minerals in and under the sea-bed, seaward of the limit of the coastal state's exclusive jurisdiction*

(1) We do not consider it admissible under present circumstances to vest jurisdiction 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 undersea minerals.

(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 sea-bed 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 sea-bed 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 development fees or royalties, and (ii) the purposes to which such rev-

enues, 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.

Respectfully submitted,

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MYRES MCDOUGAL
JOSEPH W. MORRIS
CECIL J. OLMSTEAD
RICHARD YOUNG
WILLIAM T. BURKE, *Rapporteur*
NORTHCUTT ELY, *Chairman*

(Two members of the Committee, Messrs. Oscar Schachter, Director of Research, UNITAR, and Stanley N. Futterman, Legal Adviser for Special Political Affairs, Department of State, have asked that, because of their official positions, particularly in relationship to the work of the United Nations Ad Hoc Committee, their names not be included as sponsors of this report. The Chairman, nevertheless, wishes to acknowledge, with appreciation, the contributions made to the Committee's discussions by Messrs. Schachter and Futterman, as well as by Prof. Henkin, whose dissenting views are printed herewith.)

Dissenting Statement by Louis Henkin

I cannot subscribe to the Committee's report. In my view, its focus is narrow, its concerns parochial, and its proposals short-sighted. The *laissez faire* philosophy which permeates it is a dangerous anachronism. The positions its recommends would lead to a "grab" by the coastal states, especially the highly developed states, of resources which the President of the United States has declared to be "the legacy of all human beings." They would seriously damage other interests of all nations, including the coastal states, and eventually end "the freedom of the seas" in principal parts of the oceans.

I am particularly troubled by the proposed extension of the doctrine of the continental shelf to an area more than three times that originally contemplated. That recommendation is without foundation in the 1958 Convention, either in its language or in its history. It would grab for the coastal states the resources of one-quarter of all the ocean bed, and the area in which the principal mineral resources are believed to lie. Even in its narrow concerns, I believe this recommendation to be mistaken; the implication that it is better for entrepreneurs to deal with national governments without international regulation or intervention is a misreading of recent history and extremely short-sighted.

But the most serious consequences of a magnified continental shelf are not even mentioned. For while the doctrine of the continental shelf formally gives the coastal state sovereignty only for the purpose of exploiting mineral resources, exclusive jurisdiction for one purpose tends to expand to sovereignty for all purposes. The Committee's proposal would mean that, increasingly, one-quarter of the ocean—and in many ways the most important quarter—would tend to become territorial sea. Surely, it would soon be effectively barred to many other uses by other nations, including much navigation, scientific research, and defensive measures at sea that are important to national security and world peace.

Comments by the Rapporteur and Chairman on Professor Henkin's Dissent

1. As to the jurisdiction of the coastal states: Professor Henkin apparently construes the Convention as though the exploitability criterion were not there; otherwise, his assertion that the submerged portion of the continental land mass encompasses "an area more than three times that originally contemplated" is irrelevant, because this is a comparison of the areas included within the 200 meter and 2,500

meter isobaths. But the exploitability criterion is there; it explicitly takes coastal jurisdiction "beyond that depth" of 200 meters; and if it is not limited to the continental land mass by the criterion of adjacency, as the Committee construes the Convention, then what other limit is to be found in the Convention? Professor Henkin does not tell us. The Committee proposes to limit, not extend, the exclusive coastal jurisdiction. Of course, we decline to limit it to the 200 meter isobath, since the Convention itself says coastal jurisdiction extends "beyond that depth," just as we decline to extend it to the median lines of the oceans, as some have construed the Convention.

2. As to the contention that the Continental Shelf Convention, construed as encompassing the seabed of the continental margin, would tend to expand coastal sovereignty over the superjacent waters: History does not support this assertion. The claims of the Latin American countries to 200-mile wide territorial seas antedate the Convention. The Convention's explicit dissociation of coastal control of the seabed from territorial sovereignty over the superjacent waters has been respected, so far as we know, irrespective of the width of the seabed area under coastal control. The Committee proposes that this be reaffirmed in declarations of coastal states limiting their seabed jurisdiction to the continental margin.

3. As to the deep ocean floor beyond coastal jurisdiction: It is strange to characterize as an "anachronism" the application of the principles of freedom of the sea to the bed of the sea, in order to maintain access to the world's submarine minerals for all mankind without discrimination. These principles have served mankind well for three centuries. It is curious to call "parochial" the Committee's call for international agreement on enlightened standards of national conduct which will assure that this accessibility continues, accompanied by recognition of one another's investments in undersea mineral development, and is not replaced by claims of exclusive territorial sovereignty. It is odd to call "narrow" our proposal that the nations which take the whole risk of developing the minerals of the deep ocean floor seaward of the coastal jurisdictions shall dedicate a portion of their gains, if any, to the welfare of other countries.

William T. Burke
Northcutt Ely

APPENDIX

After the preparation of the foregoing Report, a report of the National Petroleum Council, dated July 9, 1968, entitled "Petroleum Resources under the Ocean Floor," became available.

It contains the following Appendix, prepared by Oliver L. Stone, Chairman-Designate of the Committee on Marine Resources of the Section of Natural Resources Law of the American Bar Association. It is reprinted here not as a part of this Report, but as a matter of information, because of its relevance to the interpretation of the Convention on the Continental Shelf.

REVIEW OF BACKGROUND AND NEGOTIATIONS LEADING TO EXECUTION OF 1958 GENEVA CONVENTION ON THE CONTINENTAL SHELF

The 1958 Geneva Convention on the Continental Shelf encompasses the "continental margin." *

The Convention, in article 1, defines the term "continental shelf" as follows:

> "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." **

The definition, read in light of its history, may reasonably be interpreted as encompassing the "continental margin." ***

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* The term "continental margin" is used herein as it is defined in the report to which this appendix is a part.

** The text of the definition and the preparatory work leading to its adoption indicate clearly that the exploitability test was not intended to extend the shelf regime to mid-ocean, but rather was intended to have some limitation to submerged areas reasonably "adjacent" to the coast. Evidence of this is revealed in the International Law Commission's (ILC) Report of its 8th Sess. (U.N. A/3159), pages 76-77, 81-82, hereafter cited as ILC Report; and in Fourth Comm. (Cont. Shelf), Off. Records, Vol. VI, U.N. A/Conf. 13/42, pages 3-4, 8-12, 15, 21, 24, 27, 33-35, 40, 42, 53, 55, and 88-92, hereafter cited as Fourth Comm. Report.

*** Since the exploitability criterion and the adjacency test potentially permit extension of the shelf regime to the outer edge of the "continental margin," that fact precludes all nations other than the littoral nation from asserting rights to shelf natural resources in this area.

1. *The history of the Convention's definition of the term "continental shelf"*

In the International Law Commission's (ILC) first draft of the definition (1951) the "continental shelf" was defined as covering:

> "the seabed and subsoil of the submarine areas contiguous to the coast, but outside the area of territorial waters, where the depth of the superjacent waters admits of the exploitation of the natural resources of the seabed and subsoil."

At its 1953 session, however, ILC changed the definition and defined the shelf solely in terms of water depth, using 200 meters as the outer limit.

At its final session in 1956, the ILC again changed the definition of "continental shelf." This time the shelf was defined in substance as it appears in Article 1 of the Convention, embodying the alternate criteria of water depth (200 meters) and exploitability. The ILC explained its final definition as having been prompted by action taken by the Inter-American Specialized Conference on Conservation of Natural Resources: Continental Shelf and Oceanic Waters, held at Ciudad Trujillo (Dominican Republic) in March 1956. That conference had concluded that "the right of the coastal State should be extended beyond the limit of 200 metres, 'to where the depth of the superjacent waters admits of the exploitation of the natural resources of the seabed and subsoil'." (ILC Report, p. 41.)

In its final report on the definition, ILC makes clear that its definition departs from the strict geological concept of the shelf, stating (ILC Report, pp. 41-42):

> ". . . the Commission therefore in no way holds that the existence of a continental shelf, in the geographical sense as generally understood, is essential for the exercise of the rights of the coastal State as defined in these articles."

And *(id.)*:

> "Again, exploitation of a submarine area at a depth exceeding 200 metres is not contrary to the present rules, merely because the area is not a continental shelf in the geological sense."

Further light is shed on the definition of the shelf, particularly the phrase "the submarine area adjacent to the coast," by ILC's commentary on its draft Article 68, which provides that the coastal State exercises over the shelf "sovereign rights for the purpose of exploring and exploiting its natural resources." The ILC points out that once

the seabed and the subsoil become an object of active interest to coastal States with a view to exploitation of their resources, "they cannot be considered as *res nullius,* i.e., capable of being appropriated by the first occupier. It is natural that coastal States should resist any such solution." (ILC Report, p. 43.) And then the commentary proceeds *(id.):*

> "Neither is it possible to disregard the geographical phenomenon whatever the term—propinquity, contiguity, geographical continuity, appurtenance or identity—*used to define the relationship between the submarine areas in question and the adjacent non-submerged land.* All these considerations of general utility provide a sufficient basis for the principle of the sovereign rights of the coastal State as now formulated by the Commission. As already stated, that principle, which is based on general principles corresponding to the present needs of the international community, is in no way incompatible with the principle of the freedom of the seas." (Emphasis added.)

Thus, the ILC left no doubt that the "adjacent" areas to which the Convention relates includes the submarine areas having "propinquity, contiguity, geographical continuity, appurtenance or identity" with the continental land mass. The "continental margin" meets all of these criteria, although any one would suffice. It is, therefore, clearly encompassed by the Convention.

Additionally, the Ciudad Trujillo Conference of 1956 is of particular significance in construing the Convention's definition because it was the outcome of this Conference which prompted ILC to incorporate the exploitability test in its final (1956) draft of the definition. The Trujillo Conference (Committee I Report) reported:

1. "The continental shelf is from the point of view of geology, structure and mineralogical characteristics, an integral, although submerged, part of the continents and islands."
2. "There is no uniformity as regards the width, depth, and geological composition of the shelf, even in a single sea."
3. "The shelf is and constitutes a valuable source of natural resources, which should be exploited for the benefit of the coastal state."
4. "The extent of these resources is not known exactly, but it is believed that they bear a relation to the extent of the American shelf. . . ."
5. "Scientifically the term 'continental slope', or 'inclination' refers to the slope from the edge of the shelf to the greatest depths."

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6. "Technical progress has been made [in exploiting the resources of the shelf] and there are exploitations at depths of nearly 1000 meters."
7. "The term 'continental terrace' is understood to be that part of the submerged land mass that forms the shelf and the slope."

From the foregoing points the Committee concluded:

> "The American States are especially interested in utilizing and conserving the existing natural resources on the American terrace (shelf and slope)." (Words in parentheses appear that way in original.)

And:

> "The utilization of the resources of the shelf cannot be technically limited, and for this reason the exploitation of the continental terrace should be included as a possibility in the declaration of rights of the American States."

The Conference * unanimously adopted a Resolution (Document 95) which reads:

> "1. The sea-bed and subsoil of the continental shelf, continental and insular terrace, or other submarine areas, adjacent to the coastal state, outside the area of the territorial sea, and 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 sea-bed and subsoil, appertain exclusively to that state and are subject to its jurisdiction and control."

At the 1958 Geneva Conference on the Law of the Sea, the fourth Committee considered the draft articles on the Continental Shelf. In commenting on the definition, particularly the exploitation test, the spokesman for the United States delegation (Miss Whiteman) observed that (p. 40):

> "The definition of the rights of the coastal State to the continental shelf *and continental slope* adjacent to the mainland proposed by the International Law Commission would benefit individual States and the whole of mankind." (Emphasis added.)

This expression of understanding of the definition by the United States made during the course of the debates, together with the fact that the United States had shortly prior thereto joined in the Ciudad Trujillo resolution of March 28, 1956, proclaiming that "the continental shelf, continental and insular terrace" appertain to the coastal nation,

* Twenty nations including the United States participated in this Conference.

places it in a uniquely strong position to announce its interpretation that the shelf regime encompasses the "continental margin."

Dr. Garcia-Amador, a delegate to the Ciudad Trujillo Conference, served thereafter as Chairman of ILC during its eighth session at which the definition of "continental shelf" was revised to include the exploitability test along with the 200 meters criterion. His views undoubtedly were significant in bringing about this change. He writes (Garcia-Amador, *The Exploitation and Conservation of the Resources of the Sea* (2nd ed., 1959, at p. 108):

> "As we have indicated, the geographical configuration of the bed of the sea contiguous to the coast of continents and islands is sometimes so irregular that it cannot be defined in terms of the shelf or terrace concepts. When this is so, as in the case of some countries in the American continent and elsewhere, the coastal State may exercise the same exclusive rights now enjoyed by those *which have a continental or insular shelf and terrace,* provided the depth of the superjacent waters admit of the exploitation of the natural resources of the seabed and subsoil and that the submarine areas be adjacent to the territory of the coastal State." (Emphasis added.)

And continuing (*id.*, p. 130):

> ". . . States enjoy present legal powers when the submarine area adjacent to their territory has the configuration of a shelf, defined by the limit of the 100-fathom line. Potential or future powers would be enjoyed by them, for example, according to the system adopted by the International Law Commission, with respect *to the slope and the corresponding part of the terrace,* and by all coastal States with regard to the other submarine areas adjacent to their territories. . . ." (Emphasis added.)

At ILC's eighth session (1956) at which consideration was being given to changing the definition of the continental shelf as it appeared in the 1953 draft (out to the 200-meter water depth line), Dr. Garcia-Amador proposed a definition substantially the same as that in the Ciudad Trujillo resolution of March 28, 1956. McDougal and Burke comment on this proposal as follows (*The Public Order of the Oceans,* by McDougal & Burke, p. 683):

> "Some controversy attended the suggested elimination of the continental shelf term and the references to the 'continental and insular terrace', but this became muted when it was realized that a criterion embracing both a 200-meter depth and the depth admitting exploitation would embrace such areas if they were in fact exploitable or came to be."

A somewhat similar proposal by Panama was rejected by the Fourth Committee, no doubt for the same reason and also because the Panama proposal would not have automatically vested Convention rights to the 200-meter water depth contour (Report of Fourth Comm., pp. 32-33, 127).

Within the Fourth Committee the United Kingdom proposed an amendment to the definition to confer sovereign rights in the coastal nation for exploring and exploiting the natural resources "over the submarine areas adjacent to its coast but outside the territorial sea, up to a depth of 550 metres" (Report of Fourth Comm., p. 132). It was stated that "the continental slope ended in most places at that depth [550 meters]" (*id.*, at 36). The reasons underlying the rejection of this proposal are not specified, but it would appear that the delegates did not want to restrict the Convention's exploitability coverage to the specified depth limit.

2. *Subsequent action by nations*

Since the Convention went into effect in 1964, the United States by action taken by the Interior Department, has clearly evidenced its construction that the definition extends far beyond the 200 meter water-depth line. In 1961, the Associate Solicitor of the United States Department of Interior issued a memorandum concluding that the Secretary's leasing power under the Outer Continental Shelf Lands Act, read in light of the Convention on the Continental Shelf, extends to an area lying about 40 miles off of California in water-depths ranging up to 4,020 feet with the greater part being in excess of 600 feet. The Secretary has also issued oil and gas leases in water-depths up to 1,500 feet.

Moreover, the Secretary of Interior announced, in June 1965, that he had authorized approval of plans of a company to conduct a core drilling project on the Continental Slope in the Gulf of Mexico off the coasts of Texas, Louisiana and Florida in waters ranging in depth from 600 to 3,500 feet. This "permit" or authorization is not to be confused with the grant of an oil and gas or other mineral lease. It appears that this permit was issued pursuant to § 11 of the Outer Shelf Act and the Secretary made clear in the permit that "No rights to any mineral leases will be obtained from these core drilling programs." Also, on May 26, 1967, the U. S. Geological Survey announced approval of plans for another company or group of companies to conduct a core drilling program on the Continental Slope beyond the

continental shelf "off Florida and northward to points seaward of Cape Code and Georges Bank." The release states that "No rights to any mineral leases will be obtained from these core drilling programs". The release indicates that about 21 core holes will be drilled beneath the floor of the Atlantic Ocean in water ranging in depths from 650 feet to 5,000 feet. The depth of penetration in each core test is limited to a maximum of 1,000 feet.

In a letter opinion of February 1, 1967, from the Deputy Solicitor of the Department of Interior to the Corps of Engineers, it is made clear that the Department is of the view that Cortez Bank is an area under United States jurisdiction under the Outer Continental Shelf Lands Act and the Convention on the Continental Shelf. Cortez Bank is located about 100 miles from the California mainland and is separated from the mainland by ocean floor trenches as much as 4,000 to 5,000 feet deep, although the Bank itself is covered by shallow water.*

At the March 11, 1968, meeting of the United Nations Ad Hoc Committee to Study the Sea-Bed and Ocean Floor Beyond the Limits of National Jurisdiction, the spokesman for Canada said (A/Ac. 135/1, p. 33):

> "In the view of the Canadian authorities, the present legal position regarding the sovereign rights of the coastal States over the resources of submarine areas extending at least *to the abyssal depths* is not in dispute." (Emphasis added.)

And, according to the U. N. press release of the March 21, 1968, meeting of the Ad Hoc Committee (U. N. Press Release GA/3585), the Canadian spokesman's views are reported thus (p. 2):

> "The [Ad Hoc] Committee should define the limits of the area covered by the resolution [Gen. Ass. Res. 2340 (XXII)]. In his view, the areas over which coastal States had sovereign rights included, without doubt, the continental shelf *and its slope*." (Emphasis added.)

In view of the foregoing, the United States would be fully justified in asserting that the Convention on the Continental Shelf encompasses the continental margin.

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* Barry, "Administration of Laws for the Exploitation of Offshore Minerals in the United States and Abroad", ABA National Institute on Marine Resources, 6/9/67, p. 12.

[End of Appendix by Mr. Stone.]

Mr. ELY. I have served also as a member of the subcommittee of the National Petroleum Council's Committee on Petroleum Resources Under the Ocean Floor. I participated in the preparation of that report, entitled "Petroleum Resources Under the Ocean Floor," and I concur in it. I believe your committee has this in its files. But, of course, it is not a bar association paper either.

Appendix F to my prepared statement consists of quotations from the North Sea Continental Shelf decision of the International Court of Justice rendered in February of this year.

(Appendix F referred to follows:)

APPENDIX F

EXTRACTS FROM THE JUDGMENT OF THE INTERNATIONAL COURT OF JUSTICE IN THE NORTH SEA CONTINENTAL SHELF CASES (GERMANY-DENMARK, GERMANY-NETHERLANDS), 1969 REP. I.C.J. 1 (20 FEB. 1969)

19. More important is the fact that the doctrine of the just and equitable share appears to be wholly at variance with 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 existance 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 its own affair, but no one else may do so without its express consent.

41. As regards the notion of proximity, the idea of absolute proximity is certainly not implied by the rather vague and general terminology employed in the literature of the subject, and in most State proclamations and international conventions and other instruments—terms such as "near", "close to its shores", "off is coast", "opposite", "in front of the coast", "in the vicinity of", "neighboring the coast", "adjacent to", "contiguous", etc.,—all of them terms of a somewhat imprecise character which, although they convey a reasonably clear general idea, are capable of a considerable fluidity of meaning. To take what is perhaps the most frequently employed of these terms, namely "adjacent to", it is evident that by no stretch of imagination can a point on the continental shelf situated say a hundred miles, or even much less, from a given coast, be regarded as "adjacent" to it, or to any coast at all, in the normal sense of adjacency, even if the point concerned is nearer to some one coast than to any other. This would be even truer of localities where, physically, the continental shelf begins to merge with the ocean depths. Equally, a point inshore situated near the meeting place of the coasts of two States often properly be said to be adjacent to both coasts, even though it may be fractionally closer to the one than the other. Indeed, local geographical configuration may sometimes cause it to have a closer physical connection with the coast to which it is not in fact closest.

42. There seems in consequences to be no necessary, and certainly no complete, identity between the notions of adjacency and proximity; and therefore the question of which parts of the continental shelf "adjacent to" a coastline bordering more than one State fall within the appurtenance of which of them, remains to this extent an open one, not to be determined on a basis exclusively of proximity. Even if proximity may afford one of the tests to be applied and an important one in the right conditions, it may not necessarily be the only, nor in all circumstances, the most appropriate one. Hence it would seem that the notion of adjacency, so constantly employed in continental shelf doctrine from the start, only implies proximity in a general sense, and does not imply any fundamental or inherent rule the ultimate effect of which would be to prohibit

any State (otherwise than by agreement) from exercising continental shelf rights in respect of areas closer to the coast of another State.

43. More fundamental than the notion of proximity appears to be the principle—constantly relied upon by all the Parties—of the natural prolongation or continuation of the land territory or domain, or land sovereignty of the coastal State, into and under the high seas, via the bed of its territorial sea which is under the full sovereignty of that State. There are various ways of formulating this principle, but the underlying idea, namely of an extension of something already possessed, is the same, and it is this idea of extension which is, in the Court's opinion, determinant. Submarine areas do not really appertain to the coastal State because—or not only because—they are near it. They are near it of course; but this would not suffice to confer title, any more than, according to a well-established principle of law recognized by both sides in the present case, mere proximity confers *per se* title to land territory. What confers the *ipso jure* title which international law attributes to the coastal State in respect of its continental shelf, is the fact that the submarine areas concerned may be deemed to be actually part of the territory over which the coastal State already has dominion,—in the sense that, although covered with water, they are a prolongation of continuation of that territory, an extension of it under the sea. From this it would follow that whenever a given submarine area does not constitute a natural—or the most natural—extension of the land territory of a coastal State, even though that area may be closer to it than it is to the territory of any other State, it cannot be regarded as appertaining to that State;—or at least it can not be so regarded in the face of a competing claim by a State of whose land territory the submarine area concerned is to be regarded as a natural extension, even if it is less close to it.

Mr. ELY. I shall now proceed to try to give categorical answers to the 10 questions which were stated in the committee's letter to me of November 26 but, as the chairman has requested, I will turn first to question No. 7 in which the committee asked: What sort of an interim policy should be established with respect to the regulation and control of the activities of U.S. nationals related to the exploration and exploitation of resources located on the deep seabed beyond the limits of the Outer Continental Shelf prior to reaching international agreement on a deep seabed regime?

I shall turn in a moment to the United Nations action, but first let me tell you the conclusion reached in our bar association groups on related subjects.

The resolution of the house of delegates recommends as an objective of any international arrangement freedom of exploration by all nations on a nondiscriminatory basis; security of tenure to those engaged in producing the resources in compliance with such utilization; and encouragement to discover and develop these resources and optimum use to the benefit of all people.

As indicated in the interim report of the American Branch of the International Law Association these rights now exist under international law, and there is no reason why use of deep sea resources should be prohibited pending the establishment of a more formal international regime.

We feel, I think I can say advisedly—

Senator METCALF. Will you now relate to the recent action of the United Nations?

Mr. ELY. Yes, I am about to come to that. The action of the United Nations Assembly on December 15 consisted of votes on four resolutions which had been submitted by the first committee. The resolution D to which the chairman has referred was approved and as summarized in the United Nations press release. It was a declaration that states should refrain from all exploration activities in the area beyond

the limits of national jurisdiction, and that no claim to any part of that area shall be recognized.

The operative part of the resolution read as follows:

> The General Assembly declares that, pending the establishment of the aforementioned international regime:
>
> (a) States and persons, physical or judicial, are bound to refrain from all activities of exploitation of the resources of the area of the seabed and ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction.
>
> (b) No claim to any part of that area or its resources shall be recognized.

That resolution was adopted by a vote of 62 in favor, 28 against, and 28 abstentions. The U.S. Representative spoke forcefully against it, as he should have done.

The effect of this type of a moratorium, assuming that the declaration of the assembly is given any effect as international law, is to cast in doubt all investments made in the exploration of the deep sea bed beyond the limits of national jurisdiction, and it runs directly counter to the objectives stated in the resolution of the House of Delegates of the American Bar Association.

Senator METCALF. May I ask a question at this time?

Mr. ELY. Of course.

Senator METCALF. We have had testimony, and the subcommittee knows, that there is the assertion of national jurisdiction to the 3-mile limit. South American nations have asserted jurisdiction up to 200 miles. What does national jurisdiction mean in this resolution?

Mr. ELY. There is no justifiable relationship between the width of the territorial seas, which is the subject matter of the debate over the 3-mile limit, the 6-mile limit, the 12-mile limit. Those numbers all relate to the jurisdiction dealt with in the Convention on the Territorial Sea and the Contiguous Zone, not the Convention on the Continental Shelf.

With respect to the territorial sea, the jurisdiction of the coastal state is plenary, as complete as it is on land, with the exception of the right of innocent passage of vessels and perhaps a few other exceptions. The contrasts with the coastal nations jurisdiction with respect to the resources of the Continenal Shelf. The latter differs in two major respects: First, geographically, the latter may extend for hundreds of miles to sea on the floor of the ocean beyond the 3-mile limit or the 6-mile limit or the 12-mile limit.

Second, qualitatively, jurisdiction over the seabed is a very limited type of jurisdiction, beyond the territorial sea.

The coastal nations' rights under the Continental Shelf doctrine are limited to the exploration and exploitation of the natural resources of those submarine areas. Article II of the Convention on the Continental Shelf expresses those rights. Article III of that convention explicitly states that these rights with respect to the seabed do not affect the status of the overlying waters as high seas or the status of the air space above.

Consequently, the width of the limited jurisdiction of coastal nations over the seabed under the Continental Shelf doctrine has nothing to do with the width of the territorial sea, and these subjects should not be confused.

Senator METCALF. Now, since we are concerned with exploitation and exploration why does this United Nations resolution, in your opinion, put in jeopardy the position of the United States, because

as our national jurisdiction moves out as far as we can exploit, it would seem that it wouldn't make any difference to the United States.

Mr. ELY. Your comment is certainly in order, Mr. Chairman. There are two implicit dangers in the action of the United Nations: First, let us visualize a situation so far to sea that the boundary of national jurisdiction cannot be involved, say in mid-Pacific or mid-Atlantic. We will assume that an American company wishes to outfit a ship, perhaps at the expense of several million dollars, to explore the seabed with a view to harvesting manganese nodules and develop the feasibility of this process. Perhaps this requires floating facilities to concentrate the minerals and so on. Shall it, or shall it not, make such an investment for operation far beyond the limits of national jurisdiction?

Under the present international law my strong feeling, like that of the report of the American Branch of the International Law Association, is that this American company has a perfect right under the law of the sea to make such an investment and make such an investigation, and that the flag of the United States protects that operation.

Senator METCALF. But you beg the question. You said beyond the limits of national jurisdiction.

Mr. ELY. Yes.

Senator METCALF. And it would seem to me that if Deep Sea Ventures, and we have had some testimony from that organization, goes out and exploits manganese nodules in a feasible manner, it is not beyond the limits of national jurisdiction.

Mr. ELY. Senator, under the Continental Shelf doctrine, as is developed in some detail in my prepared testimony, the exclusive jurisdiction, the exclusive sovereign rights, of the coastal Nation with respect to exploration and exploitation only extend, in the opinion of the committees that have examined this, and in my opinion, to the edge of the continental margin. That is, they are co-extensive with the submerged continental land mass. They are limited to that geological boundary, and do not extend beyond it, out on the abyssal ocean floor.

No nation has exclusive rights with respect to the abyssal ocean floor beyond the edge of the continental margin. No one asserts any such rights. But until December 15, 1969, at least, the international law was that any nation may explore the deep seabed beyond the limits of national jurisdiction without gaining any exclusive right to those areas, but with a legitimate right under the law of nations to occupy portions of the seabed for the purpose of extracting the minerals.

The effect of this resolution declaring a moratorium, in effect, and stating that states are bound to refrain from all activities of exploitation of the resources of the area of the seabed beyond the limits of national jurisdiction, and saying further that no claim to any part of this area shall be recognized, means that if this is now the law of nations on the freedom of the seas with respect to exploration of the seabed is abrogated. This is a very serious breach in the centuries-old law of the sea.

I regard it as most unfortunate.

Senator STEVENS. May I get in here?

Senator METCALF. Mr. Ely, we are interrupting you because I think this is a most important and significant discussion and, as you know, the Senate is in session and we may be called away and your prepared

testimony will be incorporated so that we can all read it and understand it.

Now, Senator Stevens.

Senator STEVENS. I think you know what a pleasure this is for me to be up here. We are being addressed by my first employer, Mr. Chairman.

Mr. Ely, as I understand your concern, and I think your concern is really well taken, what you are saying is that under the 1958 Convention on the Continental Shelf there was an area recognized for exclusive exploitation and it was not tied to national jurisdiction. It was tied to exploitability of the adjacent Continental Shelf. That is what the United Nations now has done, they have blurred the definition so they are talking about national jurisdiction areas and they have removed the correlative area of nonexclusive right in the area beneath the seas which were recognized as being open not only on the surface but in the subsurface to total exploitation and use for all persons, all nations, on an international basis; is that correct?

Mr. ELY. You jut it very well indeed, Senator. The key word that I would underscore is that word "blurred." That is precisely what has happened.

The second danger implicit in this resolution of the assembly is the unstated intention of those who sponsor that type of resolution that the international regime, when created shall not only have jurisdiction over the deep ocean, the abyssal ocean floor, but also that this jurisdiction shall command landward against the exclusive jurisdiction of the coastal nations. The internationalists would press as far toward the shoreline (say to the 200-meter isobath) as can be attained politically, for the avowed purpose of arrogating to the international regime the mineral resources of the continental margins which, under existing law, are within the exclusive jurisdiction of the coastal nations.

Senator STEVENS. And by blurring this they leave open the question of whether if they succeed in this subnavigable, international navigable water land grab they are involved in, whether they can bring that up against our jurisdictional boundaries on a sovereign jurisdictional basis rather than leave us the exclusive right to exploit out from our shores to the extent of current exploitability and technique. We went through this, Mr. Chairman, if that is constantly going on they have left an area there where an investment is in jeopardy, any American company that goes beyond the state of current exploitability and experiment may be putting an investment in an area that is now claimed by the United Nations, as I understand it.

Mr. ELY. The Geneva Convention on the High Seas, as I would read, shall I proceed?

Senator METCALF. I just want to ask if this is not an abrogation of the Geneva Convention?

Mr. ELY. The Geneva Convention on the High Seas, as I would read it, would be abrogated to the extent that this new moratorium resolution prohibited a surface vessel operating on the high seas from dredging up the seabed and putting those minerals to use. Under the resolution, no right is to be acquired, no claim is to be recognized.

Senator METCALF. However, is it your opinion that the Geneva Convention is sufficiently precise to define the limits of national jurisdiction as used by the United Nations?

Mr. ELY. Yes, Mr. Chairman. This is the subject of your questions one and two. The committees of the American Bar Association have considered this question, have concluded the 1958 Geneva Convention is sufficiently precise to require no new convention or agreement. Indeed the action taken on December 15, in the assembly illustrates the utter folly from the American viewpoint, of convening a new law of the sea conference, which might turn up with unpredictable results. All we know for sure is that it will be dominated by nations that have no interest in this subject except to take away from the coastal nations as much of the minerals of the continental margin as they can get.

Senator METCALF. I think it should be emphasized that they have no experience as far as the sea is concerned.

Mr. ELY. That is correct.

In our 1969 joint report we reconsidered most carefully this whole jurisdictional problem. If you will read our report you will find that we canvassed the opposing viewpoints on policy and on law, with great fairness I think, and these were the four conclusions that the two sections and the Standing Committee I referred to arrived at.

Senator STEVENS. Is this your appendix A?

Mr. ELY. This is appendix B. Appendix A is the action of 1968 of the house of delegates and these same sections.

Appendix B is the joint report of 1969 of the sections.

In the 1969 joint report we summarized very briefly our conclusions which appear on page 4 of my prepared statement:

> (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.
>
> (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, nonsedentary fisheries, or airspace) are invalid extensions of the continental shelf doctrine, and should be so regarded by the United States.

And we go on to say that many of us, including myself, regard the language of articles 1 and 2 of the convention as confirming in the coastal nation exclusive sovereign rights with respect to exploration and exploitation of the seabed resources of the entire submerged continental land mass, not limited by depth of water or distance from shore, but the area that constitutes what the International Court of Justice in the *North Sea* case called the natural prolongation of the territory of the coastal nation.

I arrive at this conclusion by an analysis of conventional law—that is, the legislative history of the Convention on the Continental Shelf, its language—and by an examination of the customary international law as embodied most recently in the judgment of the International Court of Justice in the *North Sea* case.

In your question No. 3, you asked whether the United States should stand on its rights under the present language of the convention, or whether it should, as the Marine Science Commission has proposed, take the initiative to secure international agreement on an amendment to the convention. The Commission favored a narrow Continental Shelf. You asked us to support our answer.

My prepared statement does so at some length. The 1968 resolution of the house of delegates, speaking for the American Bar Association, recommended:

> 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.

In short, stand on the convention.

Your question No. 4 asks if the United States should choose to stand on its rights under the present language of the convention, would any other affirmative action be required on the part of the United States to secure such rights.

Strictly speaking, the answer is "No." No affirmative action is required because article 2 of the convention tells us in so many words that the coastal State exercises over the Continental Shelf sovereign rights for the purpose of exploring it and exploiting its natural resources. And paragraph 2 of that article assures us that:

> 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.

Paragraph 3 of article 2 tells us that, "The rights of the coastal State over the Continental Shelf do not depend upon occupation, effective or notional, or on any express proclamation."

For reasons spelled out in the 1968 and 1969 reports of the sections and standing committee, we think that under the existing convention coastal jurisdiction is, in general, restricted by the criterion of adjacency to the submerged continental land mass, the prolongation of the land territory, and that it does not extend to midocean.

The Marine Science Commission disagrees. It said at page 144 of its report:

> We do not think there is any reasonable way to interpret the Convention's definition that would place a precise outer limit on the existing legal Continental Shelf.

From that slender premise it proceeds to the conclusions that we should take the initiative in proposing a new Conference on the Law of the Sea, and the Commission recommends that pending such a new conference we restrict our claims to 200 meters isobath or 50 miles from shore, whichever gives us the greater area.

Our section reports condemn this type of moratorium, as I will indicate later. The house of delegates, speaking for the American Bar Association, said that if there is any uncertainty about the limitation on coastal jurisdiction the way to remove that uncertainty was this: 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 areas of exclusive sover-

eign rights with respect to natural resources of the seabed and subsoil and the deep ocean floor beyond the limits of national jurisdiction.

The reasons for this are spelled out in my prepared statement.

Your question No. 5 asked whether if the United States should choose to secure a new international agreement or amendment of the convention, would it be advisable to take such action before resolving a number of other problems. This is dealt with at page 12 on my prepared statement. The conclusion I suggest to you is that, first, there is no proper relationship between a new international agreement on Continental Shelf boundaries and a new international agreement on the deep sea regime.

Let me explain this. We should not bargain, we should not trade off, any part of the existing American jurisdiction in the minerals of the submerged American Continent to gain any advantage, any language, in a convention setting up a new international regime.

Our 1968 report said:

> We do not believe that it is in the interests of the U.S. that negotiations for the creation of an international regime to govern mineral develepoment of the ocean floor should proceed on the assumption that this new regime will have the 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 U.S. should stand on its rights under the Convention as heretofor ratified.

Let the deep sea regime, to operate seaward of the continental margin, be considered on its merits. It may take two decades to get the data necessary to make informed judgments and negotiate a treaty. No one can write mining law applicable to this deep area now, and the writing of a sound convention will depend on getting the type of information that the United Nations resolution of December 15 inhibits. We must know a lot more before you can know what areas should be covered by single mining rights, or for how long a time, or what the diligence requirements should be. We lack nearly all the information needed to write intelligent mining laws for the deep sea and an intelligent convention.

Senator STEVENS. Could I interject there, Mr. Ely?

Mr. ELY. Yes.

Senator STEVENS. Do you think we are bound to, as a nation, under international law, abide by this action of the United Nations on December 15. Is there any binding effect of this action on our national action out on the high sea area and the subsea area?

Mr. ELY. No, Senator, I think not. We are dealing now with the nebulous and hazy subject of customary international law. What effect a declaration of the Assembly has, as a component of customary international law, on the practice of states no one can say for sure. It is certainly not a binding agreement. It is not conventional law.

Senator STEVENS. It would have the same effect as a resolution of this Congress stating what we would like to have the U.N. do, wouldn't it?

Mr. ELY. It is comparable to that.

Senator STEVENS. It is moral suasion and that is just about all.

Mr. ELY. Yes.

I would hope that our State Department would take that view. I should like to see a firm statement from our Government that it does

not regard the Assembly resolution to which we have referred as constituting valid international law, and that the United States does not propose to be bound by it.

I think, if I may say so, speaking entirely personally, that a considerable part of this dilemma that we now face comes about through the tacit encouragement given by our representatives in the United Nations in the preceding Administration to the idea that this Government would sanction the creation of an international regime which would indeed take over a portion of the resources of our continental margin, as the Marine Science Commission so broadly hints.

I think personally, and I emphasize I am speaking personally now, that public opinion in this country will not tolerate any weakening of the American Nation's right to the essential mineral resources of our continental margin and, by the same token, I trust that administration policy will firm up American rights to continue the exploration of the deep sea.

But I must say, Senator, that I am far more concerned about the protection of the American mineral estate in our own continental margin than I am in the form which an international regime should take, because nobody knows yet how to structure one. What I am now concerned about is the danger that the very effort to acquire the necessary knowledge of the deep sea may be seriously inhibited by this moratorium resolution.

Senator METCALF. How are we going to determine this? You have made a reference to mineral law of the West, where we located claims and so forth which, I think, is a good analogy. Another analogy is the water law with which we are both familiar——

Mr. ELY. Right.

Senator METCALF. In the western area which grew up as a result of the needs and the uses of the people, there were differences in the common law and so forth. We have had the law of the sea that has grown up as a result of the great nations who have used the sea, both in a naval capacity and in military, and used it for commerce. All at once we have these people come in who have no experience with the law of the sea, and no experience with the usage that we have had on the high seas, and passed a resolution in the United Nations.

How are we going to finally resolve this? In our mineral law or our water law we have a court that does resolve it. But it seems to me that, to use an expression that Senator Stevens has used, this is blurred and shady and shadowed, and it is confused. How can a man today go out and invest in a venture with this United Nations resolution facing him?

Mr. ELY. That is the subject, really of your sixth question. As this discussion proceeds, it illustrates the care with which your committee has structured these questions. They seem to progress naturally from one into another.

The House of Delegates resolution suggests that the law should evolve through practice and experience, as the law of the sea generally has. Let the nations primarily engaged and capable of engaging in these deep sea operations, and there are not many of them, proceed as good neighbors to develop norms of conduct which would preclude claim jumping and eventually evolve toward some scheme of registration of claims which, in due time, may develop standards of diligence

by which you keep your claim alive. Nobody knows yet what the area of the diligence requirements should be.

I have heard it said, for example, that these manganese nodules, in an area harvested 9 by 12 miles every year, could supply half the cobalt production of the world. No one knows whether we are dealing with little areas like that or dealing with very large areas in a single claim. Our general thought, therefore, has been to let the law evolve.

The pressure is on, however, in the United Nations, for structuring some kind of a regime that will create instant international law, and which will somehow freeze these conditions.

The danger, is that while everybody is against a race to grab, which is a popular expression, nobody can grab the deep seabed very well now. It is rather difficult to get down there to do it at a depth of 2 miles or so. But if you begin to recognize paper claims of some kind, you create the evil that the mining areas of the West are quite familiar with—the paper mining claim—and how do you get rid of it, when it is held by a sovereign nation? What are the diligence requirements? Suppose a vast area is granted to country X, and after 10 years the United Nations or some registry office says: "You have forfeited your claim, you haven't done anything with it." The reply is: "We have spent millions of dollars in research on how to recover and process these manganese nodules, and we have been very diligent indeed." Is the U.N. going to send some kind of a fleet out there to chase them away? You create, by paper claims, the possibility of a "race to grab."

In the mining law you meet this problem by very strict requirements relative to time and diligence. The claim is good for a certain period. It is lost if it is not operated, and so on. But nobody has the information now to write these safeguards, against speculative claims to the deep ocean.

In due time perhaps they can be intelligently written. But that is no reason to postpone the acquisition development of the knowledge about these resources, how to gather them, how to put them to use, until you structure a theoretical regime to deal with problems that have not yet arisen.

My prepared statement discusses this in some detail, and I won't trouble you by reading it.

Senator BELLMON. Mr. Chairman, Mr. Ely, you have inferred by your statement that these claims might be claimed by a nation. Isn't it likely that the claims would rather be claimed by some corporations, some private group?

Mr. ELY. As a matter of international law a vessel going to sea in the mid-Pacific, let's say, to try to dredge up manganese nodules is operating there under the protection and under the sanction of some flag. It is a vessel with the rights and obligations of the law of the high seas. And while you are quite correct that in most cases the actual expedition would be privately owned and operated, it seems sensible that some nation which has the responsibility for the flag of that vessel should somehow be held accountable under international law for the conduct of the expedition which it has thus sanctioned. Consequently, there ought to be some way for holding to account the nations of the world which are through their nationals, or through vessels flying their flags, are carrying on these operations.

Senator BELLMON. Thank you.

Senator STEVENS. Mr. Chairman, I have got a copy of this press release now from the U.N. General Assembly and to get real specific, Mr. Ely, in terms of our Gulf of Alaska, and the activity that may well take place there next year that is beyond the 3-mile limit, the language of this press release leads me to the conclusion that they have placed in some sort of jeopardy, if we are to follow their lead, the exploitation of the oil and gas resources in that area, because they are talking again about beyond the limits of national jurisdiction.

We have never claimed, as I understand it, national jurisdiction in the sense that it has always been known in international law. We have claimed the right to exploit those minerals under our Outer Continental Shelf Act and have leased those lands several years ago. I think it could well push us into a position where the title of some of the leases we have already issued would be in jeopardy.

Mr. ELY. That is quite correct.

If the next step is a resolution of the Assembly saying that "We regard the boundaries of national jurisdiction to be thus and so" and suppose this hypothetical resolution states an interim boundary 50 miles from shore or 200 meters, then all operations seaward of that hypothetical boundary are subject to this very hazard you are describing.

I think there is serious potential danger to operations in the Gulf of Alaska from possibility of that type of retroactive establishment of a boundary on our exclusive rights to exploit resources.

I hope when they say beyond the limits of national jurisdiction, they mean beyond the limits of sovereign rights for exploitation and exploration, and they would, therefore, recognize that the "limit of national jurisdiction" is seaward of a 3-mile limit on national territorial jurisdiction.

Senator STEVENS. If they had only said beyond the limits of exploitability under the convention of 1958 it wouldn't be as fuzzy, but they have intentionally, it seems to me, created an area of twilight zone here as far as our offshore activities in this country.

Mr. ELY. I think you are unquestionably correct, and it flies in the teeth of the International Court of Justice concept of the rights of coastal nations which they say are inherent, *ab initio*. They are not dependent on any convention. They encompass the whole undersea prolongation of the coastal nation's land territory. In that case, the court was dealing with an area of the North Sea which was 194 miles from the coast of Germany. It held nevertheless that this area was within the competence of the coastal nations to divide by agreement among them.

Senator STEVENS. Mr. Ely, I notice there were several changes in this resolution as it came through the General Assembly. Could you provide us with a copy of the one that was adopted?

Mr. ELY. Yes; I will do that.

Senator METCALF. It will be incorporated in the record.

(The U.N. Resolution 2574–D reads as follows:)

GENERAL ASSEMBLY RESOLUTIONS, TWENTY-FOURTH REGULAR SESSION

The General Assembly

Recalling its resolution 2467 A (XXIII) of 21 December 1968 to the effect that the exploitation of the sea-bed and the ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction, should be carried out for the benefit of mankind as a whole, irrespective of the geographical location of States, taking into account the special interests and needs of the developing countries,

Convinced that it is essential, for the achievement of this purpose, that such activities be carried out under an international regime, including appropriate international machinery,

Noting that this matter is under consideration by the Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor beyond the Limits of National Jurisdiction,

Recalling its resolution 2340 (XXII) of 18 December 1967 on the importance of preserving the sea-bed and the ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction, from action and uses which might be detrimental to the common interests of mankind,

Declares that, pending the establishment of the aforementioned international régime:

(*a*) States and persons, physical or juridical, are bound to refrain from all activities of exploitation of the resources of the area of the sea-bed and ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction;

(*b*) No claim to any part of that area or its resources shall be recognized.

Mr. ELY. Your question 8 asks the effect of the issuance of leases beyond the 200-meter isobath on the establishment under our Continental Shelf Oil Act, on the establishment or extension of the U.S. Continental Shelf boundary claim.

If our interpretation of the law is correct then the issuance of these leases is evidence of national practice which is relevant to the interpretation of both conventional and customary law. At least 39 nations have asserted or exercised jurisdiction over submarine areas deeper than 200 meters. These details appear in appendix D to my statement.

Senator STEVENS. Does that list include the North Sea operation? I was going to ask you about the North Sea operation.

Mr. ELY. The North Sea is all at a depth less than 200 meters except the Norwegian Trough, but Norway has been recognized as having rights in the North Sea seaward of the Norwegian Trough, which is 2,000 feet deep.

Senator STEVENS. At least beyond the 2,000 foot.

Mr. ELY. Yes, Norway has made leases in the North Sea in water depths which are less than 200 meters but are situated some 250 miles from Norway, separated from Norway by the Norwegian Trough which is at least 2,000 feet deep.

But, as I go on, in response to your question 9, which says what effect does the aforementioned leasing procedure have on the establishment or extension of boundary claims through other nations' continental shelves, this is an intriguing question and one that requires rather careful answer.

On this I can only state my personal views. I think that the Convention on the Continental Shelf is declaratory of the customary international law as recognizing in the coastal States the exclusive sovereign rights in the submarine areas which are prolongations of their territory irrespective of depth of the overlying water, and that, consequently, the practice of the United States in making leases on its own continental margin in deep waters a practice which is relevant to the interpretation of customary international law applicable to all nations as well as interpretation of the convention. However, I don't believe that this is the same thing as saying that our jurisdiction only comes into existence as we drill wells successfully or otherwise exploit greater and greater depths.

It is true that our affirmative laws such as the Outer Continental Shelf Land Act, our laws relating to conservation and pollution, and so on, become operative with respect to specific development projects,

step by step, to greater depths. But I believe that under the International Court of Justice North Sea opinion the coastal nation has inherent, *ab initio* sovereign rights with respect to the entire submerged continental land mass in the sense that it has the right to exclude all other nations from exploration of the submerged continental land mass. I believe that any nation which did come on the continental margin at depths greater than 200 meters off our Atlantic or Pacific Coast would automatically come within the jurisdiction of the United States. This inherent power is not paralyzed, awaiting success of the foreign exploration in Santa Barbara Channel. We have an inherent right to prohibit exploration there by foreign as well as domestic operators. I think the domestic mineral laws of each nation become applicable to each enclave that is added to the area of exploitability, but this does not mean that the coastal nation lacks power to decide that no mineral exploitation under those laws or any others shall take place on the continental margin.

Senator METCALF. But isn't there this rolling jurisdiction? Somebody has made an analogy of a springing use of the law, as you continue to explore and then develop and finally exploit, doesn't the jurisdiction continue to roll seaward?

Mr. ELY. Again speaking entirely personally, I must say, I think a better analogy perhaps is based on the situation you are all most familiar with, a withdrawal by the United States of its own public lands. This withdrawal excludes all claims under authority other than the United States.

The United States may or may not pass laws for the use and occupancy of those areas. If it does not, nobody else can come in. If it does, then its domestic law becomes operable within that withdrawal to the extent that Congress says so.

I regard the continental margins of the world, that is the submerged continental land mass; which is a prolongation of the land territory of a coastal nation as being recognized by the International Court of Justice to be within the inherent exclusive sovereign rights of the coastal nation limited to explore and exploit, *ab initio*. All other nations are excluded without any affirmative action by the coastal nation. No proclamation, no occupation by the coastal nation is needed to exclude others.

Now, it is true that its mining laws "roll forward," to use that expression, step by step as exploitation continues at successively greater depths. But I don't think that our right to exclude a foreign nation from exploiting the continental margin off New England is dependent at all on our success or failure in drilling a well at the depth of 400 meters in Santa Barbara Channel. I think we always have had that right, under international law, to exclude foreigners from our own continental margins and this right isn't dependent upon our own success or failure in exploitation.

But the Outer Continental Shelf Lands Act as domestic legislation becomes operative, obviously, as to each lease in progressively deeper water and it becomes binding with respect to our own nationals and foreigners insofar as it deals, for example, with interference with navigation or fisheries. Consequently, a nation which may have had a clear right to fish in an area off our continental margin may find its rights physically interferred with, and lawfully so, by structures

built under the authority of the Outer Continental Shelf Lands Act. In that sense, and in that sense only, is there a rolling jurisdiction.

If you use jurisdiction in the sense of the applicability of the domestic law, yes, it rolls forward as exploitation continues.

If you use jurisdiction in the sense of the right to exclude others, then that jurisdiction is not dependent on exploitability. Jurisdiction in that sense, the exclusionary sense, under the International Court of Justice decision always existed in the coastal nation.

Senator STEVENS. We saw that often enough off of South America when they used to hit our tuna boats so often in comparison, is that what you are saying? They can exert whatever jurisdiction they can exert in the national sense they will exert, and the question is whether you can take them into court in an international sense.

Now, in terms of the exploitability, whether or not they can set up an exclusive exploitability of the subsea resources would be an entirely different matter.

Mr. ELY. Quite so.

This is—pardon me.

Senator METCALF. Go ahead.

Mr. ELY. This is a point that needs emphasis.

The action of the South American nations in asserting jurisdiction over territorial waters out to 200 miles from shore in order to control fishing has no foundation in the law of the Continental Shelf. The law of the Continental Shelf doctrine deals with the quite limited sovereign rights over exploration and exploitation of the resources of the seabed.

Article 3 of the convention disclaims any relation with the overlying water column or the surface or the airspace above.

Consequently, the west coast nations of Latin America couldn't find any comfort whatever in the Continental Shelf Convention or the Continental Shelf doctrine under customary law to justify their seizure of the tuna vessels. They have to get to that point by asserting rights over territorial waters vastly in excess of any recognized by customary international law, 3 miles, 6, 12, or whatever. Their claim of 200 miles of territorial jurisdiction has no foundation in customary international law and certainly none in the Convention on the Continental Shelf.

There is another related point, Senator. I have heard it frequently said that one of the reasons why the United States should endorse a narrow Continental Shelf is that it is important to our country that a 3-mile limit be maintained with respect to the territorial waters because if a wider territorial sea were recognized such as 6 miles or 12, important straits of the world which are now high seas would be closed. The argument is that a broad Continental Shelf of jurisdiction carries with it the probability of what I call "juridical osmosis." Somehow the seabed's jurisdiction, it is feared, seeps up through the waters and nations, because they have jurisdiction for 400 kilometers to sea over the seabed, will somehow base a claim to territorial water jurisdiction on that same width.

The trouble with that argument is that it proves too much. The 200-meter isobath in most parts of the world extends far to sea beyond 3, 6, or 12 miles. It may go 200 or 400 miles to sea, and if there were anything to this "juridical osmosis" argument, then the battle is already lost.

The Navy and others who say they are fearful of a wide Continental Shelf because of the effects I have indicated, should look to the width of water which overlies the 200-meter isobath. Nobody proposes to retract the 200-meter isobath to 100 meters or 50 meters or 10 feet. It would be curious to know how many of the 116 straits of the world that the Navy believes might be closed by the widening of the territorial sea beyond 3 miles, would already be closed if the 200-meter isobath imported, by "juridical osmosis," transposed jurisdiction from the seabed up to the surface.

This is an argument that should be instantly abandoned because it would be fatal to our maintenance of the 3-mile zone.

Senator METCALF. I am somewhat intrigued by your argument that despite the fact that the Geneva Convention separates the water column above, from the subsoil within territorial jurisdiction, its usage in the 3-mile and 12-mile limit had nothing to do with our development of the seabed. I am intrigued with this because of the Geneva Convention terms exploitability and adjacency. Is it your contention that we have that adjacent area whether it is exploited or capable of development or not at the present time?

Mr. ELY. Yes, in the sense that under article 2 of the convention we have the inherent right to exclude all other nations from the exploration or exploitation of the American continental margin irrespective of depth of water or distance from shore. By continental margin I mean the submerged continental land mass down to its junction with the abyssal ocean floor.

Under article 2, which is frequently overlooked, we have the right to exclude as a matter of customary international law. This right to exclude is not dependent upon "occupation effective or notional," in the language of article 2.

The effect of the exploitability criterion is that, as among the 40 parties to the Convention on the Continental Shelf, we agree with each other that our affirmative application of our own mining and other laws to these areas marches with our exploitation of the areas. But the fact Congress may or may not decide to explore and exploit does not impair our right to exclude.

Senator STEVENS. Mr. Ely, let me interrupt you right now. Senator Bellmon has to leave. He has a very interesting question about where, if your theories are pursued in terms of this right to exclude from the Continental Shelf, where do we come in relation to Cuba where we have an adjacent nation which has equal rights under this international doctrine, where do we come in terms of the limits between us on the high seas off the shelf?

Mr. ELY. Yes.

This particular shelf, (I use "shelf" as shorthand for "continental margin"), appertains to two nations which are opposite each other. Obviously there must be a boundary line of some kind between them.

Article 6 of the Convention on the Continental Shelf provides, as between nations that are parties to that convention, that the boundary line in the absence of special circumstances or agreement, shall be the median line between them, each point of which is equidistant from the nearest points on the opposing coasts.

If the two nations are not parties to the convention—and Cuba is not—the question is, What shall be the boundary to be fixed by custom-

ary international law? In the North Sea case the court had that kind of a problem with respect to adjacent states, not opposite states, but adjacent (Germany, Denmark, the Netherlands), and the court said that article 6, paragraph 2, of the convention with respect to adjacent states, does not state customary international law but only conventional law. It further held that Germany was not bound to have her boundaries vis-a-vis Denmark or the Netherlands drawn on the equidistance principle that each point on that line shall be equidistant from the nearest point of the two nations' coasts. The effect, due to Germany's concave coastline, would be that the boundaries with her neighbor drawn on an equidistance principle would pinch Germany off from a fair share on the median line between Germany and Great Britain. So it declined to find the equidistance principle as customary international law, in disputes between adjacent states.

It did not indicate what its views would be as between opposite nations, such as Cuba and the United States.

Does article 6, paragraph 1, which deals with boundaries between opposite coasts, and say the median line shall apply in the absence of agreement or special circumstances, state customary international law? If it does, then the median line would prevail as the guiding principle as between Cuba and the United States. If article 6, paragraph 1, does not state customary law, then, assuming that the nations could not agree, they would go back to the International Court of Justice to get a declaration of customary international law on that subject. In general, my personal feeling is that the median line principle would be the primary criterion under customary international law. But I believe, in light of the court's discussion of the proportionality of the length of coast and the effect of small islands you would have some modifications of that principle.

Senator METCALF. I wish you would comment on article 5 of that agreement, especially since we have had some discussion about subsection 8, which states that the consent of the coastal states shall be obtained in respect of any research concerning the Continental Shelf and undertake there.

Now, because of that clause especially, the scientific community has come in and asked for a narrower shelf because they fear that they would be unable to get the consent of the coastal state concerned if we have a broad Continental Shelf, and they recommend that we have as much international water as possible.

Under the theory that you have promulgated here this morning the United States and any other nation has jurisdiction over a wide and relatively extensive Continental Shelf.

Mr. ELY. This is a troublesome question. First, if worst should come, and if we were faced with the choice of yielding a portion of the minerals of the continental margin and accepting a narrow shelf, in order simply to preserve our right of research on somebody else's Continental Shelf.

Senator METCALF. And our defense rights on the high seas.

Mr. ELY. If we had to say it is one or the other, shall we accept a narrower shelf in order to get research rights on the other fellow's shelf, I would say keep our minerals at the sacrifice of research on the other fellow's shelf. But I don't think the issue is quite that blunt.

I think it is arguable that the exploitability criterion may have some

relevance here as the index of the applicability of the affirmative laws of the coastal nation to the continental margin, and that we might properly construe paragraph 8 of article 5 as requiring the consent of the coastal nation only within those areas that it had itself undertaken to exploit, leaving available to research the unexploited remainder of the continental margin without the coastal nation's consent.

I don't say this is a firm opinion, or is explicitly spelled out in the convention. Of course, it is not. Moreover, there are ambiguities as between paragraph 1 of article 5 and paragraph 8.

But I do say that this type of uncertainty can be better cleared up by parallel uniform declarations of the 40 parties to the convention than it can by using this as a reason for convening a new conference of 135 nations to write a new convention that will arrive at adverse conclusions with respect to the essential, which is the protection of our minerals on our own continental margin.

Senator METCALF. I think, right at this point, it might be well to put in the record that very ambiguous section one of article 5 which says:

> The exploration of the Continental Shelf and the exploitation of its natural resources must not result in any unjustifiable interference with navigation, fishing or the conservation of the living resources of the sea, nor result in any interference with fundamental oceanographic or other scientific research carried out with the intention of open publication.

And then we come down here to section 8 which says we have to get the consent of the adjacent nation and, as you have laid out the theory this morning, a nation has complete control of its adjacent seabeds.

Mr. ELY. With respect to exploration and exploitation.

Senator METCALF. Yes.

And certainly some of that exploitation is going to interfere with fishing.

Mr. ELY. Of course, it is.

Senator METCALF. And navigability.

Mr. ELY. Of course, it is.

Senator METCALF. So I am glad that I am not a judge on the International Court having to justify it.

Mr. ELY. I am glad I am not either. But this type of peripheral or marginal uncertainty in treaty interpretation is of a kind that can be cleared up by uniform declarations of parties to it.

Senator METCALF. By the customary usages that have grown up just as we have mentioned grew up in mining law, and water law.

Mr. ELY. Exactly.

If you have a uniform or nearly uniform practice or usage, that settles the matter. If you don't, then get the parties together and say "We are all under attack here because somebody says convene 135 nations to write a new convention because 40 of us can't agree what we meant. Can't we 40 agree; or the major maritime powers agree on this interpretation?"

Senator METCALF. This is what has concerned me about the U.N. resolution, that so many nations who have not participated or are not accustomed to the use of the sea, the ordinary commerce of the sea, have gotten together and have violated what is an ancient and traditional common law that has grown up in international law.

Mr. ELY. I think the moment of truth is just about here. The decision has to be made by the American Congress as to what national policy shall be with respect to this resource, which is so peculiarly within the jurisdiction of this committee; namely, shall we or shall we not weaken our very legitimate claims to the exclusive rights to the minerals of the continental margin? If this means that we take a firm position in opposition to friends in the United Nations, this is regrettable, but so be it.

In closing, Mr. Chairman, first I want to thank you for the most generous time you have given me. I would like to refer to appendix F to my statement which are extracts from the judgment of the International Court of Justice in the *North Sea* case. These deal with the specific points that concern today's discussion. See article 19 of that judgment, which speaks of the coastal nation's inherent rights, "ipso facto and ab initio," the Continental Shelf that constitutes a natural prolongation of its territory. After this discussion it says that—

> 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 nation 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.

I say let's keep it that way.

I have prepared a short summary of the personal, rather strongly held views that I have expressed in answer to your questions, and with your permission, may I place that in the record as though read so that you will have in one place what I have tried to say in response to some of your questions about my views on policy as well as law.

Senator METCALF. I think it would be appropriate since both Senator Stevens and I are here, and this is a very important statement and we have a few minutes before the vote, I think it would be appropriate if you would read it.

Mr. ELY. Thank you, Mr. Chairman. These are my personal views as distinguished from my presentation.

Senator METCALF. We call you here because we know of your background and knowledge and expertise on this, and we are delighted to have you express your personal views.

Mr. ELY. Thank you, Mr. Chairman. But I do not attribute to the American Bar Association anything that I am about to say.

In response to the committee's invitation to speak generally on Continental Shelf problems, I shall take the liberty of stating on my own strongly held views with respect to four general lines of inquiry which run through your committee's questions addressed to me on November 26. In so doing, I speak for myself alone.

First, as to primary policy objectives: In my opinion, sound national policy requires that exclusive American jurisdiction over the exploration and exploitation of submarine minerals be exercised over the widest possible areas adjacent to our coasts, consistent with our rights and obligations under existing international law.

Second, as to existing rights of the United States: Under existing international law, both customary and conventional, the United States now possesses exclusive sovereign rights with respect to the exploration and exploitation of the minerals of the submarine areas which

constitute the "prolongation" of U.S. territory. These areas of exclusive American mineral jurisdiction include the whole continental margin—that is, not only the Continental Shelf but also the continental slope, down to the junction of the continental land mass with the abyssal ocean floor, irrespective of depth of water or distance from shore—together with the landward portion of the continental rise which overlies that junction. All other nations are excluded, *ab initio*, from the exploration and exploitation of the resources of the American continental margin, and our own laws, including the Outer Continental Shelf Lands Act, become applicable to them step by step as exploitation progresses down to this ultimate limit, the seaward edge of the submerged continent. As a corollary, similar rights must be recognized in the coastal nations with respect to their own continental margins. We should not try to chisel them away from our own advantage.

Third, as to the implementation of policy: The resources of the continental margin adjacent to our coasts are essential components of the American mineral estate, on which our national survival may ultimately depend. Our control of them should be firmly maintained. The United States should declare and maintain its exclusive rights with respect to these resources, and should not agree to a moratorium on their exercise, or a more restricted boundary, or a cession of any portion of them to any new international regime. The separate question of whether a portion of the Government's revenues from submarine minerals should be earmarked for foreign aid is a matter for decision by the Congress, not for decision by any international body. I would personally favor a generous policy with respect to money, as contrasted with control of the resource.

Fourth, as to the relation between our rights on the continental margin, and the deep seabed regime: The decision to stand unequivocally on our present rights under the Convention on the Continental Shelf, and to assert those rights as including the whole submerged continental landmass, irrespective of depth or distance, should not be influenced at all by decision of the separate question as to what kind of international regime should be created to function seaward of this area of exclusive national jurisdiction. As to the form which that regime should take, I would keep our options open. There is no precipitate need to foreclose any of them. It will take at least a decade to acquire the facts necessary to a sound decision. But, whatever form the deep sea regime may take, the essential point is that the American mineral estate in our continental margin is not to be traded off, not to be given away, not to be transferred to any international agency, no matter how excellent its purposes may be. The development of the mineral resources of the submerged prolongation of the territory of the United States should continue to be controlled exclusively by act of Congress.

Thank you, Mr. Chairman.

Senator STEVENS. If I may I want to say I agree with you 100 percent. I don't know if you know about this particularly, but we had jurisdiction off of Alaska in the fishing areas back in the days when we used to seize the sealers and whalers of other nations, the United States exerted exclusive jurisdiction. We gave it away in the interests of the so-called right of free passage for navigation without regard

to drawing the fine distinctions that you are asking us to draw so far as the mineral resources are concerned and I think had we had someone standing up for what had been the customary rights at that time, we might still have some of our fishery resources of Alaska which have been destroyed by foreign exploitation and without regard to conservation practices.

I really agree with you on this mineral resource. I think we would be in sad shape if we listened to some of the people who would like to have us just give up these resources without regard to the fact that we have that jurisdiction today, and we can keep it.

Mr. ELY. Mr. Chairman, before I leave the stand, I suggest that you may want to have in your record some other material. I don't take responsibility for these, but they are significant statements. One is the resolution of the American Mining Congress of October 5, 1968, on undersea mineral resources. One is a resolution, is a statement of policy of the American Petroleum Institute. One is a statement of policy of the Board of Directors of the American Institute of Mining Engineers. These speak for themselves, but I think the general tenor of them all is one of concern about the minerals of the submarine areas adjacent to the United States. In my prepared statement you will find a long footnote which is an extract from a paper by Professor Jennings of Cambridge University, which is contained in volume 18 of the International Comparative Law Journal, and I commend this to you. If you wish I will furnish Xerox copies of the article. He reaches conclusions substantially in accord with those I have stated.

Senator METCALF. I concur that these opinions of the various organizations and resolutions are appropriate and they will be included in the appendix of the testimony unless there is objection.

Mr. ELY. I thank you very much, Mr. Chairman. I can't express adequately my appreciation for your time and your courtesy and attention.

Senator METCALF. You have our thanks and I think the whole committee is grateful to you for giving us your time in discussing a problem about which all of us are concerned and, at the same time, we are trying to grope for solutions at this time rather than wait until the solutions are presented to us as an accomplished fact by actions of other nations or other committees.

Mr. ELY. Thank you, Mr. Chairman.

Senator METCALF. I am going to try, with the permission of Senator Stevens to run the hearing through until there is a vote. Now I hope that Mr. Laylin, who is the chairman of the Committee on Oceanography of the American Bar Association, will come forward and testify.

Mr. Laylin, you have heard the discussion, and I hope that you will depart from your prepared statement, which will be put in the record as if read, and discuss with us some of the questions that we have raised.

STATEMENT OF JOHN G. LAYLIN, ATTORNEY AT LAW, WASHINGTON, D.C.

Mr. LAYLIN. I will try not to repeat.

Senator METCALF. If you repeat it would give an accent to the things that Mr. Ely has said.

Mr. LAYLIN. Well, I think it would be more interesting to perhaps dwell on the things where I do not agree with him.

Senator METCALF. Well, fine yes.

Mr. LAYLIN. There is one Freudian mistake I discovered on the front page of my prepared statement.

Senator METCALF. You can read any part of the statement that you wish.

Mr. LAYLIN. I went home with a bad cold last night and I didn't read this until this morning.

Senator METCALF. Why don't you sit down.

Mr. LAYLIN. I see that my secretary, who is very partial, has changed "disapproved" to "approved." I said some of my views are strongly disapproved by some members of my committee, and she said "approved." So will everybody make that change, the last sentence of the first paragraph. Nobody disapproved so articulately and persuasively as my friend, Mr. Ely, who has just testified.

Senator STEVENS. It should be "disapproved."

Mr. LAYLIN. It should be "disapproved." There are those who approved but maybe not so strongly.

Well, I shall read a little bit to save time.

My name is John G. Laylin, I am an attorney practicing in Washington with the firm of Covington & Burling. I am currently chairman of the Committee on Oceanography of the Section of International and Comparative Law of the American Bar Association. The views I express are my own. They are not necessarily the views of members of my committee. Some of my views are strongly disapproved by some members of my committee.

The American Bar Association in August 1968, adopted a resolution which is attached to a joint report Mr. Ely has put in the record. That resolution is the only official expression of the American Bar Association on the subject under inquiry. It does not take a position on the issue of the desirable width of the treaty Continental Shelf or the interpretation of the definition in the 1958 Convention.

This issue has been the subject of lively debate in my committee. No position has been taken by the committee beyond agreeing that the treaty shelf under the test of adjacency will never extend beyond the foot of the continental slope.

While the views I express are my own, I have had the advantage in arriving at certain conclusions by participating in the discussions between spokesmen on my committee for the different schools of thought. Certain of them have pressed for acceptance of the thesis that the outer boundary of the shelf now is at the foot of the continental slope, that is Mr. Ely's position. This is, of course, the position taken by the National Petroleum Council. Others have adhered to the view that there is no basis for the contention that the treaty shelf today extends beyond the deepest isobath of proven exploitability.

From the discussion it has become evident that those who have primarily in mind the extraction of oil are interested only in the area landward of the foot of the continental slope. They have been informed, it would appear, that there is little likelihood of oil pools below the bed of the deep sea. In consequence they are not concerned with the regime to be established for the deep seabed. It does not matter to them that their demands may hurt the efforts of the United States to bring about a satisfactory regime for the deep sea.

In contrast members of the committee who have in mind the interests of hard metal miners find themselves agreeing with many of the contentions of the Navy and the scientists. They do not object to a broad shelf, but they do object to sacrificing the chances of reaching agreement on a satisfactory deep-sea regime by insisting willy-nilly that the United States now take the position that the outer limit of the shelf is now at the foot of the continental slope.

My own view is that the line should be established at the place that best reconciles the interests of all groups in all countries.

Senator METCALF. Counsel for the committee has called my attention to the fact that it is the contention of the National Petroleum Council that that is the ultimate limit, not the limit now.

Mr. LAYLIN. Well, I wish they would stay put. They keep changing.

Senator METCALF. It is, as I understand it, the present contention of the National Petroleum Council that the ultimate limit, not the limit now, is at the foot of the Continental Shelf.

Mr. LAYLIN. Well, I am glad to hear that. They are coming around to my view.

Senator METCALF. Yes. Is Mr. McKnight here?

Mr. MCKNIGHT. Yes; I am right here, sir.

Senator METCALF (continuing). Mr. McKnight, would you identify yourself?

STATEMENT OF MAXWELL S. McKNIGHT, ASSISTANT SECRETARY-TREASURER, NATIONAL PETROLEUM COUNCIL

Mr. MCKNIGHT. Yes; I am Maxwell Stewart McKnight of the National Petroleum Council, assistant secretary-treasurer.

The position we have taken in our report, and I see a copy is right here and it can be placed in the record.

Senator METCALF. It will be incorporated, by reference, into this hearing record and held in our subcommittee files.

Mr. MCKNIGHT. The National Petroleum Council's report speaks for itself, Senator, but the council's position is that expressed by Mr. Ely. National resource jurisdiction moves forward as Mineral Seabed Resources are explored. However, in view of section 2 of article 2 of the Geneva Convention and as stated by the World Court, the coastal state has an exclusive right and nobody else may explore or exploit on the shelf without its consent. Therefore, ultimate coastal state jurisdiction depends upon "adjacency," and, meanwhile, this is a protected right excluding all other nations. Where does adjacency take you? The National Petroleum Council felt in terms of the legislative history of the Geneva Convention, the geological considerations, and the political realities of the situation, adequately would extend to the seaward edge of the continental margin.

Mr. LAYLIN. If they agree with me there is no quarrel.

Senator METCALF. Yes.

I won't want to argue with you. All we are searching for are different ideas.

Mr. LAYLIN. Correct.

Now, this that we are discussing now is the legal interpretation of section 1 and perhaps section 2. The argument on section 2 is really a question begging argument. It says you have exclusive right on the

shelf. Then you go back to section 1 and what is the shelf? The shelf is out to the limit of exploitability. So I read Jennings' article last night—

Senator METCALF. Mr. Ely says the shelf is out there whether we have exploited it or not.

Mr. LAYLIN. Are you talking about the geologic shelf or the treaty shelf?

Senator METCALF. It is my understanding that he says we have a right to deny access to the geologic shelf whether we exploit it or not.

Mr. ELY. You are quite right, Mr. Chairman. I say that under the customary international law, which the court said the articles 1 and 2 of the Convention "enshrine," the right of exclusion of the coastal nation exists *ab initio* as encompassing the entire prolongation of its territory; namely the adjacent continental land mass, irrespective of the coastal nation's exercise of that jurisdiction to carry an exploration or exploitation itself.

Mr. LAYLIN. That is not the treaty shelf. That is his view of customary international law. Bear in mind the World Court was talking about the North Sea all of which is shallow. It was not talking about the deep sea. That is pure obiter in the World Court opinion. I am not taking a position one way or another as to the customary international law at this point.

Senator METCALF. We are delighted to have you present your opinion and your views because this committee is interested in all opinions.

Mr. LAYLIN. Well, what the customary international law is on the subject is not a thing on which anyone is going to give an opinion lightly. I would certainly want to consider it more.

Senator METCALF. Do you disagree with Mr. Ely?

Mr. LAYLIN. I think Mr. Ely is very sincere in believing what he says but I don't think he has anything to support it.

Senator STEVENS. Do you disagree that when you can identify the shelf, the continental margin or—I call the terrace and he says margin, it means the same thing to me.

Senator METCALF. This seems to be a question of semantics.

Senator STEVENS. We have a glossary the staff provided us at least anyway down to the ocean floor where the seaward edge of the continental land mass meets the ocean floor, don't you agree that is our land?

Mr. LAYLIN. That we have dominion, jurisdiction over it?

Senator STEVENS. Jurisdiction over who does what with it?

Mr. LAYLIN. No.

Senator STEVENS. What happened to the concept of exploitability under the 1958 convention then? Even if under customary law didn't give it to us didn't that give it to us?

Mr. LAYLIN. We have the agreement of 38 nations, maybe it is 40 now, that have ratified the 1958 convention, that they will respect our exclusive right to exploit the Continental Shelf adjacent to our coasts to the depth of proven demonstrable exploitability.

Senator STEVENS. And that is, as the chairman says rolling forward every day so I think it is at the edge of the shelf anyway.

Mr. LAYLIN. That is right, it is rolling toward the edge.

Senator STEVENS. Technical people tell me we can go as deep as we want to go if we can afford it today. It is not exploitability, it is commercial value and that is not in the convention.

Mr. LAYLIN. Well, there was an institute which was considering this thing, this subject, in Miami just last week, and the consensus there was that by exploitability they meant practicably exploitable, commercially exploitable.

Senator STEVENS. Well, it didn't say so. It didn't say it has to be commercially feasible, it just says exploitable.

Mr. LAYLIN. You are right, but they thought that was a reasonable interpretation of that word.

Senator STEVENS. You know, if we found a very rare resource out there it might make a difference. The commercial value of the thing. I don't think was in the 1958 convention. What I am interested in pursuing is the problem I thought that the American Bar Association had agreed with the expression that Mr. Ely had just set forth. Are you representing another committee? Aren't you on the same committee?

Mr. LAYLIN. Yes, we are, and he is on another committee of the natural resources, and then I am on his committee of which he is chairman of the American Branch of the International Law Association.

Senator METCALF. Let me read this to you, Mr. Laylin.

Mr. LAYLIN. He read—excuse me.

Senator METCALF. This is the American Bar Association declaration.

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.

Mr. LAYLIN. May I interrupt? That is Mr. Ely's position. Now, the next sentence is my position.

Senator METCALF (continuing). You signed this whole report?

Mr. LAYLIN. Yes, read, if you will, the next sentence.

Senator METCALF. "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." So you subscribe to this doctrine of rolling jurisdiction, as soon as it is exploitable?

Mr. LAYLIN. Correct.

Senator METCALF. Well now, what happens upon exploration?

Mr. LAYLIN. Well, that——

Senator METCALF. We haven't exploited it. It isn't technologically feasible or commercially feasible but we have research going out here in this land mass, and we are trying to find a way to put our oil drilling rigs or our vacuum cleaners to suck up the nodules or whatever they are, out here in an area that is not exploitable, and then all at once it becomes commercially feasible. Is that the time at which we acquire jurisdiction?

Mr. LAYLIN. That is right, sir.

Senator METCALF. Well now, suppose, to use—and I am just searching for answers—just to use an example used by Mr. Ely we find off the coast of Santa Barbara we can go out a certain distance. Does that mean we can go out the same distance all the way around the United States or all the way around any other country?

Mr. LAYLIN. That is the way I read it and so can everybody else.

Senator STEVENS. But if we go out and get a nice patented way to do this at 600 meters, whatever the measure is, and the other country

doesn't, they are up to only 200, can we go out there, can we operate at 600 feet because their technology only goes to 200?

Mr. LAYLIN. Well, I think we all agree that it is to the deepest point at which anybody has proven exploitability.

Senator STEVENS. It seems to me that is such a subjective thing to read into international law that we are going to get to the point where we really were in Alaska. I really don't understand how you read the depth of the water into the North Sea Continental Shelf cases of Germany, Denmark, and the Netherlands. I don't see anything in there where it makes any difference whether the tidal water went out 400 miles or whether it went out 40 feet. They are talking about the land mass, the natural prolongation of its land territory into and under the sea exists ipso facto and ab initio by virtue of sovereignty over the land. That is all we are saying.

Mr. LAYLIN. Senator, I am informed that the entire surface area that was concerned in that case was within the area of exploitability. There wasn't any question of that.

Senator STEVENS. What difference does it make if the court is deciding the matter on the basis of the customary international law without regard to any convention, read that in terms of my State. Are you familiar with the fact that off the north of Alaska you can go out probably 60, 80 miles, you know knee deep. It has got a tremendous sea area there that is just——

Mr. LAYLIN. Shallow.

Senator STEVENS. The jurisdiction is now in question between Alaska and the United States, as a matter of fact, but what difference does it make in terms of whether it is within the——

Senator METCALF. What is this talk about Alaska and the United States? I thought Alaska was a part of it.

Senator STEVENS. We are fighting with the United States all the time but we had jurisdiction up there.

The point I am trying to make is I don't see how that makes any difference. You say that this was within the area of exploitability and then you have to read this decision to say the judge knew you were in the area of exploitability and you can't take this beyond the area of exploitability because he really didn't mean to say what he said; you would take it he said the area of Continental Shelf that constitutes a natural prolongation of its land territory within the area of current exploitability they have jurisdiction, isn't that right?

Mr. LAYLIN. My main point is that they didn't make a decision on this question because the question wasn't before them. They were dealing with an area that is admittedly on a Continental Shelf.

Senator STEVENS. They did go into it. They said in the sense that if the coastal state does not choose to explore or exploit the areas of its shelf appertaining to it that is its own affair but no one else may do so without an express consent.

Mr. LAYLIN. That is right.

Senator STEVENS. So they are saying without regard to its exploitability the natural extension of the land mass is a matter of national jurisdiction. Do you disagree with that? I would be interested because I would like to be able to interpret at the U.N. what the U.N. did last week consistent——

Mr. LAYLIN. Well, Senator, the question wasn't before them at that point. It was admittedly exploitable. If they had been dealing with an area and one of the sides had said "This isn't exploitable" then they would have had to make a decision. But the question wasn't raised.

Senator STEVENS. What do you do then, again, Mr. Chairman, getting back up home what do you do, if someone comes offshore Alaska and it is out beyond the area of known exploitability and they say "We have got a means we think to develop this area and we can suck up some gold from down there cheaply and even at the present price we can sell at a profit, we want exclusive rights to go in there," is the United States going to say "Sure, go in there and if you do prove exploitability you have got exclusive rights," or do they say "no, you can't go in there until you prove you can."

Mr. LAYLIN. It is perfectly clear that if a foreign nation demonstrates exploitability off our coast within the area of adjacency, and I agree with Mr. Ely that adjacency goes out to the foot of the slope, once he demonstrates exploitability he demonstrates the area is part of our Continental Shelf under the treaty.

Senator STEVENS. Does he have any rights?

Mr. LAYLIN. He has a right to explore but if he exploits then he is out of luck.

Senator METCALF. He has the right to explore but the minute his exploration is proved commercially feasible then he changes the whole jurisdiction.

Mr. LAYLIN. Correct.

Senator STEVENS. Where do we get the jurisdiction to keep up with what he is doing? This is not hypothetical. I happen to know there are a couple of vessels off our shore, there were last year and will be next year. How do we get the jurisdiction to keep up with what they are doing? They have a boat out there, they are beyond the 3-mile limit and out on the surface of the water and there with foreign and scientific apparatus that is foreign to us, some new invention, how do we know they reach the area exploitability unless we say:

By our very rights we have a right to know what you are doing because you are over an area that we have jurisdiction over.

Mr. LAYLIN. Well, I am the last one to say that this present definition is perfect. It does have this difficulty that it is a changing line, and there is the problem of ascertaining what is the depth at which exploitation is practicable now.

But, within that framework we have the contour of the bottom of the sea, and we can tell by the distance that he is from shore how deep the water is where he is exploring.

Senator STEVENS. We will turn it around. I think your definition would fit only the United States, if I may say that respectfully. Can you think of any nation in the world where the U.S. Smelting & Refining could send a boat off and sit there and start exploring without their consent, that it wouldn't be seized, if it was over there, the extension of their natural land mass? I really can't.

Mr. LAYLIN. Well, that is a question of fact.

Senator STEVENS. But you are urging upon us a doctrine that in practical application throughout the world would leave us and our international business machinery at the complete mercy of those who adopt another approach, and you are saying we should adopt this ap-

proach here because we are intellectually honest and we think that commercial exploitability should be read into the 1958 convention.

Mr. LAYLIN. Senator, I am not urging this definition on the United States. The United States has accepted it, it has ratified. I ask the United States to respect what it has agreed to.

Senator STEVENS. It is not my understanding they did that. As a matter of fact, I just put the speech in the record that I was prepared to give to the American Bar Association and I have to respectfully disagree with you because I think they knew what they were doing at the time they did it and exploitability meant what it meant then and still means the same now and that is capable of exploitation.

Mr. LAYLIN. Whether or not it is practicable.

Senator STEVENS. Whether or not it is commercially feasible.

Mr. LAYLIN. Yes. Well, that certainly is an open question.

Senator METCALF. That is Mr. Ely's point. That we have this right to deny access at least to the outer limits, whether we can exploit it commercially at the present time or not.

Mr. ELY. That is right. If I may read you a paragraph of Professor Jennings right on that point. He says:

> The conclusions would seem to be, then, that the resources of any area which is "appurtenant," in the sense of being geomorphologically or geologically a part in physical fact of the land mass, must by general international law be deemed already vested in the coastal state; but, as between States which have ratified the 1958 Geneva Convention on the Continental Shelf, a particular treaty regime applies to that part of the "appurtenant" area which admits of exploitation—whatever that may mean. For the test of the applicability of the treaty regime is not, of course, actual exploitation, but exploitability; a test which the advances of technology have inevitably rendered more rather than less elusive. Indeed, the remaining margin between the extent of a state's rights and obligations in general law and its rights and obligations in general law and its rights and obligations under the Convention, if it be a party to it, must now be a matter for mainly theoretical speculations; for one who is a party cannot be disbarred by the Convention from relying upon the general law, and indeed must do so in relation to non-parties.
>
> Thus the exploitability test, though it serves to extend the particular treaty regime to areas beyond the 200-meter contour, provides no reasonably practical and clear outer limit, within the limit laid down by general law and embodied in the Convention itself in the term "adjacency." It may well be, therefore, that the exploitability clause could now for practical purposes be regarded as functus officio, and the extent of Continental Shelf jurisdiction government by the Convention be regarded as approximating to that sanctioned by the general law. This would seem to be a practical as well as a logical solution of the problem.

Senator METCALF. Do you have a comment on that, Mr. Laylin?

Mr. LAYLIN. Yes, I read it last night. I know Jennings very well. I have very high regard for him. But he engages in the same question begging that our friend, Mr. Ely, did on section 2. It says you shall have exclusive rights on your own shelf but the question is—what is the shelf; and you go back to section 1 again and there one certainly finds an exploitability test. I don't want to be in the position, Senator, of having been present at the creation of this definition, but it is what we have, and what I think was most important, and was overlooked in the testimony that has been given before is the effect of this other interpretation on the attitude of other nations toward us. There are those who think that the assertive position taken by some has brought on this unfortunate resolution that was adopted on Monday. I develop that thought a little bit in the summary to my proposed statement.

Senator METCALF. Now, as soon as we, in the United States, develop a technology of exploitability, doesn't that apply to every other nation in the world?

Mr. LAYLIN. That is my opinion.

Senator METCALF. So that if we can hang a drilling rig that is a mile long underneath a platform out on the Continental Shelf, say 1,500 meters or something of that sort, then that extends the Continental Shelf of every other nation in the world.

Mr. LAYLIN. That is right.

My point is, I think it a pity to have stirred up the other nations in the world by what certainly looks to them like a grab beyond what the treaty now gives when we are going to get there anyway.

Senator METCALF. Why is it a grab when we give them the benefit of our technology?

Mr. LAYLIN. No, no. It is a grab if we say that the edge of the treaty shelf is now at the foot of the slope because exploitability has not yet been demonstrated at that depth.

Senator METCALF. Exploitation must mean something in that context.

Mr. LAYLIN. That is right.

Senator METCALF. The word must mean—if we would have said adjacency without exploitation and then we qualify it; I guess lawyers do put these words in for some purpose.

Mr. LAYLIN. That is right.

I must say that I have much more interest in what is the desirable line rather than a lot of argument about interpretation of something that admittedly permits of more than one interpretation.

Senator STEVENS. I must say that if we follow the theory that you say we should or do, that there would be no stimulus whatsoever to exploration because you would have no prior right by discovery because by definition no one could give it to you and give you an agreement that you would have it. Today we have a prior right by discovery out on the land mass that goes out from this country, I feel because we have recognized it nationally. I also feel that what you are really saying is it would be comparable to when we originally took the 3-mile limit instead saying you can have jurisdiction as far as you can shoot a cannon and we know it was related to that but they didn't say that.

Mr. LAYLIN. That is right.

Senator STEVENS. And had they done that I just wonder how the devil we would ever have figured out the conflict between international jurisdictions when we got into the rocket age.

Mr. LAYLIN. That is right.

Senator STEVENS. But that is what you are saying; you are saying this jurisdiction can keep springing out as technology develops.

Mr. LAYLIN. I am not saying that, it is section 1, which says it.

Senator STEVENS. I don't think it does.

Mr. LAYLIN. Senator Metcalf pointed out that they must have had some reason to put in exploitability.

Senator STEVENS. You put commercial exploitability.

Mr. LAYLIN. I said it is an open question.

Senator STEVENS. If you don't read it in there then it is exploitable today.

Mr. LAYLIN. I think you probably can argue that.

Senator STEVENS. Grumman's Gulfstream submarine can go down there and anchor a well in any area we have got.

Mr. LAYLIN. I do think, looking into the future, the thing for us to do is to figure out where is it to our best interests that the dividing line should be between the deep sea regime and the shelf, and I don't see how you can intelligently answer that question until you know what sort of a regime you are going to have in the deep sea. If we are going to have a regime that is written by this majority that voted on Monday, I am in favor of a broader shelf than Mike Ely is, but if we are going to have a satisfactory regime in the deep sea it might be very much to the interests of the United States, including the oil companies, that we have a narrow shelf because then they can drill beyond the shelf, the treaty shelf under this satisfactory regime and they can drill off the coast of Spain without getting Mr. Franco's consent.

Senator METCALF. And drill off the coast of South America without getting expropriated sometime, is that correct?

Mr. LAYLIN. That is right.

Senator STEVENS. You can drill off the coast of Alaska and start a war. I think we have got the position taken by the American Bar Association and the thing that brought about the U.S. action was a result of the nations of the world that saw the extension of American industry off the shelf, offshore and on the shelf of some foreign countries. I can't think of any area where we have extended in any way that would be a grab in terms of our own national sovereignty. Our companies are operating on the shelf off of nations, other nations, on the basis of the doctrine explained by Mr. Ely, and I think endorsed by the American Bar Association, and as such we believe they have some stability. The action of the United Nations puts them into the never-never land of whether they really do have rights from the onshore nations.

Mr. LAYLIN. Now, Mr. Ely was very careful to say that his position has not been endorsed by the American Bar Association nor has mine.

Senator METCALF. Mr. Ely, why don't you come up to the table. I have a bill in the Government Operations Committee to try to get adversary proceedings before some of our regulatory commissions and I didn't know we were going to have an adversary proceeding here but I think it is in the highest tradition of the bar to have such a discussion, and I think this is going to be very illuminating to the committee.

Senator STEVENS. What was the 1969 position paper if it was not a position?

Mr. LAYLIN. May I answer the second part of your question?

Senator STEVENS. Yes.

Mr. LAYLIN. I am not complaining about what the oil companies are doing. It is what they are saying that is doing the harm.

Senator STEVENS. They are going to pay those onshore nations a royalty instead of putting it in the U.N. and I am one of those who happens to believe when we formed the U.N. we didn't form a world force to govern the lands beneath the high seas. I thought they were supposed to help nations get together on the lands masses, and somehow or other they come out with this doctrine that they have the prerogative of controlling the lands under the high seas.

Mr. LAYLIN. Would you like to hear something interesting? I am told by somebody who is up there in the midst of this that the real motivation for this moratorium comes from the developing countries that do not want to compete with copper that is at the bottom of the ocean.

Senator STEVENS. Don't want to compete with what?

Mr. LAYLIN. It is mercantilism in reverse.

Senator METCALF. When you are talking copper you see you are talking my language. [Laughter.]

Mr. ELY. Mr. Chairman.

Senator METCALF. Mr. Ely, do you have a comment?

Mr. ELY. I have such a high regard for Mr. Laylin I don't like to take issue with him but I must, sharply, on two points. One is the point on page 15 of his statement that the issuance by the United States of a lease to exploit beyond the limits of demonstrated exploitability does not, in his opinion, have any effect in establishing or extending the claims. Consider the specific case of the Santa Barbara Channel. This is an area which, as a result of the Supreme Court decree in *United States* v. *California* is high seas beyond the 3-mile line measured outward from the mainland and inward of the 3-mile line measured from the islands. The United States deliberately sought a decree that characterized the area between these lines as high seas. A part of it beyond a depth of 200 meters. Leases were made by the United States in this deep water area.

Senator METCALF. Incidentally in the recent tax bill we are taxing them.

Mr. ELY. Yes; and very substantial bonuses were collected by the United States. Of course, these were beyond the areas of known exploitability. Wells had to be drilled to find out if there was any oil there. Now wells have been drilled at a depth of 400 meters. If Mr. Laylin is correct those leases had no legal validity because the granting of a lease beyond the area of demonstrated exploitability did not extend the jurisdiction of the United States and hence its power to convey title.

Senator METCALF. But the minute that exploitability is demonstrated then our jurisdiction comes under the United States.

Mr. ELY. Yes, until that point of time, on Mr. Laylin's thesis, the oil company that took the lease got nothing until it finally hit oil. This would be a retroactive right of some kind.

Mr. LAYLIN. Will the gentleman yield?

Senator METCALF. You are talking our language.

Mr. LAYLIN. I didn't say it didn't have any effect between the United States and the oil company. Of course, it has effect. I say it does not extend the area of the treaty Continental Shelf. It does not have the effect of doing that. That is all I said.

Mr. ELY. Then in Santa Barbara Channel the United States by exercising its right to make a lease on an area not theretofore proved exploitable did not extend its jurisdiction into Santa Barbara Channel?

Mr. LAYLIN. Not by granting the lease.

Mr. ELY. I say it did. This is evidence of practice of nations under the convention.

Senator STEVENS. Beyond that if you follow your theory, Mr. Laylin, why would any international company in its right mind pay anything to the onshore nation for the privilege of exploring? In our State the revenues for 10 years for the privilege of exploring exceeded the revenues from production, and this has been a very valuable thing for the United States to have revenue from the offshore lands from exploration alone, and as a matter of fact, Union Oil paid $600 million for the right to explore, not for the right to produce, but for the right to explore.

Mr. LAYLIN. But didn't that carry with it then a right to lease if they found something?

Senator STEVENS. It carried the right to produce if they found something.

Mr. LAYLIN. Yes.

Senator STEVENS. But what they paid for in the first place was the right to explore.

Mr. LAYLIN. Well, they can deduct the losses as a business expense.

Senator STEVENS. Let me ask you this just to get specific again about my State because they are going to do this next year. If the United States leases lands in the Gulf of Alaska beyond the 3-mile limit and outside the 200-meter limit and outside the current known area of exploitability, in the Gulf of Alaska next year, is that in violation of the U.N. resolution?

Senator STEVENS. Why not?

Mr. LAYLIN. Well, in violation of the U.N. resolution?

Senator STEVENS. Yes.

Mr. LAYLIN. That is another thing. But the granting of the lease out there beyond the area of demonstrated exploitability does not extend the Continental Shelf.

Senator METCALF. The analogy you are making with bonus in Alaska is that they received a lease.

Senator STEVENS. No; this is Gulf of Alaska. This is Gulf of Alaska.

Senator METCALF. On the north slope there they received a lease.

Senator STEVENS. I am talking all offshore lands now, off in the Gulf of Alaska where they issue a lease where we don't know yet whether they can recover it or not, whether they can record oil there or not.

Mr. ELY. I would give the same answer to that, Senator Stevens, that Professor Jennings gives. The lease to the United States would be a valid exercise of the U.S. rights under international laws.

Senator METCALF. It certainly is an agreement between the United States and the other party to the lease. Now, whether or not the jurisdiction of the United States extends is another question that Mr. Laylin is referring to. Until exploitability is demonstrated the United States wouldn't have jurisdiction.

Mr. ELY. Realize what a totally absurd result flows from that? The United States grants a lease in the Gulf of Alaska beyond the 3-mile limit and beyond the depth of 200 meters.

Senator METCALF. I think you have demonstrated that the 200-meter limit isn't relevant to the question involved with in the seabed.

Mr. ELY. To continue: This lease is beyond 200 meters and beyond the area of demonstrated exploitability, the hypothesis of Senator Stevens' question. Look at the absurd result: The United States grants

this lease and a wildcatter goes out and stations his vessel and puts down his drill stem. Under international law the United States had no right to do that, under Mr. Laylin's thesis and, therefore, this well being drilled out there is not entitled to the protection of international law.

This produces chaos. As Professor Jennings says, it is not a question of "exploitation" that is involved; it is the question of "exploitability" and exploitability isn't demonstrated until somebody puts that well down and he must have some security of tenure before he will do it.

The second point——

Mr. LAYLIN. May I correct that first one.

Mr. ELY. The second point I wanted to collide with my friend, Mr. Laylin on, was this: That it would be to the advantage of the United States to have a narrow shelf because American oil companies might find it to their advantage to operate off the coasts of other countries without getting permission of, say, General Franco.

To my mind, Mr. Chairman, the question is not what is good for American oil companies. The question is what is good for the United States and specifically what is good for the American treasury. Shall we, or shall we not, yield the control of the resources in our own continental margin, and shall we, or shall we not, yield royalties and bonuses from them in order to obtain for American oil companies advantages off the coast of Spain? I say no. The control that is involved here is even more important than the money. It is the right to say whether the resource shall be developed at all or not. Conservationists may say bottle it up, we don't want pollution. That decision should rest with American authority. If revenue is developed it should, come to the American Treasury, but, beyond that, these resources should flow into the American economy.

The question of whether the resources come in duty free or not is for Congress to decide. But it should not be within the control of an international regime to say "Ship this oil to Great Britain and/or Germany or Japan, don't ship it into the United States." This is for the American Congress to decide. Control is essential.

Senator METCALF. Mr. Laylin.

Mr. LAYLIN. I'm afraid you misstated my position, Mike. I did not say the United States did not have the right to grant the lease. Of course, it can grant the lease but granting it doesn't have any effect in expanding American rights.

Senator METCALF. I can see how we can enter into a contract with an oil company, Mr. Ely, and as far as the United States is concerned, and that oil company is concerned, it is a valid contract and binding and enforceable. But Mr. Laylin says until exploitability is demonstrated in international law as far as some other nation is concerned, it is meaningless and I can see how such a contract is valuable as far as an oil company is concerned.

Senator STEVENS. Mr. Chairman, the point is, as I think under this problem we are facing now with this U.N. action, they specifically state that States and persons, physical and juridical, are bound to refrain from all activities of exploitation of the resources of the area of the seabed and the ocean floor and the subsoil beyond the limits of national jurisdiction.

If I understand you, sir, the limits of national jurisdiction extend to the limits of known exploitability.

Mr. LAYLIN. That is what the definition says.

Senator STEVENS. As of December 15, we should not have any action to extend that exploitability under this resolution of the U.N. until we establish the international regime which would give them control over our rentals.

Mr. LAYLIN. I have not studied that yet. I heard the permission given to Mr. Ely to put in his views. With your permission I would like to do that. I have a very low opinion of that resolution.

Senator METCALF. Would you put those views in the record?

Mr. LAYLIN. Yes, I think it is ultra vires, it goes beyond their authority, and even it were within their authority it can only be advisory. They can't legislate.

Senator METCALF. But Senator Stevens has touched on a very vital point involved in this resolution. If the theory that you have propounded here today is correct, then we can have no more exploration—we have a moratorium on any discovery beyond the area of known exploitability at the present time.

Mr. LAYLIN. If the resolution has any legal effect and if the interpretation of it is that it freezes the shelf to where it is right now.

Senator METCALF. It if doesn't have any legal effect it doesn't make any difference one way or the other. But we are concerned. Here is a respected body, which has passed a resolution.

Mr. LAYLIN. Don't commit me to that. [Laughter.]

Senator METCALF. You know I have colleagues over there on the Senate floor that will say the same things about the United States Supreme Court. [Laughter.]

Senator METCALF. So we do have to regard the U.N. resolution, seriously regard it.

Mr. LAYLIN. Yes, seriously.

Senator METCALF. So I hope that you will provide the committee with your comments.

Mr. LAYLIN. I shall be happy to do so.

(Data referred to follows:)

STATEMENT SUPPLEMENTARY TO PRESENTATION OF JOHN G. LAYLIN IN RESPONSE TO A REQUEST FOR HIS VIEWS ON

(1) The argument made that the judgment of the International Court of Justice supports the contention that the area of exclusive national jurisdiction extends beyond the depth of present exploitability; and

(2) Effect of Moratorium Resolution adopted by the General Assembly of the United Nations.

This supplement to my original statement follows permission given by the Committee to take time to consider carefully questions of law put at the hearing on December 17, 1969. In considering these questions I have had the opportunity not only to review what has been written in this field but to discuss the issues with many of the persons currently writing and speaking on them, including Professor R. Y. Jennings, whose article was cited in support of the view I would call extreme (though not the most extreme) in favor of a coastal reach of exclusive national jurisdiction beyond the area of admitted exploitability.

Using an expression of your Chairman, this discussion has been carried on in the best traditions of the Bar. I have submitted drafts of proposed responses, had the benefit of the criticisms I invited, and have incorporated in revisions some of their thoughtful observations.[1] My personal conclusions are these:

[1] I must repeat that the views expressed are not to be understood as representing agreed conclusions of the Committee on Oceanography.

1. CUSTOMARY LAW AS TO THE BOUNDARY OF THE AREA OF EXCLUSIVE RIGHTS

Under customary international law prior to the continental shelf doctrine there was no general rule limiting the right of a state or its nationals to explore and exploit seabed resources up to the very edge of another state's territorial sea.

There were, to be sure, certain exceptions, one category related to time honored exploitation by nationals of certain states in certain areas of certain resources without regard to proximity, *e.g.*, the exploitation by nationals of the coastal states of the Persian Gulf of the pearl resources to be found there. Other limited functional rights of jurisdiction into the high seas came to be recognized on the basis of proximity to national territory. These involved the right of the coastal state to protect itself against smuggling, and to protect its fisheries, to control immigration, and enforce sanitary regulations. Despite the disputes that have arisen over assertions of right in some cases. The concept of "contiguous zones of the high seas" has been accepted in many instances for the exercise of these limited functional contiguous zone rights. This limited proximity jurisdiction was codified in the Geneva Convention on the Territorial Sea and the Contiguous Zone.[2]

The doctrine of the continental shelf is a recent example of jurisdiction with respect to limited functional rights encroaching on the basis of appurtenance into an area formerly open to everyone. The judgment in the *North Sea Continental Shelf Cases* expressed it thus:

> "The doctrine of the continental shelf is a recent instance of encroachment on maritime expanses which, during the greater part of history, appertained to no one. The contiguous zone and the continental shelf are in this respect concepts of the same kind. In both instances the principle is applied that the land dominates the sea." (Par. 96.)

The Declaration of President Truman in 1945 was the first major assertion by a coastal state of an exclusive right to exploit the seabed resources of the adjacent continental shelf. As it was not protested by any state and was emulated by many,[3] the basic continental shelf doctrine ultimately came to be accepted as a tenet of international law. This is pointed out in the opinions of the World Court in the *North Sea* cases.

Article 2 of the 1958 Convention on the Continental Shelf "enshrined," as the World Court said, the exclusive right to exploit the resources of the bed of the sea on the "continental shelf."

The phrase just quoted, as used in Article 2, is defined in Article 1: "For the purposes of these articles, the term 'continental shelf' is used as referring (a) to the seabed and subsoil . . . adjacent to the coast . . . 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 . . . (b) to the seabed . . . adjacent to the coasts of islands."

We have, then, two tests under the Convention which were accepted in the judgment as declaratory of the customary law existing in 1958—(1) adjacency and (2) exploitability.

A careful reading of the opinions will find support for the view that any natural prolongation of the land mass might be considered to meet the test of *adjacency*,[4]

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[2] Article 24 of this Convention reads in part as follows:

1. In a zone of the high seas contiguous to its territorial sea, the coastal state may exercise the control necessary to:

(*a*) Prevent infringement of its customs, fiscal, immigration or sanitary regulations within its territory or territorial sea;

(b) Punish infringement of the above regulations within its territory or territorial sea."

[3] Some, mistaking the limited nature of the right, jumped to asserting full territorial sovereignty over the sea bed and superjacent waters by pushing out the boundary of their territorial seas. These assertions have not won wide acceptance.

[4] In paragraph 41 of the judgment, the Court, speaking of adjacency in the sense of proximity, said:

". . . it is evident that by no stretch of imagination can a point on the Continental Shelf situated say a hundred miles, or even much less, from a given coast, be regarded as 'adjacent' to it in the normal sense of adjacency."

The area with which the Court was concerned contained, as Prof. R. Y. Jennings has pointed out, localities "which were a hundred miles or much more from any coast at all." (International and Comparative Law Quarterly, Vol. 18, p. 826.) He concludes that the Court was speaking of localities beyond the 200 meter isobath, quoting the sentence which next follows in the Court's opinion:

"This would be even truer of localities where, physically, the Continental Shelf begins to merge with the ocean depths . . . ."

but there is no support for the contention that the judgment declared or codified or enshrined an area of coastal jurisdiction beyond the depth that at the time in question *admits of exploitation.*[5]

If the decision is declaratory of the existing customary law, a claim to exclusivity beyond the depth of exploitability may not be made successfully by or against states not parties to the Convention. Even though not declaratory of customary law as between parties to the Convention, "exclusivity" ends at the depth of admitted (I do not insist on "demonstrated") exploitability.[6]

Undoubtedly exploitability will someday be achieved to a depth that reaches to the foot of the continental slope. The discussion would then be academic but it is not so now. The reason is largely because of the mistrust generated by claims so ill founded upon the representatives of noncoastal states and on those lacking the capability of exploiting in ocean depths.

The mere discussion of these claims has had the effect of arousing apprehension by the less developed nations as to the intentions of states supporting or even considering supporting the extreme claims of their nationals who enjoy the capability of exploiting at deeper and deeper levels. The developing nations fear—and quite naturally—that the areas of exclusive jurisdiction will be pushed further and further seaward to the enrichment of the already rich and the continuing impoverishment of those that are not.

It is in this context that I oppose claims to exclusive jurisdiction beyond the limits fixed in the 1958 Convention. It is for this reason that I believe *it would be most unfortunate for this Committee to espouse any campaign for the Congress to call upon the Executive to assert exclusive jurisdiction beyond the depth that admits now of exploitation.*

I turn now to the resolution adopted by the General Assembly in seeking to check the march of coastal exploitation deeper and deeper in the bed under the high seas.

2. THE MORATORIUM RESOLUTION

(*a*) *Its effect*

On Monday, December 15, 1969, the General Assembly, by a vote of 62 to 28 with 28 abstentions, adopted a resolution declaring a moratorium on all exploitation of the resources of the deepsea bed. The operative portion of the resolution reads:

> "*Declares* that, pending the establishment of the aforementioned international regime:
>
> "(a) States and persons, physical or juridical, are bound to refrain from all activities of exploitation of the resources of the area of the sea-bed and ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction;
>
> "(b) No claim to any part of that area or its resources shall be recognized."

Ambassador Christopher H. Phillips, in speaking for the United States against the resolution, asserted that "the prohibition which the draft resolution contains is without binding legal effect." The delegate from Ceylon, one of the cosponsors of the draft resolution, said "it will have no legally binding effect what-

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[5] Articles 1 to 3 of the 1958 Convention were recognized by others to be a declaration of the law that was maturing. Judge Tanaka, in his dissenting opinion, put it this way:

"There is no doubt that Articles 1–3, which constitute the fundamental concept of the Continental Shelf, are mainly formulated on the basis of the State practice established since President Truman's Proclamation of September 1945, and that, accordingly, they have the character of customary law. Therefore, even those States which have not ratified or acceded to the Convention could not deny the validity of these provisions against them. Denying the principles enunciated in Articles 1–3 would deprive the non-contracting States of the basis of all rights over their continental shelves." (P. 179.)

The majority denied that Article 6 of the Convention codified customary law, giving as a reason that reservations as to its rule of proximity were permitted by the Convention, but it affirmed that Articles 1 to 3 were regarded by the signatories to the 1958 Convention "as reflecting, or as crystallizing, received or at least emergent rules of customary international law relative to the Continental Shelf, *amongst them the question of the seaward extent of the shelf* . . . ." (Par. 63, italic supplied.)

[6] Professor R. Y. Jennings finds that "one who is a party cannot be disbarred by the Convention from relying upon the general law, and indeed must do so in relation to nonparties," but as between the parties it is binding, "not as a principle," to be sure, "but as a device for the purpose of regulating the application of the treaty regime between parties to it." (P. 831.) In his conclusion he advocates a phasing out of the exploitability test as "a practical as well as a logical solution of the problem" (p. 832), but that is quite different from supporting the contention that the World Court judgment is authority for the view that the United States can *now* lawfully assert jurisdiction out to the foot of the Continental Slope.

soever." I agree. The General Assembly may only recommend to states how they and their nationals should comport themselves.

A recommendation may under certain circumstances have weight in measuring the support given to growing principles of customary international law. The weight to be given even with a consensus depends, however, upon the seriousness of the inquiry which brought about essential agreement as to what the law is or should be.

Had there been the conscientious preparatory work of the International Law Commission such as provided the basis for the 1958 Convention on the Continental Shelf and had a resolution with a similar foundation been supported by a broad consensus—yes—its approval would have furnished evidence of a practice accepted as binding on the whole community of nations. It had, as you know, neither. No serious preparatory work. No consensus. Of the 40 states parties to the 1958 Convention less than a third supported the resolution. Of the 28 states that voted against, one-half were parties to the Convention.

The vote by 62 members of the United Nations was nevertheless evidence of a lack of confidence. That is a political fact. To ignore this is to court the consequences of disregarding any fact, be it political or moral, irresponsible or otherwise. It was at the very least a protest vote revealing an intense desire to be included in any economic benefits to be derived from exploitation of the deepsea bed.

(*b*) *Response to the moratorium resolution*

How should we respond?

For my part—and I speak only for myself—we should respond by facing the political fact and seeking constructively to find ways to share the benefits to be derived from the recovery of the resources of the deepsea bed. The net economic gain to be derived in the foreseeable future has undoubtedly been exaggerated but the very fact that the gain may be modest is not a reason for failing to provide procedures for an equitable sharing.

Our response should be to devise a practical answer to the demand that those of us who have the capability of exploiting the natural resources of the sea bed share equitably with the developing nations the profits flowing from successful exploitation of this natural resource.

Not to exploit is not the answer. Everyone loses. The answer is to encourage exploitation but on a basis of equitable sharing of the benefits. Everyone then wins. That is easier said than accomplished. But it can be accomplished—with good will and common sense.

The ultimate *desideratum* is a convention agreed to by all concerned; but that goal cannot be reached in one jump. It must be reached in stages. And the stages can be such as to provide a viable interim regime.

To begin with, I would hope that the parties to the 1958 Convention would by common accord find a way to promote the development of customary international law to guide their conduct while a convention is being elaborated and until it is put in effect.

Consultation through diplomatic channels by the forty or more parties to the 1958 Convention should begin right away, looking to agreement by all or a significant number on the issuance of parallel declarations along the following lines:

1. Announce an agreed interpretation of the definition in Article 1 of the Convention as to the boundary between the deepsea bed and the area of exclusive coastal state jurisdiction.[7]

2. State the principles to serve as guidelines pending the elaboration of rules to be incorporated in a Deep Sea Bed Convention. These presumably would include the following:[8]

(*a*) There is an area of the sea-bed and ocean floor and the subsoil thereof, underlying the high seas, which lies beyond the limits of national jurisdiction (hereinafter described as "this area");

(*b*) There should be agreement, as soon as practicable, on an international regime governing the exploitation of resources of this area;

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[7] This has been recommended in the 1968 Resolution of the House of Delegates of the American Bar Association. It is particularly appropriate that agreement as to the precise boundary be sought in conjunction with the working out of a general understanding of the sort of regime to prevail for the deepsea bed.

[8] The language in (*a*) through (*f*) is taken from the report of the 1968 Rio de Janeiro meeting of the United Nations *ad hoc* committee.

(*c*) No state may claim or exercise sovereign rights over any part of this area, and no part of it is subject to national appropriation by claim of sovereignty, by use or occupation, or by any other means;

(*d*) Exploration and use of this area shall be carried on for the benefit and in the interests of all mankind, taking into account the special needs of the developing countries;

(*e*) This area shall be reserved exclusively for peaceful purposes;

(*f*) Activities in this area shall be conducted in accordance with international law, including the *Charter of the United Nations*. Activities in this area shall not infringe upon the freedom of the high seas.

3. Propose practices to be followed on a basis of reciprocity pending incorporation of rules and machinery in a Deep Sea Convention to become effective when ratified or acceded to by at least twenty-two states.[9] Such practices might properly include the following:

(*a*) Each state would forbid its nationals from exploiting any part of the deepsea bed outside of an area registered by the national with an agency established by its government and also with a registration office of some international organization. For reasons that will apepar below, it would be appropriate for the International Registry to be set up by the International Bank for Reconstruction and Development.[10]

(*b*) The registration would be accompanied by payment to the International Bank of a fee of some fairly nominal amount times the number of square miles times the number of years of the claimed area, "the ordinary fee." If it is desired that no other registration be permitted for this area, the fee would be substantially larger, "the extraordinary fee."

(*c*) The registrant would be required to remit yearly to the International Bank an annual fee equal to —% of the value of the product recovered that year from the registered area less the cost of recovery.[11]

(*d*) The moneys collected by the International Bank, above the expense of administration of the International Registry, would be put into a revolving fund to be available for low interest development loans.[12]

(*e*) Registration would be permitted by more than one claimant for areas for which only the ordinary filing fee has been paid; but would not be permitted for those areas for which the extraordinary fee has been paid.

(*f*) The parallel declarations should specify the maximum limits as to time and space of the areas to be allowed to be registered and should also provide for forfeiture of registration on nonpayment of the annual fee or on failure to maintain a minimum level of exploitation of the resources in the registered area.

(*g*) The declarations should express an intent to provide in the Deep Sea Bed Convention for the protection of registered areas during the balance of the registered period.

The foregoing program would serve not only as a response to the Moratorium Resolution but also to another resolution adopted by the General Assembly requesting the Secretary General—". . . to ascertain the views of Member States on the desirability of convening at an early date a conference on the Law of the Sea to review the regimes of the high seas, the continental shelf, the territorial sea and contiguous zone, fishing and conservation of the living resources of the high seas, particularly in order to arrive at a clear, precise and internationally accepted definition of the area beyond national jurisdiction, in the light of the international regime to be established for that area."

As stated in response to questions while testifying, I think it would be disastrous to hold a conference of all members of the United Nations to open up the 1958 Convention. It would be worse, if that were possible, to hold such a conference to take up all of the issues mentioned in the General Assembly Resolution. It is submitted that the program that I propose would afford the best preparation for establishing a beneficial and sensible regime for the deep sea and for reaching agreement as to the precise boundary between the deep sea bed and the area of national jurisdiction. The other issues should be dealt with independently. One of these merits special mention.

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[9] This is the number required for the effectiveness of the 1958 Convention.

[10] No registration would be required for exploration.

[11] The national presumably would enjoy a tax credit for this under the income tax laws of its state.

[12] States not members of the Bank that join in this program would be eligible to borrow from this fund.

3. POLLUTION

While the resolution does not mention pollution by name, it does express concern over "conservation of the living resources of the high seas." I would not wish the foregoing to be understood as ignoring or minimizing the need—the urgent need—for action to prevent contamination of the waters and shores of the seas by exploitation of the sea bed or other means, particularly as a result of shipments of oil.

Here again there should be interim rules and procedures pending the elaboration of an international convention. I understand that the International Maritime Consultative Organization, a special agency of the United States, has established committes that are currently studying rules to be followed to lessen the danger of pollution by tankers.

An argument advanced in these hearings in support of a claim by the United States that its continental shelf reaches now to the foot of the slope assumed that otherwise we could not prevent the nationals of another state from drilling outside the present boundaries and creating a risk that oil would escape and contaminate our territorial waters and coasts.

This argument fails to take into account that the United States and any other coastal state can enforce safety rules beyond its territorial waters, beyond its contiguous zones and beyond the boundary of the continental shelf under customary international law.[13] The Permanent Court of International Justice declared this to be the law long before the concept of continental shelf jurisdiction came into customary or conventional international law. This, of course, is not a jurisdictional right but a right of self-protection based upon the coastal state's primary interest in the continuing purity of the waters that wash its shores.

Returning to the question of exploitation of the resources of the deepsea bed, I would favor an American initiative along with that of all parties to the 1958 Convention to seek to work out a *modus vivendi*, a practical interim pattern of practices, by which on a basis of reciprocity we would assure to all nations that we would play a fair game pending the working out of a regime for the exploitation of the resources of the deep sea to the benefit of the persons who risk their savings in making this work, to the benefit of their own countries and to the benefit of all other countries.

Senator STEVENS. I can't overestimate or overemphasize rather my concern because I am convinced just as I was convinced years ago that there was oil up north in the northern part of Alaska, I am convinced that the Gulf of Alaska is the great wealth of this country in the future. I think Mike Ely expressed that in terms of the security we have and the knowledge that we have that the minerals and the metals and the oil and gas that we will need in the future are there, and that great Continental Shelf area, Continental Shelf as I understand it but not Continental Shelf as your definition would extend it, I think it is ours all the way out.

Senator METCALF. I am not so sure about that. As Mr. Laylin said, the North Sea Continental Shelf cases were on the basis of known and proven exploitability, and—I think exploitability in that shallow water of Alaska might be known and proven at the present time.

Mr. ELY. Mr. Chairman, perhaps it would be well to put Professor Jennings' entire article in your record; it is short.

Senator METCALF. It will be incorporated if you will provide it.

Mr. ELY. Yes, and he deals with this question explicitly.

(The article referred to is in the appendix.)

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[13] Case of the *S.S. Lotus*, P.C.I.J. Ser. A. No. 10 (1927); 22 Am. J. Int'l L. 8 (1928). See Restatement of the Law, Second, Foreign Relations Law of the United States, Sec. 18 and cases cited beginning at p. 52.

The preamble to the International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties of November 1969 recites that protection against the grave consequences of oil pollution from maritime casualties presents "measures of an exceptional character to protect" the interests of the coastal state "and that these measures do not affect the principle of freedom of the high seas."

Senator METCALF. Mr. Reporter, we have continually referred to this North Sea case. It is a rather voluminous case and it will be in the file of the committee and it is the North Sea Continental Shelf case decided in judgment February 20, 1969. It will not be part of the formal record but it will be incorporated by reference in the committee's record.

Senator STEVENS. Is Mr. Laylin's full statement in the record?

Senator METCALF. Mr. Laylin's full statement is in the record.

(The complete statement follows:)

STATEMENT OF JOHN G. LAYLIN, ATTORNEY AT LAW, WASHINGTON, D.C.

My name is John G. Laylin. I am an attorney practicing in Washington with the firm of Covington & Burling. I am currently chairman of the Committee on Oceanography of the Section of International and Comparative Law of the American Bar Association. The views I express are my own. They are not necessarily the views of members of my Committee. Some of my views are strongly disapproved by some members of my Committee.

The American Bar Association in August 1968 adopted a resolution which is attached to a joint report. That resolution is the only official expression of the American Bar Association on the subject under inquiry. It does not take a position on the issue of the desirable width of the treaty continental shelf or the interpretation of the definition in the 1958 Convention.

This issue has been the subject of lively debate in my Committee. No position has been taken by the Committee beyond agreeing that the treaty shelf under the test of adjacency will never extend beyond the foot of the continental slope.

While the views I express are my own, I have had the advantage in arriving at certain conclusions by participating in the discussions between spokesmen on my Committee for the different schools of thought. Certain of them have pressed for acceptance of the thesis that the outer boundary of the shelf now is at the foot of the continental slope. This is, of course, the position taken by the National Petroleum Council. Others have adhered to the view that there is no basis for the contention that the treaty shelf today extends beyond the deepest isobath of proven exploitability.

From the discussion it has become evident that those who have primarily in mind the extraction of oil are interested only in the area landward of the foot of the continental slope. They have been informed, it would appear, that there is little likelihood of oil pools below the bed of the deep sea. In consequence they are not concerned with the regime to be established for the deep sea bed. It does not matter to them that their demands may hurt the efforts of the United States to bring about a satisfactory regime for the deep sea.

In contrast members of the committees who have in mind the interests of hard metal miners find themselves agreeing with many of the contentions of the Navy and the scientists. They do not object to a broad shelf, but they do object to sacrificing the chances of reaching agreement on a satisfactory deep sea regime by insisting willy nilly that the United States now take the position that the outer limit of the shelf is now at the foot of the continental slope.

My own view is that the line should be established at the place that best reconciles the interests of all groups in all countries. We cannot determine where that should be until we know what sort of regime will be established for the deep sea bed and we cannot hope to have much leverage in negotiating the deep sea bed agreement after we have tied our government's hands as to the location of the dividing line.

If we are not successful in achieving agreement on a satisfactory deep sea regime, I would have our government be free to assert jurisdiction as far into the ocean as possible. On the other hand, if agreement is reached on a satisfactory regime, I see many advantages in keeping the treaty shelf as narrow as possible. In the latter case, the oil companies can still drill off the United States coast as far out as they wish. They can also drill near the Spanish coast without having to get the consent of Mr. Franco.

This being my view, I am opposed to any attempts to freeze the boundary line until we have agreement on the kind of regime that is to prevail on the seaward side. To open up the 1958 Convention would be most unwise. Anyone who has followed the General Assembly debates or participates in any conferences open

to all of the nations of the world would be appalled at the prospect of subjecting this Convention to the politicking that goes on, particularly by the unstable new nations.

With this in mind, I would avoid if at all possible subjecting the negotiation of the deepsea convention to a free-for-all conference. The idea has occurred to me that the present parties to the 1958 Convention should seek to reach agreement on a deepsea convention and after it has the necessary ratifications open it to adherence by all other nations.

I should add that the reasons that prompt me to regret demands for a broad shelf now lead me also to regret the proposal of the Commission on Marine Science that we seek a narrow shelf before we know what we will have beyond the area of coastal state jurisdiction.

Permit me to turn now to the questions put by Senator Metcalf in his letters to me of November 26 and December 2.

1. Is the 1958 Geneva Convention on the Continental Shelf sufficiently precise to permit reasonable interpretation as to the limits of the legal Continental Shelf?

2. If so, what is a reasonable interpretation of the ultimate limits of the legal Continental Shelf as defined by the 1958 Geneva Convention on the Continental Shelf?

The Marine Science Commission answered this question in this way:

"We do not think that there is any reasonable way to interpret the Convention's definition that would place a precise outer limit on the existing legal 'continental shelf'."

One cannot deny that the definition lacks precision and more than one interpretation is accordingly possible. This does not mean, however, that reasonable men cannot arrive at a single reasonable interpretation.

The definition fixes three (some would say, four) tests of the outer limit. The first is to a depth of 200 meters; the second is to the deepest point at which exploitability has been demonstrated; the third is "adjacency" to the coastline; and the possible fourth is the physical "continental shelf." The treaty boundary thus follows the deepest isobath on the continental shelf that is still adjacent to the coast at which exploitability has been demonstrated. It moves seaward with each new achievement at greater depths.

Clearly, the third test excludes extension of the shelf to mid-ocean. The view has been expressed by the Committee on Oceanography that adjacency permits extension to the foot of the continental slope. The Committee has taken this view as one that to it seemed reasonable.

Some argue that the definition as it now stands permits an interpretation that the treaty continental shelf today extends to the limits of adjacency, and that adjacency means any area that is not beyond the foot of the continental slope. A few contend that adjacency permits extension to cover even the "landward portion of the continental rise."

I cannot go along with these interpretations since exploitability has yet to be demonstrated at these depths.

The question puts emphasis on reasonableness. In my own view, if one is thinking in terms of what line would be reasonable, not from the language of the Convention so much as from the point of view of desirability, I would say that the proper line can be established only after we know what sort of a regime is to prevail beyond the treaty continental shelf. If there is to be a satisfactory regime, there are strong considerations in favor of keeping the shelf relatively narrow. And we may find it to our interest to accept the alignment that best promotes a satisfactory deepsea regime.

The advocates of a broad shelf have primarily, if not exclusively, in mind the extraction of hydrocarbons off the coast of the United States. The oil found there can come in duty free without limitations of the import quota. Important as this resource is to the United States, it is not lost if it is under a satisfactory deepsea regime. In balance, the United States would gain from a narrow treaty shelf since we could drill for oil closer to the coasts of other countries.

Of course, the interest of the United States is not confined to oil. We have important interests in mining hard minerals from the deep sea bed, in fishing, and in maintaining the area covered by the doctrine of freedom of the seas as large as possible for navigation, for scientific exploration and other purposes.

It seems to me unwise for the United States to commit itself at this time as to the limits of the treaty shelf. It should decide what it will agree to as a part of the process of obtaining a satisfactory regime for the deep sea bed.

3. Should the United States stand on its rights, under the present language of the Shelf Convention, or should it, as the Marine Science Commission has

proposed, take the initiative to secure international agreement on an amendment to the Convention providing for a narrow Continental Shelf?

4. What reasons do you offer in support of your answer?

The United States should, of course, "stand on its rights" under the present language of the shelf Convention.

And what are the rights we should stand on? And which of these rights should have priority? Those members of my Committee who have primarily in mind the extraction of oil off our coasts believe that to agree on a boundary short of the outermost limit of adjacency would be a sacrifice of our rights. They appear to cling to this, no matter what other rights might be sacrificed in the process. Others who prize the freedom to explore the bed of the sea beyond the limits of the continental shelf without having to secure the consent of the coastal state believe that this right would be sacrificed were the United States to claim or consent to extension beyond the depth of proven exploitability out to the outermost limits of adjacency.

The Joint Report discusses the arguments for and against a broad shelf. The report seeks to reflect accurately the different views of the members and takes no position.

My personal opinion—and let me emphasize that this view is not one on which the Committee agreed, my personal opinion is that the rights we should stand on are the totality of rights of the United States and its nationals. Included in these is the right to negotiate a deep sea convention that is good for the entire world.

The right that I personally would single out as having priority, as the most important to stand on, is the right to agree to the alignment that fits best the interests of the United States once we know what kind of regime will prevail for the deep seabed.

If the resources of the deep sea are to become available to mankind, we need a regime for the deep sea that permits governments and private organizations to make businesslike decisions and arrangements. We need an administrative body that is divorced from politics and not overrun by bureaucracy. We need fiscal rules that permit and encourage profitable operations.

The debates in the General Assembly give little encouragement to believe that this is what the majority of nations have now in mind.

Against the possibility that a satisfactory regime for the deep sea bed cannot be sustained under customary international law or attained by a multilateral convention, we should stand on the right we now have to hold out for an outer boundary that moves with each new demonstration of exploitability—deeper and deeper, until the exploitable limit and the adjacency limit coincide. The understanding that we will hold out for this could encourage other nations to agree upon a satisfactory deep sea regime, provided that we preserve for them and our negotiators scope to adjust the boundary along the line that best promotes the rights of all.

Should we have a satisfactory regime for the deep seabed I can see—advantages to the United States, the oil interests not less than the scientists, the Navy and our friends in the developing countries—advantages to all in a relatively narrow shelf. I would stand on the right to have negotiating scope to try to bring this about.

5. If the United States should choose to stand on its rights under the present language of the Convention, would any other affirmative action be required on the part of the United States to secure such rights?

6. If so, what action?

The United States will, of course, choose to stand on its rights under the present language of the Convention. What action then should it take?

It should first, as I have suggested, determine what rights it finds to be paramount—which can be reconciled with its other rights and the corresponding rights of other nations.

Having done this, it should—I submit—take a positive stance toward a good deep sea regime and maintain a negotiating position as to the boundary a) to help to bring this about and b) in the event of failure to be free to support the widest shelf permitted under the concept of adjacency.

7. If, on the other hand, the United States should choose to secure international agreement or an amendment to the Convention for either a broad or a narrow shelf, would it be advisable to take such action before further resolving other international legal problems, such as the development of a regime for exploration and exploitation of the natural resources of the deep seabed; the establishment by international agreement of the limits of the territorial sea; the role

of coastal states in developing conservation resources related to their offshore fisheries; the conclusion of an arms control agreement affecting the seabed; or other related problems regarding the use of the high seas and the underlying seabed?

This question has been anticipated in some of my earlier responses. I am of the view, as I have said, that the decision as to whether the treaty continental shelf should be broad or narrow can be intelligently answered only in connection with the development of a regime for exploration and exploitation of the deep seabed. I must remind you that my Committee has not endorsed this view, nor has it rejected it.

I would oppose vigorously the holding of a conference to open up the questions resolved in the 1958 Convention on the Continental Shelf. Here the members of my Committee are in complete accord.

I recognize the interrelationship of some of the issues mentioned. The inner boundary of the treaty shelf is, for instance, the outer boundary of the territorial sea. Adjacency, however, is tied to the coastline.

The resolution of the related issues is desirable. No doubt the resolution of aspects of some of them is essential. But to make it imperative that all be settled as a preliminary to agreement on a deep sea bed regime and its boundary with the continental shelf is to assure that these latter will not be reached for some time.

8. What measures should the United States include in the formulation of its position looking toward a deep seabed regime which would achieve the following objectives:

(A). Recognition that there is an area of the seabed beyond the limits of exclusive national jurisdiction which is not subject to national occupation by claim of sovereignty, by means of use or occupation or by any other means;

(B). Accommodation among other users of the deep ocean floor and marine environment, including prevention of unjustifiable interference with the exercise of the freedom of the high seas, including navigation, fishing and the conduct of fundamental scientific research carried out with the intention of open publication, by any nation or its nationals;

(C). The conservation of living and mineral resources of the high seas and deep seabed;

(D). The encouragement of private investment in exploration and exploitation of the resources of the deep seabed; and

(E). The formulation of work requirements and other procedures associated with the exploration and exploitation of deep seabed resources which would serve to insure responsible and orderly development of these resources, while avoiding waste and other undesirable consequences.

9. What sort of an interim policy should be established with respect to the regulation and control of the activities of U.S. nationals related to the exploration and exploitation of resources located on the deep seabed beyond the limits of the Outer Continental Shelf prior to reaching international agreement on a deep seabed regime?

It would seem to me that there are two things that the United States should be doing—side by side. One is to work out with likeminded nations the principles and provisions that should eventually be incorporated in a multilateral convention. Our Government should encourage, as it has been encouraging, study of these matters by scientists and lawyers, by scientific associations and bar associations and others.

The other step would be to undertake to elucidate now the principles of customary international law to be observed pending the conclusion of a multilateral convention. This exercise should be supplemented by declarations of policy. Certain of these have already been made. An example is the renunciation of any right of asserting sovereign dominion over any part of the deepsea bed. A "common denominator" has been achieved to the effect that "no State shall exercise or claim sovereignty or sovereign rights over any part of" the "seabed and ocean floor, and the subsoil thereof beyond the limits of national jurisdiction.

As to the policy that this Government should establish with respect to the regulation and control of U.S. nationals, it would seem that the key concept should be that our nationals should be restrained from carrying on any activities which, if carried on by nationals of another country, we would find to be objectionable. Beyond national boundaries, no one nation can presume to do unto others differently from the way it wishes others to do unto it.

10. What effect does the issuance of leases beyond the 200-meter isobath pursuant to the Continental Shelf Oil Act of 1953 by the Secretary of the Interior have on the establishing of or the extension of a United States continental shelf boundary claim?

11. What effect does the aforementioned leasing procedure have on the establishment or extension of boundary claims for other nations' continental shelves?

The issuance by the United States of a lease to exploit beyond the limits of demonstrated exploitability does not, in my opinion, have an effect in establishing or extending the claims of the United States. It will be appreciated that no country other than the coastal state may issue a lease that has any meaning off the shores of the coastal state.

Quite obviously, the issunce of a lease to depths that are within the area of demonstrated exploitability and within the bounds of adjacency does have the effect of exercising the right accorded to the United States by the 1958 Convention. The granting of a lease beyond the bounds or adjacency or in areas beyond the limits of exploitability has no effect on the establishment or extension of boundary claims for our treaty continental shelf or the continental shelves of others.

12. What rights does the United States have pursuant to relevant Federal law and the 1958 Geneva Convention on the Continental Shelf to regulate United States and foreign commerical and scientific exploration of the seabed on the geological (by that, I mean "continental") margin in areas beyond either the 200-meter isobath or the most seaward or deepest area in which a United States mining lease has been issued?

Under the Convention the United States has the right to require its consent "in respect of any research concerning the continental shelf and undertaken there." I interpret this to mean that the right of the coastal state is limited to requiring its consent to research involving physical contact with the treaty shelf. However, under the Convention the coastal state "normally" may not withhold its consent to scientific research involving physical contact with the treaty shelf if the request is submitted by a "qualified institution" intending to publish its results. But the coastal state has the right to participate in the research.

The Outer Continental Shelf Lands Act of 1953, § 11, provides that "any person authorized by the Secretary (of the Interior) may conduct geological and geophysical exploration in the outer continental shelf." * I interpret this statute to be assertive of a United States right to require its consent to any research or commercial exploitation involving physical contact with the treaty shelf, whether the researcher or exploiter is a national of the United States or of a signatory of the Convention or of a state that has not become a party to the Convention.

If country X explores in an area adjacent to the coast of the United States at a depth not yet shown to admit of exploitability, finds oil and for the first time demonstrates its exploitability, it or its nationals may not exploit this without the consent of the United States. This holds, whether a lease has been granted to someone or not. Obviously, if an exclusive lease has been granted to someone, the United States will not give a second lease to another.

A practical difference between those who recognize that the coastal states' rights do not go seaward of the deepest isobath admitting of exploitability and those who, with the National Petroleum Council, maintain that the treaty shelf now reaches to the bottom of the continental slope is sometimes not fully appreciated. Under customary law, scientific research could be carried on up to the outer limit of the territorial sea. The consent of the coastal state was not required. Under the 1958 Convention we have first seen such consent is required. This should be kept in mind when we talk of standing up to our rights.

In Conclusion: The regime the United States should favor for the deep sea bed and the boundary we should favor between the deep sea and the continental shelf should be the one that best serves all of the interests of all of the world. This, I repeat, is my personal view, but I cannot say that is or is not the view of my colleagues on the Committee. I would guess that it is—with varying emphasis on the relative importance of the different interests. Only that will serve the interests of the United States. The interest of individual industrial groups should receive careful attention for only through proper encouragement to private enterprise will the resources of the deep sea bed be brought into the economy. But there are many interests of fundamental importance that should receive attention that is no less careful.

Pending agreement on a convention establishing the treaty rules for exploration and exploitation of the deep sea bed the Congress should, in my opinion, encourage

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*This phrase is a bit confusing. The "outer continental shelf" is the same as the "treaty continental shelf." The description outer comes from the fact that the inward limit is outside of the territorial sea.

cooperation by our Government with the governments of other nations, whether or not parties to the 1958 Convention, in establishing the earliest possible a pattern of rules and practices to be observed by common accord. The purpose of such rules, in the language of the resolution adopted unanimously by the House of Delegates of the American Bar Association, would be to assure "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."

In quoting these agreed goals I again request that the Committee recall the differences existing within the committees of the American Bar Association as to the best ways of achieving these goals. We agree on the goals and we agree further that their achievement is most likely to come about with the presentation of our points of view—our differences and our agreements and our confidence in this process of open and friendly give-and-take.

Senator STEVENS. You may feel I want to be discourteous, I don't want to be discourteous we sort of got wrapped up in this argument before we got involved.

Mr. LAYLIN. I don't see much point in detaining the committee. We have pretty well covered the point where I disagree with my friend. We are sort of like two professional tennis players, we go over this in many different forums.

Senator STEVENS. Do you subscribe to the theory that says we should join in calling for a new convention?

Mr. LAYLIN. Oh, I am very much against that.

Senator STEVENS. You are opposed to that?

Mr. LAYLIN. If you talk with anybody who attended this last general conference on the treaty on treaties and see the politicking that goes on in these general conventions mainly by these new unstable nations, they will hold up something that is good and that they would really want in order to get some advantage on an entirely extraneous matter.

I have suggested in this symposium in Miami, and I put it in here, too, that it would be interesting to consider calling a convention, conference, I should say, to work out a treaty for the deep sea which is confined to the countries that are now parties to the Continental Shelf Convention, the 38 or 40 of these, and they are, by and large, responsible countries that have capabilities in the ocean. That group would work out a satisfactory regime for the deep sea and then open that convention to adherence by all nations. If you start with these 110 nations all together represented in the General Assembly you would never get anywhere at any time.

Senator METCALF. Mr. Laylin, this is a matter of concern, of course, to the State Department. But this committee has special jurisdiction as to what Congress should do. What do you think Congress should do at this time?

Mr. LAYLIN. Well there, I am sure, I disagree with Mr. Ely. I think it would be most unfortunate if the Congress undertook to tell the State Department how it should interpret this treaty. I think it would embarrass the State Department.

Senator METCALF. Well, the State Department is like a Harvard man, you can always tell one but they don't listen.

Mr. LAYLIN. Well, I am listening.

[Laughter.]

Mr. LAYLIN. I say I am a Harvard man and I am listening.

Senator METCALF. Should we amend the Outer Continental Shelf Act, or should we pass legislation extending our jurisdiction as far as the United States is concerned or should we provide some permit system? There are things that have been proposed that are within the realm of the jurisdiction of the Congress.

Mr. LAYLIN. Yes, well, I certainly think it is within the jurisdiction of this committee to pass legislation that goes to the extent of the outer limit of the Continental Shelf.

Senator METCALF. We could assert our jurisdiction as far as Congress is concerned.

Mr. LAYLIN. But for this committee to try to define what that is, I think, would not be helpful.

Senator METCALF. Mr. Ely.

Mr. ELY. May I try to answer that?

Senator METCALF. Yes.

Mr. ELY. Let me pose a problem first. Suppose in the Gulf of Alaska, beyond a depth of 200 meters and beyond an area of demonstrated exploitability, beyond the 3-mile limit a foreign nation, and pick any, Russia being the nearest one, sends out a rig and starts drilling. Does or does not the United States have a right to send a note to the Russian Government saying "you are on the American continental margin? Kindly get off." On Mr. Laylin's thesis the answer is "No." On mine we do have such a right.

Senator METCALF. Is that correct?

Mr. LAYLIN. If it is beyond the area of proven exploitability we can do it off the coast of Russia, and they can do it off the coast of the United States.

Senator METCALF. Now, suppose Russia again, or any nation, which has the technology that we have, anchors a boat off the coast of Santa Barbara and starts drilling. What happens then?

Mr. LAYLIN. Within the area of proven——

Senator METCALF. No, just a little beyond that.

Mr. LAYLIN. Well, if it is beyond it is just the same as if it is off the coast of Alaska.

Senator METCALF. But the minute then they strike oil and start developing then they come within the jurisdiction of the United States?

Mr. LAYLIN. Yes. So the practical answer is they are not going to be foolish enough to do that.

Mr. ELY. But the even more practical danger in such an answer is that we can't tell that foreign rig in the Gulf of Alaska, "Get out of here, we don't want any drilling at all by anyone."

Senator STEVENS. I want to go one step further than that and say this: Suppose our rig, the *Cuss One* that belongs to four partners of an oil venture, which is a floating rig, suppose the *Cuss One* anchors off of a foreign nation with the consent of that foreign nation beyond the realm of exploitability and they agree to pay that foreign nation a royalty of 50 percent and along comes a Japanese, a Russian, whatever it might be, another nation, and they anchor right beside it and they start drilling and they say "Wait, boys this is ours, we paid for this right to explore," and they said "We are sorry, under the current interpretation that your country gives to this convention you didn't get any exclusive rights because they didn't have any to give

you. Now, we are drilling." Now where do you get any concept of control over the development of exploration which leads to exploitability under the theory that you espouse?

Mr. LAYLIN. Well, I think the answer is very easy, Senator. The minute you have struck oil and proven exploitability, your lease is good against anybody else.

Senator STEVENS. What if the other guy strikes the oil, is what I am talking about.

Mr. LAYLIN. Your lease is the only lease that is any good. He has done you a favor.

Senator METCALF. He has demonstrated exploitability.

Senator STEVENS. You are going to have some awful strange mining camp laws drawn if that is the way we are going to develop them offshore, they are going to be awful strange.

Mr. LAYLIN. Let me remind you I did not write this definition. But I think Senator Pell has introduced a resolution to open that up. I think that would be a great mistake.

Senator STEVENS. I would like to have you expand on that a little bit.

Senator METCALF. Yes, I would too.

Senator Pell and Senator Hollings were invited to participate. We have three subcommittees in the Senate looking into this matter. Senator Pell from the Foreign Relations Subcommittee, and Senator Hollings from the Commerce Subcommittee. This committee, because we have asserted jurisdiction over the Outer Continental Shelf, feels we have some interest and some concern, but I believe Senator Pell's resolution was referred to the Foreign Relations Committee, and so Senator Pell's committee is considering Senator Pell's resolution, but it is appropriate as part of our consideration that I would like to have your comment on Senator Pell's resolution.

Mr. LAYLIN. I think you would have the same messy conference if we opened that thing up that we had at the General Assembly last Monday and you couldn't open up section 1 without the danger of opening up all other things. No matter how much Mike and I disagree on other things we are 100 percent agreed as to that, aren't we?

Mr. ELY. Yes, indeed.

Mr. Chairman, could I answer your question, what should Congress do? I think this conversation illustrations perfectly, if Mr. Laylin is right, the chaos that could result by uncertainty as to whether the Russian rig drilling off Alaska in waters beyond demonstrated exploitability is or is not operating lawfully. Or transpose the problem to Santa Barbara Channel. Under international law, is this Government powerless to enforce a decision that there shall be no exploratory drilling? Why? This is intolerable from the viewpoint of American public policy, and I find nothing in the convention or customary law that makes us so helpless. I think that Congress, in legislation that ought to originate in this committee, might very well assert that the jurisdiction of the United States under the Outer Continental Shelf Lands Act encompasses the entire submerged continental land mass adjacent to the United States, and put an end to that problem. Congress has a right to determine policy on the question of the extent of our domestic laws.

Senator METCALF. We already did that in the tax bill by saying we are going to tax people who are out there.

Senator STEVENS. Mr. Chairman, as I understand, Mr. Laylin couldn't object if we could get the people who are managing the technology to testify, that we do have current exploitability to the edge of that shelf, isn't that correct? We could have a congressional finding that we now have the technology to exploit to the edge of the shelf. If we could have that finding we could accomplish what mining wants to accomplish could it?

Mr. LAYLIN. If that is a fact.

Senator STEVENS. That is what I said. If we had evidence to support that you would be in agreement.

Senator METCALF. It is certainly a fact as far as our citizens are concerned, isn't it, that if we license and if you want to enter into drilling offshore, you would come into the jurisdiction of the United States?

Senator STEVENS. Mr. Chairman, I would like to get some of the people I know in this business, oil and gas industry, in particular and the offshore minerals people off Alaska to come in here and tell you what we can do today.

Senator METCALF. We will have them.

Mr. LAYLIN. I think that is very pertinent.

Mr. ELY. The National Petroleum Council now forecasts that within less than 5 years exploitation at a depth of 1,500 feet will be feasible. In 10 years we will have a breakthrough to make exploitation possible at 4,000 to 6,000 feet. Once that is achieved there is no insuperable limit, because to get that deep you must be able to build your structures on the sea bottom.

Senator STEVENS. Yes, but you are not talking about a very great area of the United States when you are talking about that depth, are you? My understanding of the offshore area in the seaward land mass, it is not that far.

Mr. ELY. The difference between the 200-meter isobath and the 2,500-meter isobath which some people say corresponds very roughly to the edge of the submerged continent (others disagree) is equal to about half again as much as that within the 200-meter isobath. The area that is at stake here off our continent between the 200 meters and 2,500 meters isobaths is roughly equal to the combined area of New York and Texas and California. This is a huge domain in which to casually abandon a legitimate claim.

Senator STEVENS. That is the best defense of my State I have heard today, Mike, because that is still not equal to the size of Alaska.

Mr. LAYLIN. It is a misstatement. We are not abandoning something. We don't have it there to abandon it.

Senator METCALF. We are having a rollcall now and, as I understand it, we are going to have a rollcall about every hour on the hour and all afternoon, and so I am going to have to adjourn this hearing. I am sorry we didn't give you equal time, Mr. Laylin. However, any views that you have will be incorporated in the record. If I keep the record open, I would like to have this printed for future reference. Now these hearings are going to go on next year, but I would like to have this record printed as soon as possible. Would you get your material in by January 1?

Mr. LAYLIN. Yes, Senator.

Senator STEVENS. That is cruel and unusual punishment.

Senator METCALF. No, I was going to ask him when he wants it.

Mr. LAYLIN. January 1 is ample time.

Senator METCALF. Or the 15th?

Mr. LAYLIN. All right.

Senator METCALF. The record will be kept open until January 15 for the submission of further material and we are very grateful to both of you for coming here and presenting your ideas on the matter on which I have no experience and nothing but praise for you people who are much more expert than I.

Mr. LAYLIN. Senator, will you make sure that the copy that goes to the printer gets "disapproved"?

Senator METCALF. Yes, sir, the reporter has that and the staff. Thank you very much. We will be in recess subject to the call of the chair.

(Whereupon, at 12:45 p.m. the hearing was adjourned, to reconvene subject to the call of the Chair.)

OUTER CONTINENTAL SHELF

THURSDAY, JANUARY 22, 1970

U.S. SENATE,
SPECIAL SUBCOMMITTEE ON OUTER CONTINENTAL SHELF
OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C.

The special subcommittee met at 9:05 a.m., pursuant to notice, in room 3110, New Senate Office Building, Senator Lee Metcalf (chairman) presiding.

Present: Senators Metcalf, Bellmon, Stevens, and Hansen.

Also present: Senator Pell.

Staff members present: Jerry T. Verkler, staff director; Stewart French, chief counsel; and Charles Cook, minority counsel.

Senator METCALF. The subcommittee will be in order.

As we continue our inquiries into policy issues related to the width of the Continental Shelf, the U.S. position related to the development of a regime for the exploration and exploitation of seabed resources beyond the limits of exclusive national jurisdiction, the relationship between shelf width and the development of such a regime and other matters bearing on these issues, it is appropriate that we have with us today a group of knowledgeable individuals in this area.

I have read most of your statements, which will be incorporated in full in the record.

Gentlemen, I asked you to appear together at the witness table to discuss some of the key issues related to the resolution of the Continental Shelf and deep seabed problems.

Instead of troubling you to read your statements at this time, I would prefer that each of you take no more than 20 minutes to speak off the cuff on a few of the key issues related to the shelf and seabed questions. Then, after all of you have completed your extemporaneous answers to these questions, we will ask you additional questions, and you may ask each other questions and pose appropriate comments, and we will then let the debate follow its own course.

You have copies of the questions in hand. The key questions are:

1. As you would interpret the 1958 Geneva Convention on the Continental Shelf, ultimately how far seaward may the United States exclusively explore for and exploit the natural resources of the seabed—assuming we have developed the technology to make exploitation possible?

2. The International Court of Justice, in its recent North Sea decision, referred to the "rights of the coastal State in respect of the area of the Continental Shelf that constitutes a natural prolongation of its land territory into 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, it is here an inherent right."

Notwithstanding the court's dicta concerning a 100-mile limitation on adjacency, how far seaward does the natural prolongation of land extend? Is there not a geological basis for determining how far seaward the submerged land extends?

3. What are the advantages and disadvantages of continuing to exercise our rights under the 1958 Geneva Convention, that is, to continue seawardly with our exploration and exploitation of seabed resources, without seeking any new international agreement as to limits of the legal Continental Shelf?

4. Generally, what is your opinion about the advisability of an intermediate zone concept such as recommended in the Stratton report as a possible solution to the shelf limits problem?

5. If an intermediate zone were to be established, which of the following methods, if any, would be the most desirable means of implementing such a proposal:

(*a*) By amendment to the 1958 Geneva Shelf Convention?

(*b*) By a separate international agreement not tied in with the 1958 Geneva Shelf Convention or with a regime for the deep seabed?

(*c*) As part of a comprehensive international agreement related to the exploration and exploitation of deep seabed resources beyond the limits of the legal Continental Shelf?

6. What actions should the United States consider taking to counteract the recent trend at the United Nations, as evidenced by at least two resolutions, directed against the exploitation of the deep seabed by the United States and other developed nations and looking toward an international regime with a strong international agency having jurisdiction and power "to regulate, coordinate, supervise, and control all activities related to exploration and exploitation of deep seabed resources"?

I apologize for imposing a time limitation upon you. As you know, after these hearings were scheduled, the President decided to present his state of the Union message to Congress today. I hope you understand that we are operating under unusual time pressures, for which I do sincerely apologize.

However, in the interest of insuring that each of you have an equal opportunity to speak and comment on each other's papers, I will insist that you each adhere to a time limitation for your initial remarks of 20 minutes. We will let each of you know when your time is up, if you wish.

Mr. Henkin has not yet arrived. I hope he planned to make it. I had planned to have him speak first, but, Professor Auerbach, I will have you be the first witness, to be followed by Professor Burke and then by Professor Young. I am delighted to have you here.

STATEMENTS OF PROF. CARL A. AUERBACH, SCHOOL OF LAW, UNIVERSITY OF MINNESOTA; PROF. WILLIAM T. BURKE, SCHOOL OF LAW, UNIVERSITY OF WASHINGTON; RICHARD YOUNG, OF THE NEW YORK BAR; AND PROF. LOUIS HENKIN, SCHOOL OF LAW, COLUMBIA UNIVERSITY

Mr. AUERBACH. Thank you. I appreciate the opportunity to be here, Senator.

The statement which I have submitted to your subcommittee, in addition to answering some of the questions you put in your letter inviting us to appear, also attempts to outline, as briefly as I could, the major recommendations of the Stratton Commission, the Commission on Marine Science, Engineering and Resources. I thought it important to have a summary of these recommendations appear in the record of your committee.

I would like, if I may, Senator, to deal with these questions a little out of order so that I can take up what I think are the major questions and the rest if time is available. I think that most of your questions are answered in the prepared statement.

Senator METCALF. Yes.

Mr. AUERBACH. I want to deal first with the implications of question 3, which also involves questions 1 and 2.

I think the implication of question 3 was spelled out in your letter, Mr. Chairman, when you asked whether the United States should stand on its rights under the present language of the Continental Shelf convention or should, as the Stratton Commission proposed, take the initiative to secure international agreement on an amendment to the convention which would provide for a narrow Continental Shelf.

With all due respect, Senator Metcalf, I do not believe this is the alternative. I think that the United States should stand on its rights, but the real question is: What are its rights?

May I say that there has been some irresponsible talk by spokesmen for the oil industry that the Stratton Commission has proposed to give away the "mineral heritage" of the United States. The Commission never proposed any such thing, nor do I. I think we should hold on to our mineral heritage.

The question is: What is our mineral heritage? What rights actually does the United States now have to the mineral resources underlying the high seas?

In the light of what I think must be the answer to this question, the Stratton Commission has not proposed that the United States give away anything it now has, and I hope that my colleagues this morning will agree with me on this basic point.

It is implicit in what I have already said that the answer to question 1 is that nobody can answer it with any degree of certainty. It is precisely the uncertainties of the Geneva Convention that give rise to the different questions of law and policy now confronting the United States, and its international lawyers.

We can go into this in some greater detail if you wish and I hope my colleagues will agree with the brief comments I shall make. I do not believe that the opinions of the International Court of Justice in the *North Sea Continental Shelf* cases help us at all. As you know, Senator Metcalf, Mr. John Laylin is presently engaged in writing a

report for you on the ICJ judgment. He has circulated a draft among a number of us. Comments have been received by him, and he will, within a short time, file a statement with your committee, with which I hope I shall be able to join.

(Mr. Laylin's report and comments are on p. 130.)

The next very important question that I want to deal with relates to the moratorium legislation, because I think here is a matter which is very much within the jurisdiction of the Senate Committee on Interior and Insular Affairs. It seems to me—and I am reluctant to say it—here is a case where the Stratton Commission can say, "I told you so."

On the basis of conversation with a number of people who were involved in this moratorium legislation, it appears that many representatives of foreign nations feared that the technically advanced nations of the world would simply proceed out into the oceans with as much rapidity as they could muster and present the international community with *faits accomplis* which would make it impossible to arrive at some reasonable framework for the exploitation and development of these minerals resources that would benefit all nations. This fear is expressed in the moratorium legislation which, in effect says: "Let's hold everything where it is now so that we can have time to deliberate and to negotiate, so that we will not be overrun by accomplished facts which are irreversible."

I believe that the attitudes of some of the delegates to the U.N. General Assembly who voted for the moratorium resolution was also influenced by the fact that the oil industry actively lobbied during the last session of the U.N. General Assembly for the position it advocates, urging representatives of small coastal nations to take the initiative and declare their jurisdiction over wider and wider areas of the seabed, impliedly promising them that the United States would then go along.

With this kind of atmosphere, the passage of the moratorium resolution was only to be expected. I think it is to be regretted that the resolution was passed, because unless mineral resource exploration and exploitation are encouraged and take place, the mineral resources will benefit no one. Congress has also declared in legislation that it is our national policy to encourage technological advances in this area so ultimately these marine resources can benefit all mankind.

A matter of national policy is also involved which is within the jurisdiction of your committee. The Stratton Commission recognized that the ocean industries faced a dilemma in this respect—namely, that if they engaged in exploration and development of these marine resources pending such time as the international community agreed on a new framework, it could possibly happen that they would find themselves outside the eventually agreed-upon limits of national jurisdiction and subject to some kind of international regime which was less favorable to them than the one they were enjoying under U.S. auspices. This possibility might deter their activity. The Stratton Commission was very much aware of this problem and considered the following alternatives. First, the moratorium principle, which it rejected for the reasons I have indicated. The second alternative is for the United States to insist that any new international agreement recognize grandfather rights. This, too, creates the danger of a series of *faits accomplis* which would prejudice the ultimate location of the

boundary of national jurisdiction. In light of the moratorium resolution, it appears that a majority of the nations last fall did not find this alternative to be acceptable.

The third alterntaive, which is the one the Stratton Commission recommended, is for the United States to say to ocean industry:

> Go out there, try to explore and develop these marine resources to the best of your ability. If it should turn out that subsequently you are subject to arrangements which are less favorable to you than the arrangements which induced you to undertake the activity, the United States will guarantee you against any loss.

This is like the kind of thing we do to encourage private investment in Latin America, for example.

The Commission recommended that the United States undertake to protect ocean industry against loss of expenses and investment. I think that we might even go further, particularly in view of the moratorium resolution and the fact that I do not believe that the risk of loss in this matter is very great at all. I think that the United States might go so far as to say that it will also protect industry against the loss of reasonable profits, as well as investment and expenses, under the circumstances I have described.

This policy of guarantee recommended by the Stratton Commission will require domestic legislation. If it were passed, the nations of the world would know that it is clear U.S. policy not to permit anything that happens between now and the time that the international community ultimately arrives at agreed arrangements, to prejudice the ultimate solution. The chances for repeal of the moratorium resolution would then be very good. I shall add that the guarantee should cover all subsea activity beyond the 200-meter isobath.

This leads to another matter of domestic policy. In order to effectuate the recommendations of the Stratton Commission, the Outer Continental Shelf Lands Act must be amended. The present act requires the Interior Department to license offshore mineral ventures taking place in an area which extends no further than the Continental Shelf, as defined in the Geneva Convention. But the Outer Continental Shelf Lands Act is as uncertain and indefinite with respect to the area it covers as the Geneva Convention itself.

The result is that industry does not now know for certain when it must apply to the Interior Department for permission to venture into the oceans.

The Stratton Commission recommended that the Outer Continental Shelf Lands Act be amended to require U.S. industry to obtain Interior's permission whenever it wishes to go deeper than 200 meters. The amendment should also make it clear that this requirement is not intended to claim sovereign rights for the United States over any area of the seabed beyond the 200-meter isobath. This amendment, too, will help to lift the fear of many nations that the United States may be trying to preempt the field and prejudice an ultimate international decision about these very difficult and controversial matters.

Do I have any time left, Mr. Chairman?

Senator METCALF. Five minutes.

Mr. AUERBACH. Are there any other particular questions you would like me to deal with in the remaining time?

Senator METCALF. I will refrain from asking you questions that interfere on your time. I will have several that I want to discuss with you later.

Mr. AUERBACH. All right, sir. Let me deal with the intermediate zone, then, because this, without any question, seems to be the most controversial of the Stratton Commission's recommendations in the area that concerns this committee.

The intermediate zone proposal may be regarded as a compromise between the position that the international regime should begin where a very narrow Continental Shelf ends and the position that the United States should declare that even under the existing Geneva Convention, its legal Continental Shelf extends to the base of the continental slope and possibly even to include the landward portions of the continental rise.

Our intermediate zone proposal would guarantee the United States exclusive access to the resources of the subsea areas down to the 2,500-meter isobath or out to 100 miles from the coast, whichever alternative produced the greater area. At the same time, the intermediate zone would be subject to all other aspects of the international regime.

I might say that, so far, we do not seem to have persuaded very many people. On the one hand, the Commission for the Study of the Organization of Peace rejects the intermediate zone because it wishes the international regime to begin where a very narrow Continental Shelf ends. Nor have we persuaded the oil industry that our proposal is reasonable. Even Professor Henkin, who is generally sympathetic with the overall recommendations of the Stratton Commission, thinks that our proposed intermediate zone is too wide. Some people who share the views of the Committee for the Study of the Organization of Peace have even charged that we really adopted the oil industry position without having the courage to say so.

Now, the fact that we are being attacked from opposite sides does not necessarily mean that we are right and have somehow chosen the happy middle position. It is possible that we are wrong from every point of view. At least, I would like to assure the members of this committee that we did give very careful consideration to all alternatives and to the objections I have outlined before we arrived at our recommendation and we concluded that our recommendation for an intermediate zone offered a great deal of promise for ultimate international agreement.

That is all I would like to say now, Mr. Chairman. Thank you.

Senator METCALF. I think, Mr. Auerbach, you have made a challenging statement and one that is going to generate some discussion.

Under the provision to the panel that we have here set up, I am going to refrain from asking questions until all the testimony is in.

(Mr. Auerbach's complete statement follows:)

STATEMENT OF CARL A. AUERBACH, PROFESSOR OF LAW, UNIVERSITY OF MINNESOTA

Mr. Chairman: The Report of the Commission on Marine Science, Engineering and Resources was a year old just a few weeks ago. During this past year its recommendations have been subjected to intense analysis and a fair amount of criticism. I had supposed there was at least one advantage in being on a commission that reported and departed. Its members could have their say and not be around when the brickbats began to fly. How wrong I was.

But that is how it should be in a democracy. By serving to advance understanding and discussion of the Nation's marine affairs, the Commission's Report has accomplished one of its major purposes. As citizens, the members of the Commission have a responsibility to participate in the continuing dialogue. And, as you can see, we are not hesitant about discharging this responsibility. But I should hasten to add that I speak only for myself this morning.

As the dialogue proceeds, I hope, too, that I can remain open to ideas and suggestions that are better than those embodied in the Commission's Report. You will recognize how difficult this is when I also say that I have not heard much during this past year which has caused me to change my mind about the essential soundness of the principal recommendations of the Commission regarding the international legal-political framework for the exploration and development of the mineral resources underlying the high seas. This is not only because one tends to become stubborn in defense of one's controversial ideas. This is true. But I have taken comfort in the fact that no criticism has been levelled at the Commission's recommendations which it did not take into consideration in reaching its conclusions.

I should like to outline these recommendations, Mr. Chairman, in a manner that will permit me to deal with the specific questions you put to me in your letter of invitation to appear before this subcommittee.

Objectives of Framework

In the Commission's view, any body of principles and rules, institutions and procedures—which I shall call the framework—for the exploration and exploitation of subsea mineral resources must be judged by the extent to which it achieves the following objectives—(1) to promote international peace and order; (2) to enable all nations to benefit from the exploitation of these resources; and (3) to encourage scientific and technological efforts and the other major capital investments required and, to this end, to provide means to recognize exclusive claims to explore and exploit the mineral resources of large enough subsea areas for long enough periods of time to make the activity profitable.

Existing Framework: "Should the United States Stand on its Rights"?

The Commission concluded that the existing international framework cannot achieve these objectives. In your letter, Mr. Chairman, you ask whether the United States should "stand on its rights under the present language of" the Continental Shelf Convention or should it, as the Commission proposed, "take the initiative to secure international agreement on an amendment to the Convention providing for a narrow continental shelf?" The question is, what are its rights? May I say that there has been some irresponsible talk by spokesmen from the oil industry that the Commission has proposed to give away the "mineral heritage" of the United States. The Commission never proposed any such thing. Nor do I. I think we should hold on to our "mineral heritage". But the question is, what "mineral heritage" does the United States actually have in the Oceans?

General principles of international law recognize each coastal nation's right of permanent, exclusive access to the mineral resources found in its territorial waters, or on their beds, or in their subsoil. But there is no international agreement on the breadth of the territorial sea and claims vary from three to more than 200 nautical miles.

The International Convention on the Continental Shelf grants to each coastal nation "sovereign rights" over the continental shelf "for the purpose of exploring it and exploiting its natural resources." It defines the continental shelf as extending "to the seabed and the 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". This definition imposes uncertain limits upon the extent of the continental shelf. Assuming there are such limits, only general principles of international law govern exploration and exploitation of the mineral resources of the bed and subsoil of the subsea areas beyond them. And these principles also abound with uncertainty. These uncertainties discourage the development of subsea mineral resources.

A Redefined Continental Shelf

The Commission concluded that there is no way to fix a definite seaward limit to the continental shelf by interpretation of the language of the Convention defining the continental shelf. Accordingly, it recommended that the United States lead an effort to reach international agreement upon a precisely rede-

fined continental shelf. Specifically, it proposed that the seaward limit of each coastal nation's "continental shelf" be fixed at the 200-meter isobath, or 50 nautical miles from the baselines for measuring the breadth of its territorial sea, whichever alternative gives the coastal nation the greater area for purposes of the Convention on the Continental Shelf. In the Commission's view, the interests of the United States and the international community are best served by the narrowest possible definition of the continental shelf for purposes of mineral resources development. The 200 meter/50 mile pairing was chosen by the Commission because it is about as close together as pairings on worldwide averages of the depths and widths of the world's continental shelves can reasonably be.

I do not read the decision of the International Court of Justice in the *North Sea Continental Shelf Cases* as giving coastal nations sovereign rights over areas greater than those they would acquire for this purpose under the Commission's recommendations. Among other things, the majority opinion states that "by no stretch of imagination can a point on the continental shelf situated say a hundred miles, or even much less, from a given coast, be regarded as 'adjacent' to it." This statement may even cast doubt on a coastal nation's claim of exclusive access to the mineral resources of its *geological* continental shelf that lie in the subsea areas farther than 100 miles from its coast.

Relations Between United States and Business Entities on Redefined Continental Shelf

Mineral resource development on the redefined U.S. continental shelf would be governed by the Outer Continental Shelf Lands Act. However, the Commission also recommended that this Act be amended to authorize the Secretary of the Interior to waive competitive bidding whenever he determines that this step is necessary to encourage mining on the redefined continental shelf. (The Commission did not think that competitive bidding would have to be waived to encourage petroleum recovery on the redefined continental shelf). If competitive bidding is waived by the Secretary, the business entity which discovers the deposits would be given the right to exploit them on terms and conditions, including payment to the United States, which are stipulated in advance. No other nation, or international agency, would be involved.

An International Registry Authority

The Commission recommended that the United States propose a new framework for exploration and exploitation of the mineral resources underlying the deep seas, that is, the high seas beyond the outer limits of the redefined continental shelf. The Commission also outlined the elements of such a new framework.

All claims to explore or exploit particular mineral resources in particular areas of the deep seas would be registered with an International Registry Authority. Every nation adhering to the agreement embodying the new framework would undertake not to engage in, or authorize, exploitation except under a registered claim. But nations would be free to engage in or authorize preliminary investigations to determine whether it was worthwhile to seek registration of a claim to explore.

Only nations, or associations of nations, would be eligible to register claims to explore or to exploit.

The membership of the International Registry Authority and the manner of choosing its governing body would be specified in the agreements embodying the new framework. The Authority would find its place in the family of the United Nations but would be as autonomous as the World Bank. It would be organized on a "multiple principle" of representation, which would take technological capacity and geographic distribution into account.

Under the Commission's recommendations, the International Registry Authority would be required to register claims with respect to specified mineral resources—for example, oil and gas, or all minerals other than oil and gas, or all mineral resources—in specified areas of the deep seas on a "first come, first registered" basis, subject only to the following condition. The nation registering the claim would have to satisfy the Authority that the individual, association, corporation, or national organization undertaking the exploration is technically and financially competent and willing to perform the task. The entity undertaking the task would not have to be a national of the registering nation ; that would be a matter for each nation to decide for itself.

But for the condition mentioned, which is necessary to prevent claim-registration from being used to "sit on" the rights derived therefrom, the Registry Authority would have no discretion to deny registration of any claim.

Registration of a claim to explore, would confer upon the registering nation the exclusive right to engage in or authorize exploration for particular mineral resources in a particular area of the deep seas. The Commission's International Panel envisaged that this right would be subject to maximum area limitations and requirements as to the minimum time within which the resources would have to be proved. These limitations and requirements would be fixed by the Registry Authority in accordance with specified standards economically suitable to such exploration. Failure to comply with these conditions, which would also serve to eliminate claim-registration for the purpose of "sitting on" rights, would subject the registration to revocation.

Upon proof of discovery, the Registry Authority would be required to convert the registered claim to explore into a registered claim to exploit. Registration of a claim to exploit would confer upon the registering nation the exclusive right to engage in, or authorize, exploitation of a particular mineral resource in a particular area of the deep seas for a limited number of years; and, consequently, internationally—recognized title, or the right to confer such title, to the extracted mineral resources.

The term of years for which the registering nation would have exclusive access to the mineral resources of the area covered by the registered claim, as well as the size of the area, would be fixed by the Registry Authority. The area would be large enough, and the time long enough, to enable the producer to operate economically and not wastefully and to recover its original investment as well as an adequate return thereon.

Each registered claim to exploit would also be subject to the requirements of actual exploitation within a specified period of time and continued exploitation thereof, unless the Registry Authority, for good reason, waived these requirements. Failure to comply with the requirements would subject the registration to revocation.

Upon expiration of the period of registration of a claim to explore or exploit, further exploration or exploitation of the resources covered by the claim would be subject to whatever framework was in effect at that time. The nation which registered the expired claim would not acquire, by virtue thereof, a vested right to continue to explore or exploit the particular mineral resources in the particular area in question. Nor would it even require a preference over any other nation with respect to such further exporation or exploitation.

A registering nation would be authorized to transfer any of its registered claims to any other nation which adhered to the agreements embodying the new framework.

No unregistered claim would be entitled to any of the benfits derived from registration, and in any conflict between a registered claim and an unregistered claim, the former would prevail. All nations would thus have an incentive to adhere to the recommended agreement and to register claims with the Registry Authority.

To cover the costs of the International Registry Authority, every nation would be required to pay to the Authority a fee for each claim to explore which it registered and an additional fee of and when that claim was converted into a claim to exploit. The Authority would be empowered to fix the fees.

An International Fund

Furthermore, under the Commission's recommendations, every nation registering a claim to exploit would be required to pay a portion of the value of the production, if any, into an International Fund. The membership of the International Fund, and the manner of choosing its governing body, would be determined by the U.N. General Assembly. The Registry Authority would receive the payments from the registering nations and turn the proceeds over to the International Fund, but would have nothing to do with the Fund's management.

The Commission recommended that the International Fund be prohibited from spending the money in the Fund for the general purposes of the United Nations. In this way, the debate about the advisability of establishing such a Fund would be kept separately from the debate over whether the United Nations should have an "independent" source of income, particularly for peace-keeping operations.

The money in the Fund, according to the Commission, would be used for such purposes as financing marine scientific activity and resource development, par-

ticularly food-from-the sea programs; and aiding the developing countries through the World Bank, the U.N. Development Program and other international development agencies.

Relations Between United States and Business Entities in Deep Sea Areas Beyond Intermediate Zone

With respect to claims in areas of the deep seas beyond its intermediate zones—which I shall describe shortly—the Commission recommended that the United States not use competitive bidding, but adopt the same policy of "first come, first registered" that will guide the International Registry Authority.

Since all nations have equal access to the deep seas beyond the intermediate zone, the Commission feared that U.S. use of competitive bidding in these subsea areas would create "flag of convenience" problems that should be avoided. So the United States would register a claim to explore in these areas on behalf of the first responsible qualified business entity that applies therefor. Upon discovery, the claim to explore would be converted into a claim to exploit on behalf of that same entity.

Enforcement of Recommended Framework

Under the Commission's recommendations, each nation adhering to the agreements embodying the new framework would undertake to enact legislation to implement it and, particularly, to assure that (1) the business entity on whose behalf a claim is registered complies with the conditions imposed by the International Registry Authority and reasonably accommodates other uses of the subsea area covered by the registered claim, the superjacent and surface waters, and the air above them, along the lines specified in the Convention on the Continental Shelf; and (2) the specified fees and payments are submitted to the Registry Authority.

The Commission's International Panel contemplated that this national legislation would also require the entities on whose behalf claims were registered to collect and submit to the International Registry Authority such statistics and reports regarding the registered exploration and exploitation activities as the Authority might require.

The agreements embodying the recommended framework would also empower each registering nation to apply its civil and criminal laws to protect the exploration and exploitation activities conducted under its registered claims, including the personnel involved and the necessary installations and other devices, against piracy, theft, violence and other unlawful interferences.

The registering nations failure to discharge these obligations effectively would subject its registered claims to revocation by the International Registry Authority. To enable the Authority to exercise its revocation power fairly and with full knowledge of the facts, the Commission recommended that the Authority be permitted to inspect all stations, installations, equipment and other devices used in operations under a registered claim and to conduct appropriate hearings.

Dispute Settlement

The Commission recommended that the United States ratify the Optional Protocol Concerning the Compulsory Settlement of Disputes which accompanied the 1958 Geneva Conventions on the Law of the Sea and which the United States signed.

It also recommended that the International Registry Authority initially settle disputes arising out of the new framework for deep sea mineral resource development. At the request of any party to the dispute, the Authority's initial decision, including a decision to revoke a registered claim, would be subject to review by an independent arbitration agency possessing expertise in resolving the kinds of issues likely to be presented. The determination of the arbitration agency would be final. The Commission's International Panel envisaged that the Registry Authority would appoint the members of the arbitration agency.

The Intermediate Zone

The Commission recommended that an "intermediate zone" be created encompassing the bed and subsoil of the areas beyond the redefined continental shelf but only to the 2,500 meter isobath, or 100 nautical miles from the baselines for measuring the breadth of each coastal nation's territorial sea, whichever alternative gives the coastal nation the greater area for the purposes for which the zone is created.

This intermediate zone would be treated in all respects like the subsea areas of the deep seas beyond it, except that only the coastal nation or its licensees, which need not be its nationals, would be authorized to explore or exploit the mineral resources in the zone. Only the coastal nation, therefore, would be authorized to register claims in its intermediate zone with the International Registry Authority.

Relations Between United States and Business Entities in Intermediate Zone

Business entities, domestic or foreign, which seek to have the United States register claims on their behalf in the intermediate zone would apply to the Secretary of the Interior who, the Commission recommends, should be designated to register U.S. claims with the International Registry Authority. The Secretary would have discretion to determine whether to register the claim as applied for—as would also be the case if the claim covered an area in the deep seas beyond the intermediate zone. In exercising this discretion, the Secretary would use criteria consistent with those the International Registry Authority itself would use and would also be guided by the State Department's judgment as to the foreign policy implications, if any, of registering the particular claim.

If the Secretary saw no obstacle to registration, he would register the claim to explore on behalf of the first responsible qualified business entity that applies therefor. If he decided to resort to competitive bidding following discovery, the registered claim to explore would be converted into a claim to exploit on behalf of the responsible qualified business entity that bid highest therefor. The bidding need not necessarily be in terms of fixed amounts of cash to be paid before actual exploitation begins, as is now the case on the outer continental shelf. It might be in terms of a percentage of profits.

In any case, the successful bidder might not be the entity on whose behalf the claim to explore was registered. But the registering nation would be authorized to substitute any responsible qualified business entity for the entity on whose behalf the claim to explore was originally registered.

Competitive bidding creates no "flag-of-convenience" problem in the intermediate zone, because only the coastal nation will have access to the zone under the Commission's recommendations. Nevertheless, the Commission recommended that the Secretary of the Interior also be authorized to waive competitive bidding in the intermediate zone. There is greater need for such discretion in the intermediate zone than on the redefined continental shelf in order to encourage the recovery of mineral resources, including oil and gas, from deeper waters.

If the Secretary decides to waive competitive bidding, the registered claim to explore, following discovery, would be converted into a claim to exploit for the entity on whose behalf the claim to explore was originally registered.

In every case, the business entity on whose behalf a claim to explore or exploit is registered in the intermediate zone—or beyond—would pay to the United States the specified fees to cover the costs of the International Registry Authority which the United States would be obligated to pay to the Authority. In addition, the business entity on whose behalf a claim to exploit is registered would pay to the United States the portion of the value of the extracted minerals which the United States would be obligated to pay to the Authority on behalf of the International Fund. This payment would take the place of both the fixed annual rent per acre or square mile and the royalty on the value of production which must now be paid for mineral leases on the outer continental shelf. In this way, the Commission sought to recognize the rights of the international community to the mineral resources of the deep seas without unduly burdening U.S. private enterprise.

Interdependence of Commission Recommendations

Before turning to some misunderstandings and criticisms of the Commission's recommendations, I should like to answer another specific question you put in your letter, Mr. Chairman. Should international action fixing the precise outer limits of the continental shelf, for purposes of the Continental Shelf Convention, be taken "before further resolving other international legal problems, such as the development of a regime for exploration and exploitation of the natural resources of the deep seabed:, the establishment by international agreement of the limits of the territorial sea; the role of coastal states in developing conservation resources related to their offshore fisheries; the conclusion of an arms control agreement affecting the seabed; or other related problems regarding the use of the high seas and the underlying seabed?"

Your very comprehensive question must be broken up into several parts, Mr. Chairman, before it can be answered. All the issues you raise are important and the nations of the world must dispose of them on a basis tolerable to all if the cause of world peace is to be advanced. But they need not all be considered together with the question of the appropriate framework for the development of deep sea minerals.

Certain of these questions, however, will have to be considered together. It seems unlikely that the issue of the outer limits of the continental shelf can be negotiated apart from the issue of the framework for the subsea areas beyond the redefined continental shelf and vice versa. This does not mean that the United States should necessarily seek the widest possible continental shelf if the framework for the areas beyond the continental shelf, however redefined, is not acceptable to it. I should say that, as a practical matter, I do not think there will be the required international agreement on a framework if the United States is opposed to it. But if this should happen, obviously the issue of the outer limits of the continental shelf will have to be reconsidered in the light of that development. Even then, the argument for a narrow continental shelf might prevail—in order to prevent the possibility of "creeping jurisdiction" that may endanger other U.S. uses of the seas, including military uses.

I do not think the other issues you mentioned, Mr. Chairman, need necessarily be disposed of before a new framework for subsea mineral resources development could become effective.

I might mention, at this point, one relatively minor aspect of the Commission's recommendations. The Commission's International Panel doubted the wisdom or equity of including living sedentary species in the definition of "natural resources" for purposes of the Continental Shelf Convention. But it did not think this decision was reversible. The Commission, however, excluded these living resources from its recommended framework for the intermediate zone and the subsea areas beyond. This recommended framework, therefore, applies only to mineral resources.

Some Criticisms and Misinterpretations

The Commission's proposals for redefining the continental shelf and creating an intermediate zone have drawn the greatest criticism so far. Its Report did not dissuade the National Petroleum Council from affirming its prior position favoring a U.S. declaration, which other coastal nations would be asked to emulate, that the existing legal "continental shelf" includes the geological continental shelves, continental borderlands, continental slopes and at least the landward portions of the geological continental rises.

Nor did it dissuade the Commission to Study the Organization of Peace (CSOP) from urging—in a report signed by a most distinguished group of citizens—that the continental shelf be redefined as proposed by the Commission, not intermediate zone be created and the U.N. General Assembly set up an international authority to auction to the highest bidders mineral leases in the subsea areas beyond the redefined continental shelf. The U.N. Committee of the World Peace through Law Center essentially agrees with CSOP.

I have also heard it charged that in proposing an intermediate zone, our Commission accepted the oil company position but pretended not to. Professor Louis Henkin, who is sympathetic with the Commission's views, thinks our proposed intermediate zone is too broad.

The fact that the Commission's recommendations are being subjected to crossfire does not demonstrate their validity. They may deserve to be shot down—from any point of view. But I do think the nature of the criticism demonstrates the difficulties of the problem and the reasonableness of the Commission's recommendations, which are intended not to establish an international framework for all time, but only for the period immediately ahead.

I should also point out that the felt necessities of the oil industry with respect to such a framework are not identical with those of the mining industry. The oil industry now assumes that most of the subsea oil and gas will be found in the areas down to the base of the continental slope, not beyond. Therefore, it is not as interested as the mining industry in the international framework for minerals development beyond the continental slopes and rises. It appears willing to postpone serious consideration of the framework for these areas of the deep seas in return for the wide legal "continental shelf" it seeks. The mining industry, on the other hand, may be willing to accept a narrow continental shelf in return for a reasonable framework for developing the deep seas areas beyond the continental slopes, where it expects to find rich deposits of the minerals it seeks.

I recognize there is no unanimity within either the oil industry or the mining industry, or indeed among international lawyers, on these issues. There is some opinion in the mining industry, for example, that the existing principles of the freedom of the seas are adequate to encourage exploration for and the exploitation of manganese nodules. But I have also heard spokesmen for the American Mining Congress argue that the legal principles embodied in the concept of the freedom of the seas are not sufficiently specific to protect mining rights on the ocean floor.

I agree with the latter view. High seas fisheries, to which some representatives of the mining industry liken the harvesting of manganese nodules, are plagued with difficulties that have arisen precisely because the principle of the freedom of the seas rejects any claim, however limited, of exclusive access to a common property resource. This also helps to answer the question, raised by some in the mining industry, why revenues from deep ocean mining should be shared with the international community while revenues from ocean fishing are not so shared, even though ocean fish are as much the common property of mankind as are ocean minerals.

At present, no nation has the right of exclusive access to any high seas fishery beyond the widely recognized 12-mile exclusive fisheries zone. Registration with the proposed International Registry Authority will give the registering nation limited rights of exclusive access to ocean minerals in return for which it is equitable to require it to pay an "economic rent" to the common owners of the minerals.

Our Commission recommended the institution—on a trial basis—of national catch quotas for the North Atlantic cod and haddock fisheries in an attempt to solve the difficulties of the nations engaged in these high seas fisheries by creating rights of exclusive access. The International Panel, I should point out, suggested that once such a quota system is instituted, a portion of the net economic gain realized from the right of exclusive access thereby accorded might be paid into the International Fund set up in connection with the exploitation of ocean minerals. Ocean fish and ocean minerals would then be treated alike.

Objection has been voiced to the Commission recommendation that only nations be permitted to register claims with the International Registry Authority. I recognize that our petroleum and mining industries, unlike our fishing industry, are accustomed to deal with other nations directly, and not through their own government. But under the Commission's recommendations, the U.S. government would assume important powers and obligations with respect to the development activities of its nationals or other licensees in the subsea areas beyond the redefined continental shelf. For example, the United States would be required to assure that these activities do not unreasonably interfere with other uses of the oceans and that the business entities on whose behalf claims are registered comply with the conditions of registration. If the United States, and not the International Registry Authority, is to be responsible for these policing functions and if claim registration is not to have adverse foreign-policy consequences, our Government must be in a position to determine which claims will be registered. This is best accomplished by giving it alone the power to register claims. Furthermore, under our recommendations, as I stated before, only licensees of the United States would have access to the intermediate zone and would-be licensees in this zone, of necessity, would have to deal with the United States.

There has been some misunderstanding of the Commission's explanation that its recommendations will not preclude the registering nation from subjecting the exploration and development activities under its registered claims to domestic laws governing working conditions; the production, marketing and pricing of the extracted minerals; and the taxation of the income from such activities. The Commission does not *recommend* that such laws *should* be enacted; it thought it important to point out that its recommended framework does not *bar* the registering nation from passing such laws, if it wishes to do so.

The Commission's general statement that current leasing policies on the outer continental shelf be followed in the areas beyond the redefined continental shelf—with the modifications I have indicated—has also been misunderstood in some quarters. The Commission did not mean thereby to suggest that oil produced in these subsea areas should not be subject to the oil import quota system or to other U.S. regulation. Its Report points out that the production of oil in these subsea areas would be encouraged if exempted from the import quota and other regulatory systems. It was aware that such exemption would raise complex economic, political and military questions which it was not com-

petent to decide. So it called for a new study of these questions—by some other Commission, of course. Nothing in the Commission's report, or in the report of its International Panel, is intended to suggest policies to be followed on these matters before such a new study is made.

Interim Policy—the U.N. General Assembly Moratorium Resolution

Finally, Mr. Chairman, you asked in your letter about the policy the United States should follow until such time as agreement is reached on a redefined continental shelf and the framework for developing the mineral resources of the subsea areas beyond the redefined shelf. This problem has become much more complicated by the passage during the most recent session of the U.N. General Assembly of the so-called Moratorium Resolution. This Resolution provides that:

The General Assembly . . . declares that, pending establishment of the aforementioned international regime (the regime for the subsea areas beyond the limits of national jurisdiction):

(a) States and persons, physical or juridical, are bound to refrain from all activities of exploitation of the resources of the area of the seabed and ocean floor and the subsoil thereof, beyond the limits of national jurisdiction;

(b) No claim to any part of that area or its resources shall be recognized.

In my opinion, Mr. Chairman, this is a most unfortunate resolution. But I must add that it might have been avoided had the United States promptly adopted the interim policy recommended by the Commission.

The United States has proposed that the U.N. General Assembly adopt a resolution commending to nations "for their guidance" a set of principles concerning subsea mineral development. These principles would require that, "as soon as practicable", the seaward limits of the continental shelf be defined precisely and a new framework for the development of the mineral resources beyond the redefined continental shelf be established that will be conducive to the making of the necessary investments. But the Administration has not as yet taken a position as to the outer boundary of the continental shelf or the framework for the subsea areas beyond. It is keeping all options open, which means that it has not made up its collective mind.

Seeking to prevent such *faits accomplis*, the U.N. General Assembly passed the Moratorium Resolution. The Commission opposed this alternative because it is inconsistent with Congress' laudable objective to preserve "the role of the United States as a leader in marine science and resource development" and because it it will not benefit mankind to postpone subsea mineral resource development for an indefinite period of time. The Resolution will especially discourage such development because the subsea areas to which it applies are not known.

Another alternative is to have any new, international agreement recognize "grandfather rights", that is, the rights of those business entities which, in the interim, develop mineral resources beyond the 200-meter isobath to continue to do so on the same terms and conditions that induced them to undertake these activities. The Commission rejected this alternative because it would create incentives to postpone international agreement and prejudice the ultimate location of the shelf boundary. Apparently, this possibility also did not appeal to the U.N. General Assembly.

At the same time, the Commission recognized that if private industry proceeded with exploration and exploitation beyond the 200-meter isobath in accordance with the Commission's recommendations outlined above, it would run the risk of ultimately finding its operation in an area beyond the redefined continental shelf and, perhaps, governed by a less favorable framework than now applies on the outer continental shelf. In the Commission's view, this risk is very small, if all its recommendations are adopted. Indeed, financially, industry is likely to be no worse off than if these operations were conducted on the outer continental shelf up to the 200-meter isobath.

The United States has suggested, as principles, that (1) no nation may claim or exercise sovereignty or sovereign rights over any part of the seabed or subsoil beyond the outer limits of the continental shelf; (2) exploitation of subsea mineral resources "that occurs prior to establishment of the boundary (of the continental shelf) shall be understood not to prejudice its location, regardless of whether the coastal (nation) considers the exploitation to have occurred on its 'continental shelf'"; and (3) the interest of the international community in the development of mineral resources in the subsea areas beyond the continental

shelf should be recognized through the "dedication as feasible and practicable of a portion of the value" of these resources to "international community purposes."

So far as they go, these three principles are consistent with the Commission's recommendations. While principle (2) quite properly seeks to reserve the subsea areas beyond the 200-meter isobath for future international decision, it does not indicate what each coastal nation should consider to be the limits of its "continental shelf" until such time as the shelf's boundary is fixed by new international agreement. Nor, as I have indicated, does the United States have a position on how it will define the limits of its continental shelf during this interim period, which may last many years.

Until new arrangements are agreed upon, it is possible that coastal nations may claim wider continental shelves than would be consistent with U.S. interests and thereby prejudice the ultimate location of the shelf's boundary. To prevent such *faits accomplis*, the Commission recommended that the United States propose the principle that no nation, during this interim period, claim or exercise sovereignty or sovereign rights over any part of the seabed or subsoil beyond the 200-meter isobath. At the same time, the Commission recommended that the United States continue to authorize exploration and exploitation of the mineral resources of the seabed or subsoil underlying the high seas beyond the 200-meter isobath, on condition that such authorization explicitly state that such exploration or exploitation shall be subject to the new framework eventually established.

Nevertheless, to protect U.S. private industry against risk, the Commission recommended that Congress enact legislation to compensate private industry for any loss of investment or expenses occasioned by a new international framework that redefines the continental shelf so as to put the area in which it is engaged in mineral resources development beyond the shelf's outer limits. Industry spokesmen have argued that the promise of compensation for loss of investment and expenses will not be sufficient to encourage mineral resources development in the areas of doubtful jurisdiction. To meet this objection, and because I think the risk of loss is very small, I would be willing to go further than the Commission and have Congress guarantee private enterprise compensation for loss of expected profits, as well as investment and expenses, occasioned by the framework ultimately negotiated.

Clearly, the Commission's alternative, with the modification I would accept, is preferable to the Moratorium Resolution. Even though the Resolution, at best, probably binds only those who voted for it, it is at least a recommendation to all the other nations. To ignore it would embarrass the United States. Yet I think that there might be a chance to secure a rescinding of the Moratorium Resolution if the United States unilaterally adopted the interim policy recommended by the Commission and then urged such a policy upon other nations.

In any case, the Moratorium Resolution makes it more important than ever before that private entrepreneurs know when they must seek our Government's permission to engage in exploration and exploitation of subsea minerals and that the United States have adequate control over the evolving situation until a new framework is adopted. At present, the Outer Continental Shelf Lands Act is as uncertain on this matter as the existing definition of the continental shelf. To eliminate this uncertainty, the Commission recommended that the Act be amended to require permission from the Secretary of the Interior to engage in mineral resource exploration or exploitation in any subsea area beyond the 200-meter isobath upon such terms and conditions as the Secretary may deem appropriate. The amendment should also indicate that neither this requirement, nor the granting of permits thereunder, is intended to constitute a U.S. claim to exercise sovereignty or sovereign rights over any subsea area beyond the 200-meter isobath.

Senator METCALF. Mr. Burke, we would be delighted to hear from you at this time. If Mr. Henkin comes in, he will be the last one. He will have the disadvantage that he has not heard these preliminary statements, but I am told he can take care of himself.

Mr. Burke, you have come a long way and we are delighted to have a westerner. I know that Senator Jackson would have been especially pleased to be here to welcome you, but on his behalf I am pleased that you are here.

Mr. BURKE. Thank you, Senator; it is a pleasure to be here.

What I would like to do initially is to refer to the written statement that I have submitted and to supplement the remarks that I have made. I think that statement contains responses to these questions which are revisions of the questions that were submitted to us by letter. In one or two instances, I think they go beyond those, and I will try to respond to them.

First, I would like to point out, since I guess it is appropriate to do so, that I have no clients nor any personal financial interest in any of the issues connected with the Continental Shelf or the deep seabed regime.

I have expressed a point of view in the past in support of a relatively wide Continental Shelf, as an interpretation of the 1958 Convention, and I did that for reasons largely unconnected with policy issues about the Shelf itself with the hope that if we could in some way arrive at a definition of the Shelf which would permit orderly exploitation of that area for a considerable time in the future, it would remove the pressure which obviously has been building since 1967 for a new conference on the law of the sea which will deal with all of the issues dealt with in 1958 plus some more issues which have come up in the meantime, particularly in connection with military uses of the seabed.

It was my view and it is my view that in negotiations of this kind conducted with 130 states, the United States is not in a particularly strong bargaining position on many of the issues.

However, it seems to me that the hope for avoiding a conference which will take up all these matters is pretty slim now, so I think the situation differs from what it was before.

I have, in the written statement here, suggested that probably the best tactical position is to go into such a conference with the aim of reaching agreement on as narrow a limit on the comprehensive authority of the coastal state as possible for the United States to reach. I don't know how one defines what is going to be possible under what would be a fairly chaotic set of circumstances, what is possible will depend on negotiations amongst 130 states.

I don't believe that we will be able to reach agreement among the states on a Continental Shelf defined as it is now in the 1958 Convention or that the new definition will be 200 meters or 50 nautical miles. Whichever is greater. I think it would probably go further than that if for no other reason than the necessity to satisfy or meet the justifiable expectations of those who now have leases which extend beyond 200 meters and, in some instances in different parts of the world, beyond 50 miles.

I noted, incidentally—I guess it is appropriate to say this now; I have not had a chance to study the statements of Professor Auerbach or Mr. Young—but I notice in the latter's statement, when I got a chance to look at it briefly yesterday, that he defines exploitability as extending presently to 400 meters. I have said in my statement that so far as I know, the deepest producing oil well in the oil industry does not reach 400 meters, it has not even reached 200 meters, it is barely beyond 100 meters.

So we may have some difficulty here in explaining what we mean by exploitability. I mean production that has been demonstrated, as actually being under way and in this sense the deepest well presently in operation is 340 feet.

Senator METCALF. I was going to ask Professor Auerbach about his jurisdiction proposal. Would it be too much of an interference on your time to comment on that?

Mr. BURKE. No, because I have only a few more remarks.

Senator METCALF. I think that the jurisdiction proposal is a matter of great concern to us and its application to the Geneva Convention.

Mr. BURKE. In other testimony, not before this committee but before another Senate committee, I indicated that I don't find, myself, any direct indications of creeping jurisdiction. I have assumed what is meant by "creeping jurisdiction" is taking an extension of jurisdiction for one purpose and then attempting to justify jurisdiction for an entirely different purpose.

The only instances of that which are particularly notable are the ones which have occurred on the west coast of Latin America, and this happened over 20 years ago. This is nothing new, and certainly has not caught on around the world.

On the other hand, there is a question of the way the practice might develop. When we are talking about negotiations, in contrast to state practice, many of these issues will be tied together for bargaining purposes, and that is the reason I prefer beginning with as narrow a boundary as we can arrange in international negotiations. It may not be very narrow in the end, as we formulate conclusions, but I believe that it is to the United States' interest, and to the world's interest generally, to reduce the extent to which state boundaries are extended out into the ocean and to provide for management, beyond whatever the boundaries are, by international agreement, because we have a number of different kinds of boundaries in the ocean—boundaries on the bottom, boundaries in the water column and in the air above. These do not coincide. There are many of them, and negotiations concerning them are likely to tie them together.

I think it is to our advantage to negotiate arrangements for dealing with events beyond the control of single states. This is in contrast to extending state boundaries to reach these events. We have had an awful lot of experience with this, particularly in connection with fisheries. Technological changes hit the fishing industry pretty hard, too, and there have been expansions of boundaries in somewhat of an effort to deal with the problems of distant water fleets coming off our shores.

I believe that the most satisfactory way to arrange those matters, though, is through negotiations and international agreements. I believe that is our national policy.

I would like to add a couple of comments to supplement some of the observations I had about the prospects for a new law of the sea conference. I think there is a high probability that we will soon, too soon, be engaged in such a conference on many issues, but whether or not this is so, it seems to me——

Senator STEVENS. Mr. Chairman, may I interrupt?

Did I understand you to say it would be involved too soon?

Mr. BURKE. Yes; I think it will happen before we are able to prepare ourselves adequately. My point is that I think we should begin preparations for this on an urgent basis within the executive branch. I don't believe enough priority has been placed on preparing for these negotiations within the executive branch.

In commenting on the objectives of the deep sea regime, mention was made of the impact of such a regime on scientific research or exploration in the sea. The proponents of a treaty regime for the deep seabed often recommend that it should include the grant of exclusive rights of exploration for mineral resources.

I think it should be noted that such a grant could well pose a very serious threat to free and effective conduct of scientific exploration. The problems involved here are complicated; they include the possible need to prohibit any activity, including mining or mineral exploration, in particular regions of the deep sea, to completely maintain it as a prohibited area so that you can establish some baselines that are undisturbed that can be observed. This may require, as I say, prohibition of some activity in some parts of the deep sea. I don't believe scientists will ask that we stay out of all of the ocean.

Second, there is the problem of physical interference between different types of activities, particularly in the context we are now talking about—mineral exploration—with research activities and installations.

Third, and I think perhaps the most significant, is the problems pertaining to distinguishing between scientific exploration and exploration preliminary to prospecting or preliminary to exploitation.

It is perhaps premature presently to try to define these problems that I have enumerated in great detail, but the study that is required for doing this will be undertaken within the scientific community presently. It is not premature, it seems to me, to express the belief that very great weight should be attached to scientific considerations in analyzing these problems and that this great weight be reflected in a preferential position for science in weighing the interest concerned in exploration and exploitation of the deep seabed.

At the present, it is desirable to suggest that any system of exclusive rights be formulated to preserve full freedom of scientific exploration in the deep sea. We should not permit the disaster that has already occurred in connection with the Continental Shelf Convention in which U.S. scientists who are active in many parts of the world or would be active are no longer able to be. This came about because of the provisions in the 1958 Continental Shelf Convention. What I am suggesting is that we anticipate this problem and don't get into it when we make arrangements for the deep seabed.

Regarding the U.N. moratorium resolution, we have been asked a question about the legal effect. I don't believe it has any binding legal effect. It does have considerable political consequences. However, I think one of the actions that the United States should take with respect to this matter which will make a distinct contribution is that of increasing technical assistance efforts to the developing countries who are at the present unable to determine what is going on in the ocean.

Many of the developing States do not understand the data that is being generated from work in the ocean. They need to be geared up to participate not only by sharing in the benefits, which I think we all agree on, but to participate actively in the work that is necessary in the deep sea so that they will be able to participate and make a decision about a regime for this region. Presently the vast majority of these States are unable to do so. I think this is one of the factors that

gives rise to some of the distrust that is so obvious in the United Nations.

This means expenditure, I believe, of U.S. funds, and I assume that means the Congress should take a hand in providing adequate funds for technical assistance. I think it is one of the prime factors accounting for the political tensions and the lack of knowledge on the part of the developing countries of the ocean environment.

I think that is all I have to add.

Senator METCALF. Thank you very much for your contribution.

I want to ask my colleagues: If you are not going to be able to stay here for the entire presentation, I feel that you can break in and I will be generous in extending the time for some of the witnesses because I know that some of my colleagues have to go to other committee meetings.

Senator STEVENS. I am 15 minutes late now, Mr. Chairman.

Senator METCALF. I am very grateful to all of you for showing up at this time.

Do you have any comments?

Senator STEVENS. I wanted to ask, if I could, Mr. Chairman, a question of Mr. Burke.

As I understand your statement, you favor a 200-meter or 50-mile shelf, whichever is closer to the country——

Mr. BURKE. I said I would begin negotiating on that. I believe we ought to try to get as narrow a one as possible, and I don't believe that is possible.

Senator STEVENS. I wonder sometimes if we should start out on the basis that seems pretty narrow to me in Alaska. Do you have any idea of the implication of that, my State, and as a matter of fact, it is a 50-mile shelf.

Mr. BURKE. I don't think it is very much in the State of Washington.

Mr. AUERBACH. Senator, may I break in?

Bill, I am not sure that I understand what your position is, because it is contrary to what I understood your position to be up to now. I think the Senator asked whether the limits of the shelf you advocate are 200 meters deep or 50 miles out, whichever is nearer the coast.

Mr. BURKE. Nearer as you can get. I don't believe we are going to be able to negotiate an arrangement which will make that provision. This is going to be a bargaining situation.

Mr. AUERBACH. Whichever is nearer?

Mr. BURKE. Yes.

Senator STEVENS. That is going to extend the existing shelf.

Mr. BURKE. That is why I don't believe we are going to get it.

Senator STEVENS. I will put it in the record here and send you a copy if you like. I just got a copy of the statement that indicates that Russia has extended her jurisdiction in order to protect unilaterally her seal herds, which is going to have an effect on our Pribilof Islands concept.

My point to you is: So long as we are dealing with a situation where we apparently are one of the few countries that recognize the impact of these international decisions and, as you say, the political impact is greater on us apparently, why is it to our advantage to reduce what we have already got now? I thought the main purpose of the whole thrust of the argument is how much further should we go out, not how much should we roll back. The impact of your statement is a matter of policy.

Mr. BURKE. We are now going to be faced with whatever was provided for 12 years ago and need to reach a definition. I don't believe that in reaching that definition we will reach an agreement on a new convention which will establish a shelf narrower than we have. The narrower shelf, the shelf that we had and still do have depends on exploitability and adjacency.

My understanding of exploitability again is that it has not gone beyond 200 meters.

Senator STEVENS. You are reading it in a very narrow sense, in the sense of not only technological capability but economic feasibility?

Mr. BURKE. What is actually done; that is the only way to demonstrate it. Otherwise, it is just what somebody says.

Senator METCALF. May I interrupt a minute? Professor Henkin has arrived.

Mr. HENKIN. I am sorry, Senator; I never got the word that I was to be here before 10.

Senator METCALF. We are delighted to have you here.

We just got the message from President Nixon that he was going to deliver his state of the Union message, and we moved this meeting up and we were forced to go ahead. Thank you for coming.

Thank you for yielding, Senator Stevens.

Senator STEVENS. Thank you, Mr. Chairman.

I think the technology has been demonstrated that it is greater than 110 meters but there are no commercial wells at greater than that depth. Is that your point?

Mr. BURKE. Much drilling at much greater depts, but it is not just a matter of drilling. There has to be equipment placed on the bottom. Presently we have done this, some through subsea completions, but the deepest well is still conducted by a platform at 340 feet.

Now, Mr. Young can go into the Santa Barbara situation; we have discussed this. I don't pretend to know the technological capabilities of the oil industry.

Senator STEVENS. My point is, what I would like to know from your point of view; an interpretation of the existing convention. Do you read exploitability to mean not only technological capability but economic feasibility?

Mr. BURKE. No; I would not include economic feasbility, because that varies so from one country to another. I don't believe there would be any common standard.

Senator STEVENS. Do you believe the present convention permits us to extend out to whatever limit we have so far as technology at the present time is concerned?

Mr. BURKE. As far as technology will go, yes, as long as it is adjacent.

Senator STEVENS. If technology improves under the existing convention, we can move out further.

Mr. BURKE. That is right, and I assume we will move out further before we negotiate.

Senator STEVENS. If anything, you are suggesting it would be in our best interest to roll it back, right?

Mr. BURKE. No; I have said here I would prefer not to negotiate at all. I would prefer we continue to operate under the Continental Shelf Convention. That means we move out with our technological capabil-

ity. I believe that the term "adjacency" would include areas to the bottom of the Continental slope. I have said that in the statement. What I have discussed in terms of narrow limits is solely in the context of the bargaining situation.

Senator STEVENS. How do you read this in terms of getting away from a geology of the ocean bottom? How do you read this in terms of marine resources so far as the other convention is concerned? Do you believe that we can expect to have any interpretation that will give us a broader jurisdiction in terms of fishing?

Mr. BURKE. I think there will be broader jurisdiction for fishing if we negotiate agreements; yes. I don't myself believe that is wise. As I said, I would prefer negotiations on international arrangements rather than extending boundaries, but I think there will be some extension beyond those we now have of 12 miles.

Senator STEVENS. I don't want to press but I would like to know about this "wise." In both instances, you have indicated you don't think it is wise from the point of view of national policy to extend either natural resources subsea bottom jurisdiction or the living resources in the seawater column.

Mr. BURKE. Yes.

Senator STEVENS. Why do you reach the conclusion it is not wise?

Mr. BURKE. I think with respect to fisheries on a worldwide basis, a large expansion of the fisheries limit would reduce world production of protein, and I think that what we need to do is increase production of protein, not decrease it. I think it would create very great problems for the distant water fleets, for the U.S. fleets operating in other waters; it would raise the cost of production and probably decrease production. I don't believe that is to our interests.

Senator STEVENS. I just returned from the Aleutian chain and I was told we could produce a billion pounds of bottom fish a year perpetually from that bank out there along the Aleutian chain if we had good conservation practices. Currently it is being harvested by what they call a vacuum cleaner method, which has nothing to do with renewability of resources.

Now, unless we extend our jurisdiction and unless we impose conservation practices, as I understand it, that potential protein resource that would go on to infinity if properly managed will be destroyed. I don't quite understand how anyone is going to get the jurisdiction to impose conservation practices unless it is the onshore nation that insists on it. It is in our best interests more than anyone else to see that good conservation practices are followed, but I question the "wise."

Mr. BURKE. I will question the scientific basis for the statement that the ground fish resources in the Gulf of Alaska or near the Aleutians would be destroyed. I don't believe there is any scientific basis for that whatsoever.

Senator STEVENS. I will see to it that you get that information, then, Mr. Burke, because at the present time it is being destroyed.

Thank you.

(The information referred to above follows:)

[From Asaki Evening News, Tokyo, Japan, Jan. 7, 1970]

KOMANDORSKI ISLANDS—SEAL FISHING BAN IMPOSED BY SOVIETS

Moscow, Jan. 6—The Soviet Union has established a 30-mile shipping ban around islands only 130 miles from America's strategic Aleutian chain, Tass said Tuesday.

The report by the official news agency said the ban was put into effect to protect seals in the Komandorski Islands. The action apparently extended the Soviet claimed 12-mile limit for that area.

There have been recent contacts among Japanese, Soviet and American officials on proposals to protect the North Pacific seal herds but no specific agreement has been reached.

Tass said no shipping of any kind will be allowed in the zone.

The United States claims the traditional three-mile limit on its territories, including Near Island which is located across a short stretch of the north Pacific from the Komandorskis.

"A 30-mile zone where fishing and any work, including the setting up of navigation signs, is banned, has been set up around the seal colonies on the Kormandorski Islands," Tass said. "The area is out of bounds for ships," it said.

The report also mentioned other restrictions in the Soviet Union's Far Eastern waters but did not give any details of them.

"New fishing rules are being enforced in the Far Eastern waters, the biggest Soviet fishing area," Tass said. "Compared with 1962 rules the new ones greatly restrict fishing for salmon, sturgeon and herring."

The report said the 30-mile zone was made necessary because of serious depletion of the once huge herds of Pacific seals and Kamchatka beavers.

The Soviets' adoption of a 12-mile limit, which also has been claimed by other countries, has long been a source of dispute among fishing powers.

(Subsequent to the hearing, Mr. Burke submitted the following qualifying remarks:)

Mr. BURKE, after receiving the above information, comments that the subject of discussion was the groundfish resources off the Aleutian Islands. Seals are not fish but mammals and their destruction, if it comes to that, proves nothing in regard to groundfish.

Senator METCALF. I wonder if the Senator from Alaska would yield to me.

Senator STEVENS. Yes.

Senator METCALF. I will ask him and I will ask the witness: Isn't there a great deal of difference between the extension of jurisdiction of sovereignty over the fishery resource and the extension that we are talking about here as to jurisdiction over the mineral resouces of the seabed?

Mr. BURKE. Well, there is this identity: Particularly in the case of Alaska, there are living resources on the shelf other than the mineral resources which are quite important and we do have agreements with the other countries which exploit them—both Japan and the Soviet Union. There is this connection of living resources with the shelf in some parts of the world and in the case of Alaska this is quite significant.

Senator STEVENS. Mr. Chairman, the gentleman is right, of course. We have agreements with Japan. We have no agreements with Korea. It is coming in there in very great numbers now, and we find that the agreements with the Russians are agreements on paper. In terms of actual practice, there is a lot to be desired, and as a practical matter again it is the "vacuum cleaner" concept.

For instance, we impose on boats from your States a limitation as to the type of gear that can be used. Basically there are major large

boats in the American fleet from Seattle. Those same limitations on gear are not imposed upon the Japanese or the Russians, yet the agreement we impose on them are to territory, the area that they can fish, not means by which they can fish.

Now, when you write about the living organism—for instance, the king crab—on the shelf, it seems to me that the point you are making is that we ought to roll back in terms of jurisdiction for the oil and gas or mineral resources.

The implication is, if we do that, I don't think we can roll back on those resources and extend our jurisdiction on the marine resources, the living resources in the water. I think that one is going to follow the other and, if anything, the subsea convention, the Convention on the Outer Continental Shelf, will deal with the oil and gas resources constantly going out because of technology.

We have no similar concept as far as fishing resources. I can't quite understand how you could reach the conclusion that it is all right to creep out on the technology for oil and gas but we ought to roll back in for fishing.

Mr. BURKE. I have not reached that conclusion, Senator. I thought that was in the treaty.

Senator STEVENS. That is your interpretation of both, isn't it? Have I missed something?

Mr. BURKE. I have stated in my testimony on the first page that I preferred to continue going out under the present convention.

Senator STEVENS. Thank you. Thank you, Mr. Chairman.

Senator HANSEN. Thank you, Mr. Chairman. There are other witnesses, and I would rather defer.

(Mr. Burke's complete statement follows:)

STATEMENT OF WILLIAM T. BURKE, PROFESSOR OF LAW, UNIVERSITY OF WASHINGTON, SEATTLE, WASH.

My name is William T. Burke. I am a professor of law at the University of Washington, Seattle, Washington. The following comments are directed first at the ten questions directed primarily at shelf issues and then at those concerning the United Nations, both contained in a letter from Senator Metcalf dated December 24, 1969.

Is the 1958 Geneva Convention on the Continental Shelf sufficiently precise to permit reasonable interpretation as to the limits of the legal Continental Shelf?

If so, what is a reasonable interpretation of the ultimate limits of the legal Continental Shelf as defined by the 1958 Geneva Convention on the Continental Shelf?

Comment: It would be an error to assert that the Convention definition of the shelf is "precise" or that precision in reference becomes possible by recourse to the legislative history. The Convention was not intended to be precise. It is most doubtful that anyone in 1958 believed that assigning a precise limit was either feasible or desirable. My opinion is that the Convention definition, reasonably interpreted, extends beyond 200 meters as these depths become exploitable. The shelf so interpreted extends to the limit of "adjacency" whatever that may be. I believe it is reasonable in light of this term that the shelf expand in time to the foot of the continental slope or to the edge of the oceanic basin, assuming that this demarcation occurs on the average at 100 miles from the land-water interface. Moreover if this limit could be stipulated without convening a conference on the law of the sea such a move would be highly desirable. The North Sea Continental Case gives some indication that "adjacency" does not extend as far as 100 miles, but in other respects the decision suggests that even more distant areas are adjacent. It does not appear to me that this Case does much to assist in being "precise" about the definition of the shelf.

The interpretation I would give the Shelf Convention does not give a precise limit, at least not at our present stage of ignorance of the geology of the ocean bottom. Still if this definition could achieve widespread acceptance without a new Geneva-type conference, the lack of precision does not bother me much nor should it prove much of a bother to exploiters. However imprecise, a shelf so defined would be likely to suffice for orderly ocean development for a long period to come.

It is worth emphasis that exploitation has not even begun to approach 200 meters; the deepest producing oil well is still at 340 feet, only about 110 meters deep. Nonetheless it seems probable that most states believe the shelf already extends beyond 200 meters. It is clear that a considerable number have issued leases to depths beyond 200 meters and that such issuance is widely thought to constitute a shelf claim.

I should like to add the comment that it is probably not very important anymore what interpretation is placed on the Shelf Convention as such. It is not long for this world in its present form. All the signs point to revision of the Convention within less than five years. At least a number of states parties to the Convention will probably adhere to a new Convention containing entirely different provisions than those in the 1958 Convention.

However, my reading of the ICJ decision in the North Sea Continental Shelf case is that Article 1 of the Shelf Convention reflects or embodies customary law. Accordingly in the absence of a change in such law it will continue to be important to consider the definition in Article 1. This could be especially important if a new Shelf Convention is concluded but is unacceptable to the U.S. and other major maritime states.

The views expressed above on a desirable definition of the Shelf Convention carry with them one vital qualification which should be emphasized and that is that such definition somehow be achieved without an international conference at which numerous other issues are negotiated. The reasons for this are noted below. At this point it is relevant to note that if such a conference is convened (as now seems to me highly probable within less than five years and perhaps within three) my preference is that the U.S. seek to gain acceptance of as narrow a shelf as is possible. I doubt if it is really feasible to get a 200-meter/50-mile shelf but I would aim at getting as close to this as is possible in terms of achieving wide acceptance.

The reasons for preferring a relatively wide shelf under one set of circumstances and a relatively narrow under a different set can be briefly summarized. They are set out at greater length in statements included in other hearings. The point is simply that it seems to me extremely hazardous at this stage in time to negotiate law of the sea issues of considerable importance to this country. If somehow a relatively wide shelf could be established by interpretation of the Convention, this might slow or even halt the movement toward revision of the Convention at a new law of the sea conference. If we must negotiate however, then it is to our advantage, and the world's generally, to limit the expansion of exclusive authority over the ocean. I am not sanguine that we will be very successful in achieving this.

Should the United States stand on its rights under the present language of the Shelf Convention, or should it, as the Marine Science Commission has proposed, take the initiative to secure international agreement on an amendment to the Convention providing for a narrow Continental Shelf?

What reasons do you offer in support of your answer?

Comment: The United States would be well-advised not to attempt any such initiative as suggested by the Marine Science Commission. It would be vastly preferable to continue to rely on the provisions of the existing Convention as it evolves over time.

The reasons for these conclusions have already been suggested above, namely that probably we shall be unable to limit negotiations to the issues of the shelf limit and a regime beyond. It seems to me unwise to take the initiative to promote or encourage international negotiations when it is unlikely that we can control what issues will be negotiated and when it seems probable that we cannot achieve acceptable results in these negotiations.

If the United States should choose to stand on its rights under the present language of the Convention, would any other affirmative action be required on the part of the United States to secure such rights?

If so, what action?

Comment: The United States has been exercising its rights under the Convention for the past five years. I am unaware that this required any particular affirmative action, other than authorization of exploration and exploitation on the U.S. shelf, and only such action would be necessary in the future. If the U.S. were to attempt to indicate a limit on the shelf which had greater precision than that in the Shelf Convention, this would probably require some other action, presumably consultation with other states for the purpose of coordinating a common position on this issue. This latter course of action was probably never a realistic expectation and it may be even more remote now. However, if negotiations for revision of the Shelf Convention do not reach acceptable conclusions, it may still be necessary for the U.S. and other major maritime states to reach a satisfactory agreement among themselves both on the shelf issue and on the regime beyond. Whether this contingency even comes up for serious consideration will depend on the wisdom and moderation displayed by a majority of states at the next law of the sea conference.

If, on the other hand, the United States should choose to secure international agreement or any amendment to the Convention for either *a broad or a narrow shelf, would it be advisable to take such action before further resolving other international legal problems, such as the development of a regime for exploration and exploitation of the natural resources of the deep seabed; the establishment by international agreement of the limits of the territorial sea; the role of coastal states in developing conservation resources related to their offshore fisheries; the conclusion of an arms control agreement affecting the seabed; or other related problems regarding the use of the high seas and the underlying seabed?*

Comment: The answer to this is that of course it would be advisable to get agreement on the Shelf limit without regard to other matters, but it is idle to believe this was ever really feasible and certainly the prospects for it are now pretty remote. In any event some of the matters listed are obviously pertinent to the shelf issue and could not be left unresolved when the shelf is defined. I refer particularly to the matter of the regime beyond, arms control matters, and the limit of the territorial sea and/or fishing zone.

What measures should the United States include in the formulation of its position looking toward a deep seabed regime which would achieve the following objectives:

A. Recognition that there is an area of the seabed beyond the limits of exclusive national jurisdiction which is not subject to national occupation by claim of sovereignty, by means of use or occupation or by any other means;

B. Accommodation among other users of the deep ocean floor and marine environment, including prevention of unjustifiable interference with the exercise of the freedom of the high seas, including navigation, fishing and the conduct of fundamental scientific research carried out with the intention of open publication, by any nation or its nationals;

C. The conservation of living and mineral resources of the high seas and deep seabed;

D. The encouragement of private investment in exploration and exploitation of the resources of the deep seabed; and

E. The formulation of work requirements and other procedures associated with the exploration and exploitation of deep seabed resources which would serve to insure responsible and orderly development of these resources, while avoiding waste and other undesirable consequences.

Comment: I have no direct comments on this question and doubt if we have sufficient data on which to rest a position on some of these matters. However, it does seem useful to comment on some of the objectives listed here. As to (A) it has not been clear to me in many of these discussions just what is meant by the reference to "national occupation". Similarly it is not clear, often, what is intended by "appropriation" or "sovereign rights". If these are intended to prohibit claims to national territory then they pose no important policy problem. I have detected no consequential sentiment for dividing up the deep ocean floor among the states of the world and do not believe such an allocation will be made or even attempted.

However, it ought to be questioned whether it is in the common interest to prohibit all forms of exclusive use or control of an area of the seabed. It is very likely to happen that some forms of ocean floor use (not for mining or for military alone) must be exclusive if they are even to be safe let alone efficient. Accordingly our objectives for a deep sea regime should be formulated to take these possibilities into account.

One part of objective (B) may be an undesirable weighing of interest in ocean uses. It calls for prevention of "unjustifiable interference" with, inter alia, the conduct of fundamental scientific research carried out with the intention of open publication. For the foreseeable future, and perhaps for long in the future, it seems to me undesirable to give priority to mining in the ocean over scientific research. In case of a conflict between these two interests the latter is by far the more deserving of protection. Knowledge of the ocean environment is far scarcer and dearer than minerals. The market mechanism is hardly an acceptable means for determining which of these uses should be protected. We have already witnessed the sacrifice of scientific inquiry into the continental shelf as part of the price paid for the treaty on the continental shelf and it is not clear to me that this was or is a good bargain.

What sort of an interim policy should be established with respect to the regulation and control of the activities of U.S. nationals related to the exploration and exploitation of resources located on the deep seabed beyond the limits of the Outer Continental Shelf prior to reaching international agreement on a deep seabed regime?

Comment: The question of an interim policy concerning U.S. nationals is solely a matter of domestic law involving issues of customs, taxation and anti-trust regulations which go beyond any competence I may have. However, these issues do have international effect in the sense that they may be resolved in ways either to encourage or discourage development of ocean resources. These issues will not, incidentally, disappear merely by creation of an international regime. This country will still have to provide a framework of national policy entirely independent of the details or policies embodied in an international regime. The only observation I would like to make is that it is desirable, at the present stage, that U.S. policies encourage orderly and efficient use of deep seabed resources so long as other goals are not compromised. (Other more important goals are, for example, avoidance of disruptive impact on the economies of developing states, the conduct of scientific exploration and inquiry, and the production of protein.) The point is that it is desirable to acquire some experience in deep ocean mining in order to facilitate the creation of an effective and equitable international regime.

What effect does the issuance of leases beyond the 200-meter isobath pursuant to the Outer Continental Shelf Act of 1953 by the Secretary of the Interior have on the establishing of or the extension of a United Sates continental shelf boundary claim?

Comment: If one goes by the Shelf Convention the mere issuance of a lease would have no necessary effect either in establishing or in extending the boundary of the U.S. shelf. The reason is that a lease alone does not demonstrate exploitability. However, as indicated earlier, it seems to me that generally it is expected that such issuance does constitute a claim to an area as part of the U.S. shelf. It should be noted, however, that the lease might contain a disclaimer to the effect that no claim to jurisdiction and control is being made unless the lessee engages in exploitation.

What effect does the aforementioned leasing procedure have on the establishment or extension of boundary claims for other nations' continental shelves?

Comment: If grant of a lease is regarded by the U.S. as an extension of its shelf then it cannot successfully object if other states similarly extend their shelves even though they issue no leases in waters of the same depth. It seems to me that this is the general understanding of the law on the point.

What rights does the United States have pursuant to relevant Federal law and the 1958 Geneva Convention on the Continental Shelf to regulate United States and foreign commercial and scientific exploration of the seabed on the continental margin in areas beyond either the 200-meter isobath or the most seaward or deepest area in which a United States mining lease has been issued?

Comment: The U.S. shelf extends, I believe, as far as the furtherest shelf claim made anywhere in the world, so long as the shelf at such a distance is adjacent to the coastal state. It would be possible, therefore, for the U.S. to regulate exploration even beyond the most seaward or deepest area in which the U.S. has issued a lease.

It should be noted that the U.S. has only a very limited competence, as does any state, to "regulate" scientific exploration of its continental shelf.

The questions on United Nations Resolution 2574–D (xxiv) may be answered briefly.

(1) Did the General Assembly exceed its lawful authority in declaring that exploitation beyond the limits of national jurisdiction should be prohibited?

Comment: I do not believe the General Assembly exceeded its authority in adopting this resolution.

(2) *Assuming that the General Assembly did not exceed its authority in passing this Resolution, is the Resolution binding (legally, morally or politically) upon the United States? What is the basis for your opinion?*

Comment: The Resolution is not legally binding on the U.S. I do not believe even a two-thirds majority vote on this particular issue demonstrates or establishes a moral or political position which the U.S. must recognize as binding on it. I am not at all sure what is meant by the question.

(3) *What would be the effect of expression, either by individual members of Congress or by a Committee, of disagreement with the Resolution.*

Comment: I have no idea what effect such an expression might have.

(Subsequent to the hearing the following letter was received by the committee:)

UNIVERSITY OF WASHINGTON,
SCHOOL OF LAW, CONDON HALL,
Seattle, Wash., February 2, 1970.

MR. JERRY VERKLER,
Staff Director, U.S. Senate Interior and Insular Affairs Committee,
Washington, D.C.

DEAR MR. VERKLER: After reviewing the transcript of the hearings on January 22, 1970, it is apparent that clarification of certain points is desirable. I will be grateful if this letter of clarification is included in the hearing record.

During the hearing Senator Stevens asked some questions regarding my views on the limit on the continental shelf and on the difference he apprehended in my statement concerning national control over the resources of the shelf and such control over the fish above the shelf.

In my written statement I stated that if negotiations are necessary for revision of the 1958 Shelf Convention (a course of action I would like to avoid) I would prefer the U.S. seek as narrow shelf as is possible to negotiate. In the context of negotiations our position should be to approach as closely as possible the limit (advanced by the Marine Science Commission) of 200 meters or 50 nautical miles, whichever provides the greater area. In the oral statement I inadvertently referred to this area as whichever is *closer* to the coastal state. In this version, Senator Stevens would be correct that I might be recommending a roll-back of the U.S. shelf. I think my written statement unambiguously indicates that I do not propose a roll-back.

Under present U.S. law (and international law) there is a difference between exclusive coastal authority over the living resources of the shelf and over the fish above. Regarding the former U.S. control extends as far as our control over non-living resources. For the fish above the shelf, U.S. exclusive authority extends only to 12 miles. I do not believe it is to the U.S. or world interest to widen the exclusive fishing zone or to establish, unilaterally, exclusive conservation zones. However, as the written statement clearly indicates, I am in favor of permitting expansion of the limit of control over mineral resources if by this means we can avoid negotiations over other law of the sea matters. Because of the way shelf resources are defined such an expansion of control would also extend control over the living resources of the shelf. On the other hand, since negotiations now seem virtually certain to occur I prefer to limit control over all shelf resources. In any event I do not advocate a new shelf limit which will prejudice those who have justifiably relied on a coastal state's assertion that its shelf extended to a particular distance into the ocean.

I do not believe that anyone disagrees with the objective of subjecting fishery resources to conservation regulations. U.S. policy on these matters seems to me entirely sound, as reflected in the 1945 Truman Proclamation on fisheries and the 1958 Convention on Fishing and Conservation of the Living Resources of the High Seas. These sources demonstrate that U.S. policy is to establish conservation measures in agreement with other states or unilaterally after negotiations to this end have failed. Officials in the Executive Branch responsible for international fishery regulations testify that our policy of relying on international agreement has worked reasonably well to protect the fishery resources of adjacent waters.

It appears to me that the major difference among the witnesses brought out by the hearing concerned not the goal of maintaining the utmost freedom of the seas but rather the means to achieve that goal. My view is that multilateral negotiations such as those in Geneva in 1958 are likely to lead to greater restrictions on this freedom than to continue to develop law in light of the 1958 Con-

ventions and practice. Others believe negotiations in the near future will minimize such restrictions. This difference seems to me largely academic in view of the apparent strong move toward negotiations and it appears that Professors Auerbach, Henkin and I would have few, if any, important differences in formulating the policies the U.S. should pursue in such negotiations so far as the limits of coastal boundaries are concerned.

Sincerely,

WILLIAM T. BURKE,
Professor of Law.

Senator MECALF. With permission of my colleagues, we will call the next witness, Mr. Young. We are delighted to have you here.

Mr. YOUNG. Thank you, Senator. It is a pleasure to be here indeed before the subcommittee and in such distinguished company. I am the only nonacademic, but I don't say this boastfully.

Mr. AUERBACH. But you mean it that way.

Mr. YOUNG. I had some comments both on the questions which you raised and also on some of the things that Professor Auerbach and Professor Burke have said. I think that the first point I might refer to is something that Professor Auerbach said, that the question before us, under the 1958 Convention, is "What are our rights?" And I would agree entirely that that is the question.

The Stratton Commission report suggested that it was not possible to determine the geographical extent of those rights from the language of the Convention. Now, other people feel differently, and that it is possible to arrive at a reasonable interpretation. It is not an unknown problem in construing any legislative instrument to have to give meaning to words that seem obscure.

So I am not sure it is very helpful to engage in some of the language we have heard in the past on both sides of this controversy: Either the charges about "giving away our mineral estate" on the one hand or certain implications of sinister actions by particular industries on the other.

I am perfectly willing to admit the sincerity of both sides in advancing their views and opposing others. I think we have to go on from there. These respective positions have been quite clearly drawn, and the question is, What do we do now?

I think this leads into a few comments on some of your questions, Mr. Chairman, which I might try to make very briefly. You asked how far seaward under the 1958 Convention may the United States exclusively go, given the technology to do it. Here I would belong to that school of thought which says that you can go as far as the limit of adjacency under the Convention and that a reasonable interpretation of that rather imprecise term is the foot of the slope. I have elaborated this point somewhat in my prepared statement, and perhaps I need not go into it any further.

Your second question relates to the International Court's judgment in the *North Sea* cases and the meaning of "natural prolongation": How far seaward the "natural prolongation" extends.

Let me say first that I certainly recognize there was no issue before the Court involving the relationship of the shelf to the deep sea. It was entirely within the confines of the North Sea, and hence I think any application of the language of the judgment to the question of the deep sea edge of the shelf is necessarily speculative.

With that caveat, I would then suggest that to me natural prolongation, as used by the Court, can well be construed as equivalent to the adjacency concept of the convention and that both therefore can be equated with the foot of the slope.

Now, the actual present limit of national jurisdiction under the convention, and I would think also under customary law, is the limit of exploitability, with an ultimate stop being placed at the limit of adjacency. The result is that natural prolongation does not give you present jurisdiction beyond the limit of exploitability. In other words, the convention and the customary law as discussed by the Court are substantially coextensive.

I certainly have difficulty accepting the idea that, because of article 2 of the Convention (which describes the quality of the rights held by coastal nations), the full extent of natural prolongation is now vested in the coastal state. I think you still have a problem that the rights described in article 2 apply within the limits of a shelf which is defined in article 1. So you are back again, I think, to the limit of exploitability.

Your third question raises the question of the advantages and disadvantages of continuing to exercise our rights under the 1958 Convention without seeking any new international agreement. I think there are several advantages in our doing this, and I would like to see us maintain the existing agreement without reopening it.

In the first place, we have some idea of what we have got under the existing convention. This is not to say that it is perfect by any means, but the animal you know is sometimes a good deal easier to deal with than the one you have not seen yet.

I think another advantage is that the present convention makes it crystal clear that the waters above the shelf are high seas—a point of considerable interest to other activities besides the extractive industries. I am not at all sure that that point would fare as well or come out as clearly in a new conference or a new convention.

A third advantage is that under the existing convention most other uses of the shelf than the exploration and exploitation of resources are not dealt with: They are neither authorized nor forbidden, and presumably are still governed by other principles of law. This is important, I think, in connection with military considerations. Here again, I doubt whether you would do as well under a new convention or at a new conference.

There are one or two disadvantages in continuing under the existing convention. Of these, I think the most serious is the political outlook, the question of how you move in the face of the trend in the United Nations and the apparent attitudes of so many other states. This is a question of one's political stance in the world, and it is a very important problem. But whether it is important enough to run the risks of a new conference and a new convention is a good question.

Referring to Professor Burke's comments on these points I would hope that we would not have to reopen any of the existing conventions. But I share a good many of his apprehensions that we may be forced to face this, whether we want to or not, and I would certainly support his recommendation that the whole subject ought to be receiving the most careful study in the executive department.

Do I have some time left, Senator?

Senator METCALF. Yes, you do; 10 minutes.

Mr. YOUNG. I have a feeling that I have been talking longer than I should.

Your fourth question, Mr. Chairman, deals with the intermediate zone proposal of the Stratton Commission. In the past I have joined in some of the criticisms that have been made of the proposal as it appears in the Stratton Report. I think there are problems with that proposal in that it could be very unwieldy and awkward to operate—in particular because of the double layer of authority, the coastal state plus the international regime. So I have seen and still see certain practical problems of operation under such a scheme in the form proposed. I think there is also a real danger that if the regime is too awkward in its construction, it is not going to live very long, and nothing durable has been accomplished.

On the other hand, if the concept of the intermediate zone could perhaps be simplified somewhat, I would not want to rule out the possibility that somewhere along that line there might be a compromise which would be tolerable for all the parties concerned.

One specific comment on the intermediate zone. The Stratton report proposed, with respect to its limits, that it be bounded on the inner side by the 200-meter line and on the outer side by the 2,500-meter line or a 50-mile alternate measure. I have not gone into alternative mileages in my remarks; I think probably they will have to be granted in order to make acceptable whatever proposals are advanced. I would suggest on this point in particular that the 200-meter inner boundary may today be too small, that the shelf proper under the Shelf Convention already extends to a greater depth than 200 meters. My argument in support of that statement is that I think that the limit of exploitability has now crossed the 200-meter line.

This leads me to pick up Mr. Burke's point when he said that we differed in our concepts of exploitability. We do. I think it is entirely a question of how you define your terms. He advances a very narrow construction, that there has to be actual exploitation in operation; and on that basis I think his figures are right, that the deepest producing oil wells, for example, are still only in the range of 300 to 350 feet in water depth.

Nevertheless, I would take a broader view of exploitability; that once you demonstrate, and demonstrate bona fide, the capability to exploit, then the fact of whether you have actual exploitation or not is irrelevant. For example, in the Santa Barbara Channel a well has been drilled in just short of 400 meters of water. As I understand it, this could have been a producing well. Unfortunately, as sometimes happens, it was a dry hole. I would suggest that if that well were drilled with the intention and capability of becoming a producing well, that action demonstrates exploitability and meets the test. Hence I would say that we are now somewhere out around the 400-meter line as a limit of exploitability.

In any case, I think expectations even now have been built on technology reaching to that limit. I don't think you can go back—and here you and I, I think, again agree, Mr. Burke—I don't think you can go back and upset these established expectations by accepting a limit less than the state of the art indicates to be feasible at the given time.

Now to answer very briefly, Mr. Chairman, your fifth and sixth questions. The fifth question is about how to go about creating an intermediate zone. I would certainly prefer, if one were going to do this, to do it as part of a package which would also establish the basic outlines for a deep sea regime. As I said before, I would not like to reopen and try to amend the 1958 convention. I think the chances of creating an intermediate zone would be better if it were part of a deep sea package than if it were dealt with by itself as in your question "B."

The last question: How does the United States counter the present trend in the United Nations? This is a very good question, and I am not sure that there is any legal answer. It is a political and diplomatic problem.

Fundamentally, the problem is one of conflict, I think, between the "have" and "have not" nations. The less-developed countries are afraid that a potential great resource is going to pass beyond their reach: that they will not be able to share in it, that they simply will not be able to get a piece of the action.

This is a problem of suspicion and distrust, and I think I could only suggest that, to dispel it, it might be helpful if the United States were to engage in what one might call an educational program on the floor of the United Nations. Certainly one of the great problems of many of the newer countries is that they are completely ignorant of the problems of ocean operations. We should try to inform them better about the problems of technology and capital and knowledge that is necessary to solve before these resources are any good to anybody; and also to explain to them the requirements that are needed to get the capital and technology flowing for these enterprises. But also we should certainly seek to reassure the less-developed countries against any fears that they might have of "grabs" or of being excluded from an appropriate share in what goes on. I think we should recognize that they are entitled to participate.

So lastly, I think we should try to give them assurances of participation in ocean benefits: We should support a deep sea regime which would provide benefits for all countries and particularly less-developed countries.

You have two kinds of participation at least. One is participation in operations, the technical and operating problem. I certainly would welcome drawing the less developed countries into this as fast as that can be done. This needs financial aid for education and so on that Mr. Burke was speaking of.

The second kind of participation is participation in the proceeds, in the net revenues, and this can be done in two ways, both of which I think should be open to less developed countries. One is that they should be entitled to make their own arrangements, by contract or otherwise if they themselves don't have the necessary technology, to exploit for their own account appropriate areas of the deep sea under the international regime. This could provide direct revenues for individual less developed countries.

The other form of participation in proceeds, of course, would be through the schemes, which have been much talked about, for payments to a U.N. fund which would then go to the benefit of the less developed countries. This, too, I would favor.

I think that covers everything I have to say at the moment, Mr. Chairman.

Senator METCALF. Thank you very much, Mr. Young.

(Mr. Young's complete statement follows:)

STATEMENT OF RICHARD YOUNG OF THE NEW YORK BAR

My name is Richard Young. I am a member of the New York Bar engaged in private practice. For many years I have been concerned with problems of the continental shelf, both in the course of my practice and as a matter of scholarly interest. I am a member of the Board of Editors of the American Journal of International Law; Vice-Chairman of the Committee on Oceanography of the Section of International and Comparative Law of the American Bar Association; and one of the American members of the International Committee on Deep Sea Mining of the International Law Association. I should add that I have not been retained by any private client in connection with deep sea resources, although I have been consulted on a few questions by the Department of the Interior. The views stated herein are my own.

The statement which follows is designed primarily to answer the questions propounded to me in a letter from the Chairman of this Subcommittee dated 24 December 1969. These questions, I gather, are essentially the same as those addressed to other witnesses. I shall take them in the sequence in which they were asked.

The first two questions are:

Is the 1958 Geneva Convention on the Continental Shelf sufficiently precise to permit reasonable interpretation as to the limits of the legal Continental Shelf?

If so, what is a reasonable interpretation of the ultimate limits of the legal Continental Shelf as defined by the 1958 Geneva Convention on the Continental Shelf?

The members of the Subcommittee are well acquainted by now with the language of Article 1 of the Continental Shelf Convention, which is involved here. The limit there set for the legal shelf embraces three elements: the 200-meter depth line, the concept of exploitability, and the concept of adjacency. I have no doubt that the limit of the legal shelf extends in the first instance to the 200-meter line, however far that may be from shore. In addition, it extends beyond that line to the limit at which exploitation is possible at any given time. This is true whether or not exploitation has in fact taken place off a particular coast, for it depends on the state of the art generally and not on the particular instance. Admittedly, this is a shifting boundary, moving seaward as technology permits; but it is none the less a definite one in the sense of being ascertainable at any particular moment. As of now, as I understand it, the limit of exploitability has reached the 400-meter line.

The exploitability test, however, does not go on forever. It is limited by the third element in the Convention definition, the concept of adjacency. The limit of adjacency, whatever that may be, is the ultimate possible limit of the legal shelf and of national jurisdiction. The concept is obviously less precise on its face than either of the other two, and I myself find it difficult to derive from the legislative history of the Convention a particular meaning for the term. I doubt, indeed, if one was intended. Yet it plainly conveys, and is intended to convey, a notion of limitation: it is not mere verbiage. In such circumstances, there is an obligation on those who must apply the concept to give it a construction which is both reasonable and meaningful.

For my part, this process leads to the conclusion that the concept of adjacency may be reasonably construed to extend in most cases to the foot of the continental slope. This area is, indeed, no more than the side of the continental land mass of which the physical shelf and dry land is the top. I have been impressed by the geological and geophysical evidence which describes the change in the structure at the foot of the slope as a fundamental geological boundary. Once the edge of the physical shelf is passed—and this has already happened even on the way to the 200-meter line, since that line is deeper than the average shelf edge—it is difficult to find another logical limit until this point is reached. I also find some support for this view is the concept, advanced by the International Court in the *North Sea Continental Shelf Cases*, of the legal shelf as a "natural prolongation" of the coastal state's land territory. I recognize that those cases

did not involve any issue of shelf *versus* deep ocean, but the Court's discussion is couched in strikingly broad terms.

The net result of this analysis of the existing Convention is that, in my view, national jurisdiction now extends to the limit of exploitability, and will advance as that advances. Since exploitability has passed the 200-meter line, that line is now for practical purposes defunct. Exploitability will continue to confer jurisdiction until it goes beyond the foot of the continental slope, at which point it becomes subject to whatever regime there may be for deep-sea resources. But in no way does the jurisdiction here described extend to the superjacent waters, which expressly retain under the Convention their status as high seas. Nor does it extend to non-interfering uses of the shelf for purposes other than resource development.

In my view this is a permissible and reasonable interpretation of the language of the Convention, and one which is consonant with the interests of the United States. I do not claim, however, that it is the only possible reasonable interpretation. I think it is one the United States could stand on justifiably and advantageously, but I would not deny the possibility of eventual compromise at some lesser limit if this would ensure a wide measure of international acceptance. Such a recession on the part of the United States would be a matter of policy, and would not imply either that the previous U.S. position was erroneous in law or that the United States was politically wrong to maintain it. Certainly in no case should the recession go so far as to upset expectations already fixed in reliance on existing principles. This would happen, for example, if the doctrinaire insistence on the obsolete 200-meter line were to jeopardize commitments already made for operations under national jurisdiction at greater depths based on the concept of exploitability. In any event, in the absence of any prospect for a successful compromise, the United States should continue to assert the full rights to which it is entitled under the existing doctrine.

Should the United States stand on its rights under the present language of the Shelf Convention, or should it, as the Marine Science Commission has proposed, take the initiative to secure international agreement on an amendment to the Convention providing for a narrow Continental Shelf?

What reasons do you offer in support of your answer?

These questions, which have been partly anticipated in my earlier comments, raise two different points: first, whether the Shelf Convention should be reopened for any purpose, and second, whether if it is reopened, a narrow shelf limit should be sought.

On the first point, I am opposed (at this time at least) to reopening the Shelf Convention. This is not because the Convention is perfect—far from it. It is rather because I fear that an attempt under present conditions to rewrite the Convention in a general international conference would be, to say the least, counterproductive. Even if an agreement were to be reached—a doubtful point—there could be no assurance as to how widely it would be adopted. The result could be a still further fragmentation of the law on this subject. One can easily picture at least four schools of thought at loggerheads in, say, five years' time; the latest fashion group of 1972 or 1973, the devotees of the 1958 Convention, the old-fashioned believers in customary law, and finally the non-conformists who disagree with everyone. I do not find this prospect encouraging.

On the second point, the question of a narrow shelf limit, I have already suggested my reservations. It is usually said, in support of a narrow shelf position, that it is desirable:

(*a*) For defense purposes, to assure freedom of action in the high seas;

(*b*) For commercial and fishery purposes, to prevent shelf jurisdiction from seeping upward to the waters and airspace above;

(*c*) For political purposes in the international arena, to set an example of self-denial to be followed by others, and so on.

I believe that each of these considerations has been misunderstood and exaggerated in relation to this issue. Let me indicate very briefly why I think so.

The free and legitimate use of the high seas for defense purposes is an essential element in the maintenance of our national security, and I fully appreciate the proper concern over this displayed by the Navy and other responsible authorities. But if anything is clear about the existing continental shelf doctrine, as affirmed in the 1958 Convention and in the *North Sea Cases*, it is that it cannot legally affect the high seas character of the superjacent waters. Nor does it extend to military uses of the waters or seabed. Hence it is irrelevant in this connection whether a state claims a wide shelf or a narrow one for purposes of

resource exploitation. If it wishes to control military activities by others on the seabed off its coast, a state will find grounds for doing so in any case; but the present doctrine neither authorizes nor forbids such action. The resulting situation is one I would leave very much as it is, for it is impossible to predict what kind of restrictions on such uses a new international conference might seek to impose. Progress in this tremendously difficult and delicate field must be a part of progress on arms limitation in general, not a casual incident of regimes for resource development.

The argument foreseeing infringement of navigation or fishing rights as a result of a wide shelf claim is also unfounded. The existing rules plainly preclude use of the shelf doctrine for such purposes. The much-publicized aberrations of a few states which claim a 200-mile limit over water areas and invoke a shelf notion for support should not be allowed to obscure the fact that the great majority of coastal states which have acted on the matter have confined their shelf claims to the seabed and subsoil. As with naval uses, the more pressing problem here seems to me to be the expansion in territorial sea claims, which have a different legal character and different consequences.

On the third consideration, the "good example" claim, little need be said. It is perhaps sufficient to recall that the United States has reaffirmed again and again since the 1958 and 1960 Geneva Conferences its adherence to a three-mile limit for the territorial sea as the only one generally accepted in international law. The effect of this insistence is a matter of record. In 1950 three states claimed a 12-mile limit: Colombia, Guatemala, and the Soviet Union. At the end of 1968 there were 39, and there are probably more today.

If the United States should choose to stand on its rights under the present language of the Convention, would any other affirmative action be required on the part of the United States to secure such rights?

If so, what action?

The rights accruing to the United States under the 1958 Convention are already established thereby and in principle require no further action to perfect them. Article 2 of the Convention makes this quite clear. Since, however, the geographical limit of the Convention regime is not precisely fixed, the United States might be well advised to make clear what it believes the reasonable scope of the Convention to be (preferably along the lines suggested in my comments on the first two questions).

If, on the other hand, the United States should choose to secure international agreement or any amendment to the Convention for *either* a broad or a narrow shelf, would it be advisable to take such action before further resolving other international legal problems, such as the development of a regime for exploration and exploitation of the natural resources of the deep seabed; the establishment by international agreement of the limits of the territorial sea; the role of coastal states in developing conservation resources related to their offshore fisheries; the conclusion of an arms control agreement affecting the seabed; or other related problems regarding the use of the high seas and the underlying seabed?

To attempt to solve at once all the problems enumerated in this question would mean, I fear, that none would get solved. Of the items listed, I think the only one directly involved with the matter of the shelf limit is the question of a regime for the resources of the deep seabed. I am inclined to agree with those who emphasize the desirability of investigating at an early date the form that such a regime might take, for its shape may well influence the shelf limit the United States is prepared to accept.

What measures should the United States include in the formulation of its position looking toward a deep seabed regime which would achieve the following objectives:

(A) Recognition that there is an area of the seabed beyond the limits of exclusive national jurisdiction which is not subject to national occupation by claim of sovereignty, by means of use or occupation or by any other means;

(B) Accommodation among other users of the deep ocean floor and marine environment, including prevention of unjustifiable interference with the exercise of the freedom of the high seas, including navigation, fishing, and the conduct of fundamental scientific research carried out with the intention of open publication, by any nation or its nationals;

(C) The conservation of living and mineral resources of the high seas and deep seabed;

(D) The encouragement of private investment in exploration and exploitation of the resources of the deep seabed; and

(E) The formulation of work requirements and other procedures associated with the exploration and exploitation of deep seabed resources which would serve to insure responsible and orderly development of these resources, while avoiding waste and other undesirable consequences.

I find it difficult to make meaningful comments in detail on the series of points set forth in this question. In general, I agree with and support the objectives stated. But I would enter a word of caution against trying to formulate measures or standards too specifically or too rigidly at this time. On some points we simply do not know enough as yet to do so constructively. On others, negotiating flexibility may be desirable. Positions frozen in advance should be avoided. I would also warn against moves to create an over-elaborate structure or to establish a top-heavy bureaucracy for a deep-sea regime. Such efforts, however, well-meant, could stifle the incentives to get on with the job of making resources actually available.

What sort of an interim policy should be established with respect to the regulation and control of the activities of U.S. nationals related to the exploration and exploitation of resources located on the deep seabed beyond the limits of the Outer Continental Shelf prior to reaching international agreement on a deep seabed regime?

As a matter of interim national policy, I believe the United States should encourage the exploration of deep-sea resources lying beyond the limits of national jurisdiction, whether this is carried on as pure research or with possible commercial ends in view. It should likewise not object to such exploration by others. Such activities would involve, of course, no claims of exclusivity and would not of themselves confer any rights. They would not, incidentally, raise any question of conflict with the General Assembly's moratorium resolution, which is directed to exploitation.

Exploitation is a somewhat different problem. If it is no more than a feasibility test, it would seem analogous to exploration and not objectionable. But long-term exploitation would presumably require some assurance of tenure to the operator. In an area beyond the limit of national jurisdiction, the basis on which the United States could grant such assurances is not free from doubt. At the same time, any attempt at such assurances might unduly complicate efforts looking toward an international regime. On the whole, it would seem that early full-scale exploitation in the deep sea is unlikely as a practical matter; but probably the appropriate Federal agencies should have discretionary authority to limit or bar such exploitation by U.S. nationals during an interim period.

What effect does the issuance of leases beyond the 200-meter isobath pursuant to the Continental Shelf Lands Act of 1953 by the Secretary of the Interior have on the establishing of or the extension of a United States continental shelf boundary claim?

What effect does the aforementioned leasing procedure have on the establishment or extension of boundary claims for other nations' continental shelves?

The mere issuance of a lease by the Secretary of the Interior does not alter the international rights of the United States over its continental shelf. Under the existing Convention, these rights beyond the 200-meter line depend on exploitability. If this is shown, the jurisdiction of the United States attaches and the lease is presumably good. If exploitability does not exist, or if the area is beyond the limit of adjacency, the lease is a nullity because of the absence of rights in the lessor. Under the same principles, other states would not be entitled in strict law to use the mere issuance of U.S. leases as a ground for extending their own shelf claims. Once exploitation took place under the U.S. lease, of course, other states would be entitled to the benefit of any resulting advance in the limit of exploitability.

What rights does the United States have pursuant to relevant Federal law and the 1958 Geneva Convention on the Continental Shelf to regulate United States and foreign commercial and scientific exploration of the seabed on the continental margin in areas beyond either the 200-meter isobath or the most seaward or deepest area in which a United States mining lease has been issued?

The United States has, in the area seaward of the 200-meter line and out to the limit of exploitability, the rights over foreign commercial and scientific exploration defined in Articles 2 and 5 of the Shelf Convention. With respect to commercial activities these rights grant in effect absolute control. For scientific research they are much more circumscribed and permission for such research is not normally to be denied if it is *bona fide* and is to be made public.

For the reasons stated in the answer to the previous question, a lease beyond the limit of exploitability has no international legal significance unless followed by an early demonstration of such exploitability. The exploitability test is controlling (out to the limit of adjacency) in determining the area to which U.S. shelf jurisdiction applies.

The final three questions relate to the so-called "moratorium" resolution (Resolution 2574–D (XXIV)) adopted by the United Nations General Assembly in December 1969. The first two of these are:

(1) Did the General Assembly exceed its lawful authority in declaring that exploitation beyond the limits of national jurisdiction should be prohibited?

(2) Assuming that the General Assembly did not exceed its authority in passing this Resolution, is the Resolution binding (legally, morally or poiltically) upon the United States? What is the basis for your opinion?

The General Assembly had power, I believe, to adopt the resolution in question. The important point is whether such a resolution has any binding effect on the Members of the United Nations. In my opinion, the resolution is not binding as a matter of law. The Assembly has no general legislative competence, and certainly no authority in these circumstances to enjoin a particular course of action on its Members. Whether the resolution is "morally or politically" binding probably depends on what one means by those adverbs. Considering the context surrounding it as a whole, I would say that it was also not binding in either of these senses. What it is a political fact which United States policymakers must take into some account in their forward planning.

(3) What would be the effect of expression, either by individual members of Congress or by a Committee, of disagreement with the Resolution?

I do not see that such an expression of disagreement would affect the legal situation. But, like the resolution itself, it would be a political fact, an indication of opinion, which could be of significance to policymakers in the Government directly concerned with the problem.

Senator METCALF. I want the record to show that the committee is privileged to have with us today Senator Pell, the very able Senator from Rhode Island, who is perhaps as knowledgeable on this subject as any Member in the Senate. He has taken a great deal of interest in pending legislation.

Now we welcome you to the committee, Professor Henkin, and give you your 20 minutes and then we will start asking questions.

Mr. HENKIN. Thank you very much, Senator. I regret that I did not know you were beginning earlier because I could have been here at 9.

Perhaps it might be most useful, gentlemen, if I summarize the areas of agreement among us before I begin to talk about the issues.

All at this table are agreed that under the 1958 Convention the United States can claim out to the 200-meter depth. We are also agreed that we can claim as Continental Shelf areas that are presently exploitable so long as they are adjacent, and that we cannot claim as legal shelf what is not yet exploitable.

As regards our rights under the present convention, then, the question is what are the limits of adjacency? Mr. Young has said that different reasonable interpretations are possible but to interpret a document reasonably requires looking at the language and the history, and not enough attention has been paid to the history of this convention.

In my written statement, Mr. Chairman, I commend to you, the most thorough, dispassionate, impartial study of the legislative history of the convention, made by Mr. Bernard Oxman. It is called "The Preparation of Article 1 of the Convention on the Continental Shelf."

The committee would be interested in seeing that document if it has not done so, and might even wish to make it part of the record. That study concludes, at page 150, that:

Article 1 was not intended to embrace areas at a substantial distance from the shore lying beyond the point where the waters become deep.

In my view, any claim by the United States under the 1958 Convention to a Continental Shelf which reaches to the deep ocean basin, as has been suggested, would be wholly unreasonable and legally without foundation.

Something has been said also, and your second question inquires about the statement of the International Court of Justice. The International Court of Justice. The International Court of Justice noted that "natural prolongation" was one of the reasons why the doctrine of the Continental Shelf was developed. President Truman's proclamation in 1945 also mentions this as one of the reasons for the doctrine. But it was never suggested either in the Truman proclamation or by the International Court of Justice that therefore the whole natural prolongation should belong to the coastal state. In fact, the point of the Truman proclamation is the contrary.

Although President Truman knew all about the submerged land mass, he claimed rights only to the geological Continental Shelf, not to the rest of the natural prolongation. Although the International Court of Justice talked about the natural prolongation, they also said that adjacency means "much less" than 100 miles from shore. I was not here, unfortunately, to hear all of Professor Burke's statement, but he has written elsewhere that there "is a very clear implication that in a court's view the present limit on the shelf does not necessarily embrace the slope and rise."

To sum up, I know no basis except desire, which is not wholly sufficient for interpreting a document, for suggesting that the 1958 Convention would permit us to claim down to the bottom of the submerged land mass.

There has also been some talk about giving away our "national heritage"; I would suggest that at best this is not quite ingenuous. First of all, we have no heritage of rights beyond what the Convention gives us and not to seize what is not ours is not giving anything away.

I would remind the committee that even the rights we do have under the 1958 Convention, and those we will have in the near coastal areas when they are exploitable, are not any kind of "natural heritage"; they were not obtained by discovery or purchase or cession. Before 1945 we had no greater rights in "our" Continental Shelf than did other states. Since 1945 we have done nothing to acquire these rights except to claim them and persuade other states to do the same. Not to claim more than was agreed, not to claim even all we might reasonably claim under the Convention some day, surely not to claim all we could get away with, is hardly to give away any national heritage.

The real question is how much should the United States seek by a new agreement or, if you will, what is in the interest of the United States to claim under the present Convention?

It is important to view the interests of the United States in a very large perspective. It is true, I am afraid, that many coastal States will reach for a wide Continental Shelf. I am persuaded, however, that the interests of the United States more than of many other states lie in obtaining international agreement on the very narrowest Continental Shelf possible.

The reasons are not difficult to understand. First, I would remind the committee that the United States has always recognized that overall its many and varied interests, often pulling in different directions, require that the seas remain common and free. Although we have extensive coasts, for example, we have resisted the temptation to claim wide territorial seas and we have opposed such claims by other territorial states. I am satisfied that if we accept a wide Continental Shelf, we will find that in the long run and in the less than long run too, those continental shelves will be closed to the United States for many uses of great importance to us.

In part, my convictions on this point reflect the reading of history. The very notion of a territorial sea began because nations claimed special rights for some one purpose. The extension of the territorial sea from 3 miles to 12 miles began with states claiming a 12-mile contiguous zone for limited purposes.

One can see the process in our own times on our subject. There is no real persuasive reason why a coastal state should have exclusive jurisdiction in the seabed for some purpose, let us say, to exploit minerals or crabs, but not for others—for example, to exclude the submarine tracking devices of other states. Indeed, there is no compelling reason why a coastal state should have special rights in the seabed but not in the superjacent waters. I think the Senator from Alaska was making that point earlier in his colloquy with Professor Burke. Especially as the Continental Shelf brings even greater wealth to fortunate coastal states, the regime of the Continental Shelf, I am satisfied, will become an unacceptable anomaly. It will be difficult to persuade coastal states less blessed in minerals, but rich in something else that they may not enjoy exclusive rights, whether in fish or other kinds of resources. This is what happened after we claimed the Continental Shelf—some of the countries in Latin America claimed a very wide territorial sea because they wanted fishing rights.

Consider the history of the Continental Shelf itself. When Mr. Truman issued the 1945 proclamation, all he claimed was the geological shelf and the right to mineral resources. When the convention was written in 1958, it was found necessary to give the coastal State a wider area, rights in sedentary fish, and some control over navigation and scientific research. There is evidence that navigation has suffered a little. There is strong evidence that scientific research on the Continental Shelves of many foreign States has virtually been eliminated. I have heard it asked, why does not the U.S. Navy sweep foreign submarines off our Continental Shelf? Writers have already suggested that the Continental Shelf is a proper place for defense installations. During the recent debates in the United Nations, at least one of the delegates, discussing the Soviet-United States proposal for arms control on the seabed, objected that they were not taking sufficient account of the rights of the coastal State on the Continental Shelf.

I believe that if the United States accepts a wide Continental Shelf it will begin to find wide areas of seabed, and later the corresponding waters and air space of 100 other coastal States closed to it for military navigation, for defensive military activities, for scientific research, for fishing and other uses which are coming. At best, such areas

will be open only by the grace of often unfriendly or unstable governments and shifting politics.

Simply, the United States cannot afford to be so fascinated by the prospect of a monopoly over additional mineral wealth within increasing distances from its shore that it throws away larger interests. In fact, however, I don't think we would be sacrificing even our mineral interests if we stand up for a narrow Continental Shelf. A narrow Continental Shelf all around the world would have more of the sea and the seabed open to the United States with its long lead in technology, capital, and initiative. It seems to me that the interests of the United States, as well as of the American oil companies lie rather in a narrow shelf and a modest regime permitting exploitation beyond that narrow shelf, than in grabbing up what we can, letting other people grab what they can, and letting the deep sea go as it will.

This brings us to the regime of the deep sea. I do not know what is the international law as to the rights of States to dig for mineral resources in the deep sea, although I have written about it. No one can say with confidence what the law is. In the past, it was never more than a hypothetical, academic question, and whatever general propositions by different Latin labels were pronounced in those days don't really decide this question.

The United States then, is in a good position to say that as we read the international law, there is nothing to prevent us from digging in the deep sea. The interests of the United States really are in trying to establish a narrow shelf while reserving its rights to dig beyond that narrow shelf, not on the theory that it is continental shelf, but on the theory that we can do so in the deep seabed. In this way the United States succeeds in keeping coastal state jurisdiction narrowly confined while getting for its enterprise an opportunity to dig in the seabed under some modest form of regulation.

The question, I suppose, is, where do we go from here? What the United States should do first is to assure that we have a narrow Continental Shelf. We can do that by declaring our interpretation of the shelf to that effect and by challenging any claims by other states to a wider continental shelf than we believe is reasonable under a proper interpretation of the convention.

We would then say that with all due respect, we do not consider the U.N. moratorium resolution an authoritative statement of the international law on the subject. We reserve our rights to dig in the deep sea beyond the narrow Continental Shelf but we are wholly prepared to negotiate an acceptable, proper, effective international regime. Such an international regime could have revenue for international development and some regulation, at least requisition (as suggested by the Stratton Commission) or perhaps by licensing according to some agreed principle.

It seems to me that that posture gives us a much stronger position. We cannot use the threat of taking a wide shelf to bargain for an acceptable deep-sea regimen: Many other coastal states want a wide continental shelf and the threat that we will take one would not bother them at all. We may have to fight the other states on the width of the shelf and I think we should do that separately and independently of the deep sea regime. Then, by reserving our rights to dig in the deep

sea, we would put ourselves in a good negotiating position to come out with the kind of international regime which favors our interests and in my view also favors the interests of other nations.

As regards the intermediate zone, I should disclose that I am probably the father of the idea before I speak in its favor. The merits of the suggestion obviously depends on the kind of international regime to which it is linked. But in principle the intermediate zone provides an excellent way of meeting the concern that a coastal state has about having foreign installations generally in the area of its coast, even if beyond the adjacent waters of the Continental Shelf. It also provides a different kind of opportunity, to deal with so-called vested rights while an international regime is being established: the United States can continue to issue leases beyond the 200-meter limit indicating that it will subject these leases to an intermediate zone concept to be developed in connection with a new regime for the deep seas.

Thank you, Mr. Chairman.

Senator METCALF. Thank you all for a most helpful presentation. I am going to yield in just a moment to my colleague, Senator Pell, but in order to start this discussion off I want to refer to a statement that Professor Auerbach made and reference was made subsequently about the *North Sea* case where you said that among other things, the majority opinion states:

> By no stretch of the imagination can the point on the Continental Shelf situated, say, a hundred miles or even much less on a given coast be regarded as adjacent.

I would like to refer you to an item in this weekly report of activities, Ocean Oil Weekly Report of January 19, 1970. It says:

> *Louisiana:* Texaco has awarded a contract to Brown and Root for the construction and installation of two fixed platforms for the development of a large gas reservoir in Block 265 East Cameron Area located approximately 100 miles offshore. Water depth is approximately 150 feet. One platform will be an eight-pile, 12 well structure, the other will support production facilities. The facilities are slated to be in operation by July of 1970.

Now, what are our rights under the *North Sea* case and what are the rights of those oil companies?

Mr. AUERBACH. Senator Metcalf, you put your finger on another ambiguity in the opinion. Relying on the opinion to clarify the Geneva Convention is like asking the blind to lead the blind, because the opinion itself has more than enough ambiguities to satisfy international lawyers for generations to come.

Under the Geneva Convention, as Professor Henkin indicated, there seems to be general agreement that the coastal state has rights of exclusive access to 200 meters, no matter how far out you go, have to go to get to that depth. Now, under this interpretation of the Convention, which I venture to say all of us here at the table accept, there is no question about the right of the United States to do precisely what you have just called our attention to.

But the International Court of Justice opinion can also be read as limiting how far out the Continental Shelf extends even when the activity does not go deeper than 200 meters. This would introduce a completely different order of complexity and confusion into what hitherto has been thought to be absolutely clear law.

Mr. HENKIN. If I may have a word.

Senator METCALF. I wish all of you would respond. Professor Henkin?

Mr. HENKIN. Despite the literal language of the Convention, it is widely accepted that the adjacency concept does not apply as long as you are within the 200-meter isobath. The International Court of Justice judgment is strong evidence for that view. In that case both parties and the various opinions assumed without discussing that all the sea-bed of the North Sea was Continental Shelf although the North Sea is more than 100 miles wide at various areas, because it is also less than 200-meter depth at almost all points.

Senator METCALF. Mr. Young?

Mr. YOUNG. Mr. Chairman, on the question of adjacency and 100 miles in your statement and the Court's opinion, I share Professor Auerbach's view that this is one of the curious statements of which there are a number in that opinion. Obviously in the North Sea not only are there points more than 100 miles from shore, but there are operations more than 100 miles from shore and I am sure it was not the intent of the Court to cast doubt on those operations.

I think in order to have the statement make sense, one must identify what one is comparing; it depends on the order of magnitude, on the dimensions of the things compared. A point over here at (A), 100 miles from a point over here at (B), may well not be adjacent; but both those points may be on a single shelf, an area which as an entity is adjacent to the coast. Comparing the relative adjacency of points and areas is like comparing oranges and apples: they are quite different.

I think this is the thing to keep in mind when talking about that statement on adjacency.

Senator METCALF. Mr. Burke?

Mr. BURKE. I don't think I disagree with the comments which were made about the limited nature of that decision. In one sense, at any rate, it has very limited impact. I think it is a most unfortunate decision because it did not resolve the controversy between the parties and creates confusion about a number of other matters which the Court might better have ignored. The facts in the case are inconsistent with the statement you have read. I suspect that adjacent is not going to apply to areas 200 meters deep or less. Although I do not understand how this derives from the convention.

Senator METCALF. Gentlemen, in view of the fact that we are confronted with ambiguities in the Geneva Convention and then we are confronted by ambiguous decisions explaining these ambiguities which are compounding our problems. Would it be well as quickly as possible to have an international conference to determine some of these things.

Mr. BURKE. I would like to respond to that by saying that the Geneva Convention is confused and it is a product of 87 states attempting to negotiate. The next time we will have 130. I don't believe there are any better prospects for getting a satisfactory agreement out of that many states than there were in getting the agreement we have now. In addition to which, the preparatory work may not be done as carefully in this instance as it was with respect to the Geneva Convention in 1958 which had the advantage of 6 to 8 years at work by international lawyers.

Senator METCALF. Do the rest of you concur in that?

Mr. HENKIN. I think Professor Burke is right in suggesting it would take a long time. It is also difficult to guess what will come out. But we don't have much choice because the other countries are pressing us for agreement on a number of the issues which are before us and it is very hard for the United States to refuse to attend a conference.

More important, I think the real issue is whether you like the present state of things or not. Those of us who see the present ambiguity as leading to a very wide grab by the coastal states, and who consider that highly undesirable, are willing to risk an international conference to avoid what is happening. The point is that we ought to do what has to be done to prevent that wide coastal shelf from developing. Perhaps a wide shelf could be avoided without a conference; I would be willing to explore unilateral declarations.

Senator METCALF. You have the Truman proclamation.

Mr. HENKIN. That is right.

Senator METCALF. I didn't understand you when you said all we had to do was ascertain our rights under the Truman proclamation. Has this Nation not gone right ahead to exploit, explore, develop, challenge any other nation on its rights to interfere with our sovereignty?

Mr. HENKIN. Of course, after the Truman proclamation. But to take the rights we claimed in the Truman proclamation, all we did was to say that we will take them; we didn't explore, exploit, discover, pay for it, enter into a cession agreement or do any of the other things by which one traditionally acquires territory. This, of course, is another argument against this natural prolongation idea. Nowhere does "natural prolongation" give you rights in international law. The deep seas are the natural prolongation of the territorial sea but that does not give you any rights there. Outer space is also the natural prolongation of the air space but does not give you any rights. Some say Canada is the natural prolongation of the United States, but I do not think I should say that loud lest someone suggest we lay claim to it.

Before 1945 "national prolongation" gave us nothing. In 1945, using natural prolongation and some other arguments, we claimed the geological shelf and no more. I was saying that all we did to get even that was merely to say we want it and persuade other nations to agree.

Senator METCALF. Professor Auerbach?

Mr. AUERBACH. I agree generally, as you might expect, with what Mr. Henkin said. I want to add that the pressure for new international arrangements has been multiplied by the U.N. Moratorium Resolution.

If you are not completely bored with the *North Sea* case, there is one other point that I would like to make about the natural prolongation argument. There used to be a 19th century theory that national boundaries of states should be fixed by natural factors. We know now that that concept is outmoded and erroneous, that the search for "natural" boundaries is a search for the will-o-the-wisp. We seek to satisfy claims of justice or equity, political expediency or political interest.

The fact is that the ICJ judgment, as I read it, and I acknowledge its ambiguity, did not say that the natural prolongation of the continental land mass measures the seaward extent of the Continental Shelf. The Court was not called upon to decide this issue and we must read every word, every sentence, and every paragraph of its opinion with the issue it was called upon to decide in mind.

The Court was asked to decide whether article 6 of the Continental Shelf Convention should be used to determine the lateral boundaries between states bordering on the North Sea. That article calls essentially for approximately equal divisions of the subsea areas in question.

The Court held that article 6 was not controlling and that a state bordering on the North Sea could get more than it would get under article 6 if the area involved was more of a natural prolongation of its continental land mass than it was a natural prolongation of the land mass of the countries competing with it for that area.

This is a far, far cry from saying that the natural prolongation of the continental land mass determines the seaward extent of the legal Continental Shelf under the 1958 Convention.

Mr. YOUNG. I would just say briefly, Mr. Chairman, that I agree with Professor Burke's concern about a new conference or an attempt to write a new convention. I fully share his apprehensions that we would end up with a worse instrument that we have now, imperfect as the one we have may be.

I think I would prefer to see, although I am not at all sure it is likely to come to pass, the 1958 Geneva Conventions as a whole left alone and a new convention drafted to deal with the regime of the deep sea, possibly including an intermediate zone. Insofar as possible this should be made to dovetail with the other conventions and in that sense try to reduce the whole problem to a manageable system.

Now I realize this is not easy. I shudder at the drafting problems, but at least I think confining a conference to a single set of issues might produce a better document than an across-the-board negotiation on every conceivable issue of the law of the sea. As I say, I am not at all sure that this is in the cards, we may be forced into the kind of general conference that you gentlemen are suggesting.

Senator METCALF. Professor Henkin?

Mr. HENKIN. I think Mr. Young is right. It would be in our interest to have a narrower conference on fewer issues because we are not unhappy with some arrangements. But other nations are and if we want a convention to get some things changed, they wish to bargain with us about others.

This, by the way, has already appeared. In the U.N. there is a resolution which in effect tries to link all the issues of the ocean and to suggest that there might be a conference about all of them. We said we did not want that and would prefer one limited to defining the shelf, at least in the first instance, but we were out-voted.

I would add to what Mr. Young said, that in any event it would not be possible to have a conference limited to the deep seabed, without dealing with the definition of the Continental Shelf, because that is going to determine where that other regime would begin. That issue, at least, you cannot avoid getting into. I think it would be nice if we had a small protocol defining the shelf and a deep sea regime convention but those two seem to me to be a minimum. Whether we can get by with just that, as you say, is questionable.

Senator METCALF. Do you have a comment, Professor Burke?

Mr. BURKE. No; I have no additional comment.

Senator METCALF. Do you have a comment on this? I want to ask the advocates who are proposing that we have a narrow shelf because

it is in our national interests as far as mineral exploration is concerned, but what about the other side of the coin; namely, the pollution? Suppose we had a narrow shelf and the Russians were in Santa Barbara. What would do we about that?

Mr. HENKIN. Of course, Mr. Chairman, under the intermediate zone concept which I suggested, the Russians could not be in Santa Barbara because the intermediate zone would give us an exclusive right. But wherever they would be the problem of pollution is real, but a separate issue; the Russians don't pollute any more than we do.

Senator METCALF. We were the ones that created the pollution, but we had the Secretary of Interior do something about it. If it were some other nation or we were within the boundaries of some other nation, that sovereign power could not do anything about it.

Mr. HENKIN. There is no doubt that pollution, whether by activities in national or international jurisdiction, is a serious problem which has to be controlled by international agreement. This is one of those issues, however, which should lend itself to agreement because no one really wants——

Senator METCALF. Again, is it the impelling force to have the international conference?

Mr. HENKIN. Yes. The real issue is whether you wish to reopen some other issues. In other words, you and I could agree on a number of issues which need agreement, and pollution is one of them, but whether you wish to get back into fish and territorial seas and contiguous zones and things of that kind within 12 years of the last circus, I am not sure.

Senator METCALF. What if we just called a conference of those nations who were signatories to the last 1958 Convention?

Mr. HENKIN. For what purpose?

Senator METCALF. To resolve the ambiguities.

Mr. HENKIN. I think one could do that. I say something to that effect in my prepared statement. If they agreed to a redefinition that was within the framework of the original conception, a reasonable interpretation, it might bind the others because in general the customary law governing the nonsignatory states has been the same as the law of the Convention.

On the other hand, if they produced an extravagant definition—let me be fair, whether extra wide or extra narrow—if they come up with a definition that was substantially different from the original, the other nations need not accept it. I think the suggestion you make is a good one. We ought to be considering the possibility of getting the signatories together, especially if we seek to achieve approximately what they were thinking about in 1958, and then see what the other nations will do about it.

Mr. AUERBACH. You could not then establish a new international regime for the subsea areas beyond the limits of so-called national jurisdiction. For this purpose, you would have to invite all the nations which wished to attend.

Senator METCALF. Senator Pell, you have been making some notes here. I will be glad to yield to you at this time.

Senator PELL. Thank you very much, Senator Metcalf.

I would like to express my extreme gratitude as a member of another committee being invited to be here. It is unusual and one more

example of courtesy and fairness with which the chairman of the subcommittee and former judge conducts his hearings.

In answer to his query earlier as to what would happen in Santa Barbara if the Russians had been there, I think under my proposal, if that had happened, in the international sea guard or on the lines of the Coast Guard we would go whisking up and ask them to close down, but I understand that is a little way off, too.

Seeing one of you is not from the academic field makes me realize that the subject we are talking about theoretically is really not academic at all, very imminent and right honest. I am reminded here a little bit, to be esoteric, of the intense idea of the fourth dimension of time because with the passage of time we are going to find the boundaries of our nations will have changed and if nothing is done, if the State Department continues no-policy policy and we just move as we do in accordance with the 1958 Convention, I would submit that in 5 to 6 or 10 years we would find that the boundaries of nations will be determined by where the rise, the end of the rise hits the deep and not by any lesser definition.

Therefore, the discussion is very real and the passage of time will have a bearing on the countries' boundaries.

The question I would like to put to the panel is perhaps a little remote but I think bears on the problem, and that is the development of the history of the ownership of the airs. When did the leadership that the airs above a nation appertain to that nation, when did that first appear in international law?

Mr. HENKIN. It is not fair to call on professors who are not prepared, Senator. The history, as I recall it, is interesting, because states started out with the opposite conception, with the notion that the air above should be everybody's and should be free like the deep sea.

Senator PELL. High air as opposed to the high seas?

Mr. HENKIN. That was the original proposal, and in the 20th century. It was not until after World War I, due in substantial part, I suspect, to the realization that the air could bring bombs, that they dug out that old Latin phrase, "Whose is the land, his is the air above it up to the sky," and made it international law for states. That is a comparatively modern concept but it has now been universally accepted; every nation has wanted control of its airspace.

Senator PELL. The followup question to that, the obvious one to each of you, is this not what would inevitably happen if the seabed was given to various nations and that then the sea volume above that seabed would very soon follow the same fate as the high air did a few years ago and appertain to the adjacent nation?

Mr. HENKIN. Senator, I am not the man to ask. I agree with you. Perhaps, Mr. Burke?

Mr. BURKE. We have had the experience of about 25 years and it has not happened yet. We have had 25 years of experience and this has not happened.

Mr. HENKIN. I should like to differ with that statement. I think it has happened and is happening. Look at the history of the territorial sea. We have now accepted that every nation has a belt of sea which belongs to it, lock, stock, and barrel, with only some rights for innocent passage. The history of that territorial sea began with a claim by the Scandinavian countries to have certain rights at sea, limited rights for

one purpose only. Limited rights for one purpose became unlimited rights for all purposes.

Second, the extension of the territorial sea to 12 miles which, over our objection, is rapidly becoming the accepted view, can also be traced in part to the fact that nations had previously begun to claim distances beyond their territorial sea for other purposes—to go after bootlegging, rumrunning, in our prohibition period but also for customs and immigration and gambling and other violations of the law. Nations began to claim more and more jurisdiction beyond 3 and 4 miles and now we find 12 miles is territorial sea.

If you look at the Continental Shelf, Senator Pell, we started out with a proclamation that claimed only the geographical shelf and only for its mineral resources. Then, 13 years later, we have a convention: It goes somewhat beyond the geological shelf; it adds sedentary fish; it adds some control over navigation, and substantial control over scientific research. The Convention does not say that but in fact most coastal states have not permitted research on the Continental Shelf. Now people are talking about defense installations. It seems to me it is happening under our eyes. I don't see how one can deny that this is the trend. What you fear is going to happen, Senator, has already happened.

Senator PELL. Thank you.

Senator METCALF. Mr. Burke?

Mr. BURKE. I think you responded to a question the Senator didn't ask. The question he asked was, If we reached an agreement on allocating wider shelves, won't this inevitably lead to states not by agreement, but by practice extending control up through the water column? The facts are that thus far the extensions of authority which have taken place above the Continental Shelf have been pursuant to an agreement—incidentally an agreement upon which the United States insisted. The prime evidence for the extension of control beyond that over mineral resources is the effects upon scientific research. This was put in the agreement and it was understood at the time that there would be interference with scientific research.

Mr. HENKIN. What Mr. Burke says is true, but the fact that nations feel compelled to increase their rights by agreement proves the point I am making. They did so because in fact it is not possible, physically or politically, to keep control for only one purpose. Nations feel the need or the desire to extend control for other purposes, and they seek and obtain agreement.

I would add that the story of fishing off Peru is a case of an extension without agreement. Both will happen. Nations will make claims and then nations will try to get an agreement to match those claims. I think we can expect both extension by agreement and extension without it.

Mr. AUERBACH. Senator Metcalf, there is something in Bill Burke's position that I should like him to clarify because it will otherwise appear in the record to be an inconsistency. I think he agreed in his opening statement that as a matter of U.S. policy, he would favor a narrow shelf. In fact he would even favor, as he indicated, rolling back the Continental Shelf as presently defined under the Geneva Convention.

Yet when he comes to interpret the ambiguous provisions of the existing convention he interprets it to yield the broadest possible shelf. Does it not make good sense to interpret an ambiguous provision in such a way as to effectuate the policy you regard as desirable? Why not, in other words, interpret the ambiguous definition of the Continental Shelf to yield the narrowest possible legal shelf?

Mr. BURKE. I did not and do not adopt the widest possible interpretation, nor do I propose a "rollback." There are people who propose wider ones than I. I thought I explained that the reason for a relatively wide shelf by interpretation of the Convention had absolutely nothing to do with the convention as such, although I believe a wide shelf is permitted by the Convention as exploitation moves out.

I have supported a wide shelf as a tactic for delaying negotiations on all of the Geneva Conventions. It was predictable that States would attempt to open all of the Geneva Conventions at once if someone proposes revisions in only one of them. I thought we could reduce the pressure for that if somehow by other arrangements, we could reach agreement on a wide shelf.

Now this does not seem to be possible anymore, if I interpret correctly the developments in the U.N. I don't think unilateral action is a desirable method presently. I think we will have to negotiate and under those circumstances it will be a bargaining situation. I think we have heard several people here say that already. The tendency in this bargaining situation will be to attempt to push the limit on the water column as far out as we can push the shelf.

I think Senator Stevens might agree with that position. There are certainly other countries which prefer that position. I think that it is undesirable from the U.S. interests, and the overall world interest, to push these boundaries out together. I would prefer that we negotiate these matters separately, but I don't believe it is possible any longer to arrange that. So if there is any inconsistency it is really a question of tactics involved.

Senator METCALF. Well, does this work both ways? You are talking about pushing the shelf out and extending the jurisdiction over the water column above. Suppose the South American nations who have no Continental Shelf have pushed the water column jurisdiction out to the alleged 200 miles, does that mean they have jurisdiction over the bed of the sea underneath?

Mr. HENKIN. They claim it. They have not claimed merely the fishing rights, they claim territorial sea which gives air, sea, subsoil, seabed, everything.

Mr. BURKE. Not all claim the air. Chile does not, I believe.

Senator METCALF. Well, some of them do.

Mr. BURKE. Yes, some do.

Senator METCALF. We have a very confused area here.

Mr. BURKE. My point is, I don't deny that this has happened in the case of some of the Latin American countries and it dates back more than 20 years. I don't detect this big trend that is said to develop toward 200 miles. This began long ago but it has not expanded much and it has been limited to Latin America. It is explainable there on grounds that have nothing much to do with the ocean.

In fact, the case for the 200 miles insofar as it rests on dependence on ocean resources never existed at the time it was first made nor

presently. I don't deny that there have been those few instances, I merely say that they have not multipled as has been suggested.

Mr. HENKIN. Senator, I am so pleased to have Bill Burke in my corner that I would like to explore the area of our agreement with your permission.

Senator METCALF. I wish you would.

Mr. HENKIN. If we are agreed that a narrow shelf is in the national interest, then we are disagreeing on tactics. If I understand Professor Burke's position, it is that a narrow shelf is in our interest but it is not in our interest to reopen the conventions to achieve it.

Mr. BURKE. The narrow shelf has to be taken in context with many other boundaries. I am saying all the boundaries are going to be opened and it is desirable to maintain the narrow boundary position because I think we will be pushed out on the shelf boundary. We are not going to roll anything back but it is to our interest to minimize the extent to which these boundaries are pushed out.

This deals with military interests very substantially, not only the seabed interest, but aircraft and submarines as well.

Mr. HENKIN. In other words, we are agreed that it is desirable from the point of view of the United States to keep the coastal state from pushing out on any level—subsoil, sea, air, anything. Therefore the question ought to be what are the best ways of achieving that result? Where we differ is that Professor Burke is willing to sacrifice that interest in order not to reopen the other conventions. Is that a fair way of putting it?

Mr. BURKE. That is exactly right.

Mr. HENKIN. But if he also agrees that the other conventions are going to be reopened anyway, we ought both to be in the same corner fighting for a narrow shelf within that context.

Mr. BURKE. I believe that is what I have said.

Mr. HENKIN. Excellent. I wonder though whether we could not also get some additional agreement on tactics. Mr. Burke does not think that unilateral declarations will do any good. I suppose one question is, will they do any harm? And might they possibly do some good? It seems to me it would make a big difference if the United States came out punching, saying, "Look, the seas are free and they are going to remain free. We have adhered to the doctrine of the Continental Shelf as defered in the 1958 Convention as properly interpreted, that is, narrowly. We are going to fight on that line from here on out." If we take that position, we are in a better negotiating position.

Mr. BURKE. I don't believe I disagree with that because I think we are going to have to become much firmer in expressing our support for maintaining free access to the ocean than we have been thus far. I don't believe there is any question about it. I have a feeling that we may be unable to negotiate acceptable agreements in which case the United States may have to rely on customary law, and in that case again we are going to have to insist for a variety of interests on the utmost freedom of access to the ocean.

Senator METCALF. Any other comments?

Mr. AUERBACH. I just want to interject an additional note, because Professor Henkin's prepared statement disclaims any desire to put his position on idealistic grounds. I do think it ought to be brought to the attention of this committee that the national interests of the

United States, construed parochially in this matter, do happen to coincide with the interests of the international community which wishes to share the tremendous wealth lying between the geologic Continental Shelf and the geologic continental slope.

Senator METCALF. In the present state of the law, what is the legal effect of the United Nations moratorium?

Mr. YOUNG. I had wanted to say something on the previous matter.

Senator METCALF. Please do.

Mr. YOUNG. If I could have just a moment. I would not want the record to show any misapprehension on the fact that all of us at this table are agreed that we should have a narrow shelf. I do not agree on that, but I need not go again over the reasons for my position.

On the question of creeping jurisdiction, let me make just one observation. Creeping jurisdiction insofar as it has occurred, has largely been in the form of an extension of the territorial sea. In part this may be because we have no present limit on with the territorial sea, so it has been easy to do without having its legality seriously questioned.

Actually, I don't know of any important instances of creeping jurisdiction from the Continental Shelf doctrine. The important thing about the existing doctrine, I would emphasize again, is that part and parcel of it is that it expressly does not extend to the superjacent waters. One of the dangers of reopening this can of worms is that that principle, which is now settled, can well be jeopardized with the horrible consequences that you suggest.

Mr. HENKIN. I think, Mr. Chairman, there may be some difference in the way we use the words "creeping jurisdiction."

Senator METCALF. May I interject here. In Professor Auerbach's statement he says:

> Argument for a narrow continental shelf might prevail in order to prevent the possibility of creeping jurisdiction that may endanger other uses of the United States, including military uses.

I certainly think that we should at least come to some agreement as to what creeping jurisdiction means.

Mr. HENKIN. I am not sure that it is necessary to use it in any particular sense so long as we know in what sense we are using it. I think Mr. Young is using it in a particular sense, but if you forget the phrase, what we are saying is that if you have a wider continental shelf certain other things will follow; whether you call it creeping jurisdiction or not, does not interest me. What is not denied is that other uses of the seabed will also be barred to other States. I say that has happened; it has happened in regard to scientific research, it may be happening already in regard to military uses, it certainly has happened since 1945 as regards living resources and it has also happened as far as navigation, at least to the extent the convention permits it. If you worry about other uses, then you ask yourself also to what extent is the Peruvian position on fish traceable to the Truman proclamation; there is a link. And, in the future, if you have areas of seabed belonging more and more to the coastal State, why should not other States which have interests in the water above claim them, simply on the theory that if others can have the seabed, why can't they have the sea? There is not really a good answer to it.

So the suggestion that it has not yet happened, I think, is misleading. We have had the Truman proclamation for 25 years, which is a short

time in international life. We have had the Geneva Convention, drafted only 12 years ago and in effect only 8 years ago. These are short times. Yet already, as I read it, it has happened and is happening, creeping jurisdiction.

Mr. YOUNG. I just want to say I don't think we should overemphasize the admittedly bad precedent of the CEP countries. There are only eight or nine of them, whereas the great majority of states have maintained a much more restrained position.

Mr. HENKIN. Why should the African nations be expected to maintain a more restrained position?

Mr. AUERBACH. May I say something about that? It is a little too easy for North Americans to say that the position of the Latin American countries is completely without justification. Let me put the issue in terms of fish and mineral resources and in terms of basic considerations of equity or justice.

On the one hand is a great North American power that claims exclusive access to mineral resources on the Continental Shelf simply because there are mineral resources there. On the other hand are Latin American nations which do not have mineral resources off their coasts but have fish. In heaven's name, why is it more equitable or just for the first nation to claim exclusive access to the mineral resources, but not for the others to claim exclusive access to the fish?

I think this is going to be a commonsense consideration, based on fairness, that will appeal to the nations of the world, although there may be technical, scientific, and strategic reasons to make a distinction.

In the long run, I would agree with Professor Henkin, this consideration will prevail.

Senator METCALF. Professor Burke?

Mr. BURKE. I just would like to comment that the 200-mile claim has almost nothing to do with the major fish resources off the coast of Peru. Practically all of the fish are caught within 20 miles of the coast. If they were concerned about exclusive access to fish, a claim of 24 miles would include 10 million tons that are taken out of there every year. A mere glance at the map of Africa will show you why they may not be interested in 200 miles. There are a lot of countries around the gulf there where the bulk of the fishing occurs. If all of them extend their boundaries for fish, all to 200 miles, each of them will be cut off from all of the other waters as has already happened, of course, on the west coast of South America. Some of those states could use protein resources and actually have distant water fleets right now.

They will be the ones who are harmed if they extend this boundary as Chile already has been off the coast of South America.

Mr. AUERBACH. Mr. Chairman, even 24 miles illustrates creeping jurisdiction, so far as access to living resources is concerned.

Mr. BURKE. Twelve miles was, too, I suppose. Twelve miles, of course, came about because of the proposals made in 1958 in Geneva at the time when we were attempting to negotiate. My position is once you get into these negotiations they establish a trend, and the trend is set off by the negotiations, the trend has not been set by practice.

Mr. HENKIN. Twelve-mile agreements do not come about because people enter into negotiations and make proposals; they come about

because people have interests, and so they enter into negotiations and make proposals to achieve them. In our case, the interests have developed over the years in part because it has been accepted that they could use those 12 miles for some purposes. Of course, the negotiations are the occasion for their coming about, but the reason it happens is that nations want it and see no reason why they should not grab more. And they will continue to see no reasons why they should not grab more unless other governments, notably the United States, make it clear that the freedom of the sea for which we fought for 200 years is something we care about on every level from the seabed to the air.

Mr. BURKE. I don't believe I disagree with that reference to freedom of the seas. My point about extending these fishing boundaries is that they will grab less, not more. It is better to leave access open and free, and then to reach agreement on maintaining the yields and on fishing in an economic fashion.

That is the best route to follow. I believe that outside Latin America this route may well be the one that is adopted because I think there will be some perception, particularly in the African states that they won't gain by extending boundaries in this fashion, at least I hope so.

Senator METCALF. One of the problems that has arisen on this creeping jurisdiction that has been pointed out to this committee is that as its technology improves, exploitability improves, the boundary automatically moves out. Now that certainly is creeping jurisdiction. A nation today might have jurisdiction over an area and then a demonstrated technological exploitation tomorrow might extend it a couple of miles or another few hundred meters or maybe a depth of several hundred feet. So in view of that, and in view of the fact that we have this activity in the United States and we have had a tremendous interest in the development and exploration and exploitation of the ocean bed, I am going to give each of you about 5 minutes to conclude and tell us what you think we in Congress should do.

Senator Pell is a member of the Foreign Relations Committee and is concerned with this matter as a result of the study with the State Department. The Commerce Committee in its concern over the fisheries resources in its jurisdiction is also looking into this area. This committee with its jurisdiction over the seabed and as the committee from which the Outer Continental Shelf Act emanated is also concerned.

Now, we have talked about international conferences, unilateral declarations and proclamations. We have already been confronted with an activity by the United Nations that says we shouldn't do anything.

I am going to turn this over to you and then at about a quarter to 12 I am going to ask each one to answer that question, what should the Congress do at this time?

Senator Pell?

Senator PELL. I am very conscious of my role here as a guest and not a member of the committee. It is very unusual and extremely courteous to let me have this opportunity to receive the benefit of your thoughts.

As I understand it, the real crunch, really the definition of the shelf and the limits of it and I was wondering if one of you would care to outline the difference in concept between the Stratton Commission report, perhap Professor Auerbach who is on it, and the other concept

which you have undoubtedly heard of in the Government, which amends that to act more as a compromise.

I was wondering if you were familiar with the latter proposal.

Mr. AUERBACH. I am not familiar with the latter proposal, sir.

Senator PELL. Are any of the four of you familiar with this latter proposal that has been going around in the Government? Do you feel that from the long-term viewpoint the Stratton Commission recommendation of an intermediate zone would last or do you see it as a way of crossing the difficulties to be faced now until we reach a final definition of the shelf?

Mr. HENKIN. Senator Pell, I don't know the compromise position you were talking about, but I know your treaty on the subject. As between an agreement to extend the Continental Shelf some compromise distance to the 550 meters depth, and an agreement which would limit the Continental Shelf to roughly the 200-meter isobath plus an intermediate zone, I would strongly favor the latter, the Stratton Commission approach, because it seems to me to offer virtually the same advantages without risking the creeping jurisdiction we have been talking about. On any view, the coastal state has clear, additional rights in seabed if it is recognized as Continental Shelf. There is, then, an important distinction between the Continental Shelf concept and the intermediate zone concept; the intermediate zone concept accepts the idea that this area is deep sea, accepts international authority and the jurisdiction of whatever machinery is created for it.

Now, whether an intermediate zone will last, no one can tell you, but I think the chances of its lasting are substantially greater than the chances of a Continental Shelf regime remaining only Continental Shelf and not approaching territorial sea.

So, if one has to make guesses, I would guess in that direction.

Mr. AUERBACH. I have nothing to add to what Professor Henkin said.

Senator PELL. I have another question. One of the problems, as we all know, in connection with the Continental Shelf is the position of islands; for instance, the Azores and mountain peaks and ranges. You have the Falkland Islands which are in the midst of the Argentine Continental Shelf. Have any of you given thought to the concept as I have tried to introduce getting accepted the fact that no Continental Shelf would ever exceed in size the total area of the land to which it is adjacent in the territorial sea?

Mr. AUERBACH. I think, Senator Pell, that is a very fruitful suggestion. We never thought of it.

Senator PELL. Is there any strength to it? I see Professor Christy in the audience. His marvelous map shows that if you follow the immediate line approach, this would be one way of avoiding such a ridiculous problem.

Mr. AUERBACH. Yes.

Senator PELL. I am not saying Professor Christy is for the line. He has done it to spoof us all, I think.

Mr. BURKE. I think the object of limiting the shelves is a good one but the area is pretty small. In the event of a very small island we might not give them any shelf at all. We might reach the objective with a larger island. I don't know how you manage to figure that out.

Senator PELL. I think this is one of the very real problems that you

gentlemen in academia should focus on because when we get to the question of the State Department's no-policy policy we have to face up to these problems and no thought has been given to it. I would be much more interested in hearing the responses you make to Senator Metcalf.

Senator METCALF. We will start with Professor Burke.

Mr. BURKE. I don't know if I can use up 5 minutes.

I would repeat what I said at the end of my statement, that I think one of the most important factors is not only the unequal capacity for exploitation between the various states but also the unequal knowledge of the environment of the ocean which does not permit the developing countries, at least with their own capacity, to appraise the statements that are made about ocean resources. This lack of capacity, I think, is a significant cause of the distrust that is presently existing.

What this means, I believe, is the devotion of more funds and more imagination and effort, to technical assistance to the developing counries in the area of marine science. Such assistance can be channeled to these states in various ways, and particular emphasis should be placed upon the use of multilateral agencies in the United Nations family.

I think another position that the U.S. Congress might want to deliberate about is the problem of freeing scientific research and particularly the possibility of unilateral action by the United States to permit research in areas close to the United States without the requirement for a permit.

U.S. scientists are progressively being shut off from other countries and I think it might assist again in alleviating the distrust if this country took the lead in opening up its waters and shelves to fundamental scientific research without the requirement for a permit, subject to some conditions of notice, of course, and for assurances of other kinds.

I think this would be a matter the Congress might want to inquire into and also, of course, the executive branch which will take the eventual action if there is any to be taken.

I think that would be a very desirable course of action to take; in fact, it has already been informally recommended to the executive branch.

I think Congress would certainly want to participate in examining the conditions under which this would occur. I think this would be again one step toward alleviating some of the distrust which has poisoned the atmosphere so badly lately.

I would put the greatest emphasis, I believe, on furnishing assistance in terms of development funds, an area in which the United States is not now the leader, except in absolute terms. As I understand it, we are about 14th on the list of contributing states in terms of percentage of gross national product.

I think that the growing gap between the developing countries is responsible for some of the pressures at the U.N. It has nothing necessarily to do with the ocean, the developing states merely looking to the ocean as one way of closing the gap. I think that is probably a mistake, and an understandable one in view of the misinformation purveyed in the U.N. in 1967, that the ocean probably will not close

the gap, but we are not going to convince them of that unless we have better credibility, it seems to me, in providing assistance generally for development purposes.

Senator METCALF. Mr. Young?

Mr. YOUNG. Well, Mr. Chairman, I think this may bring down some of the wrath of my colleagues on my head.

Senator METCALF. We will try to protect you.

Mr. YOUNG. Yes, I will invoke protection of the Chair, which I am sure will be adequate and ample.

There has been a good deal of talk in the Government during the last year or two about the whole problem of the U.S. position, and the attitude in general has been that we had to keep our options open. I believe it was you, Carl, that said the Government had not made up its collective mind.

Senator PELL. You mean the no-policy policy?

Mr. YOUNG. Yes. This may have been very good at the time, but I think we are now coming to the point where we certainly have to do something. I would like to see the United States declare publicly what it considered the extent of its rights to be under the existing Convention.

For my own part, of course, I would hope that it would adopt the wider shelf view—exploitability, ultimately limited by adjacency, which I have mentioned here before.

Having made our position clear, then I think we might indicate that we would be willing to negotiate an international arrangement for a deep sea regime, including the landward edge of the deep sea area (which is the same as the limit of national jurisdiction).

I would not want to foreclose the possibility of compromise as to the location of that line or the possibility of an intermediate zone device as one of the techniques for getting general acceptance. I think we should be reasonably flexible on that, but I would like to see us start from a strong position as to what we think our rights are.

I would certainly oppose, as I have said before, reopening the present Geneva Conventions if that can possibly be done. The ideal thing would be to reopen none. I would retreat step by step so that you don't open any more than you have to in any case. The more you can separate the issues and fragment them, the better chance you may have of getting rational arrangements for the particular subject.

On military uses in particular, I would hope that we would continue to recognize that this is essentially one aspect of the big problem of disarmament. It really has very little to do with the development of the resources of the deep seabed, and any meaningful progress in deep sea disarmament, I think, has to be part and parcel of what we do on disarmament overall.

On the moratorium resolution, I certainly don't think anybody can take it seriously as a legally binding instrument. In the circumstances of its adoption, I also think it has no particular binding effect morally or politically. What it is, I suggest, is a political fact, a straw in the wind, an indicator of what the problems are that we face. So to me the effect of the resolution is that it is a political fact which we must take note of in our forward planning.

Senator METCALF. Thank you very much. Professor Auerbach?

Mr. AUERBACH. Mr. Chairman, the Report of the Stratton Commission is now just a little more than a year old and in that intervening period it has provoked a great deal of discussion and a rather fair amount of criticism, and that, of course, is the essential purpose it should have served.

Whether it is a matter of my innate stubbornness or one's natural tendency to defend one's own views, I still hold to the essential lines of the Stratton Commission's recommendations.

I am impressed by Professor Henkin's view that we may have made the intermediate zone a little too wide.

I would like again to call upon this committee to consider what our national interim policy should be with regard to the protection of private investment against any eventual international regime. I don't believe Senator Pell's committee has any jurisdiction over this matter, but your committee does.

Finally, I too would prefer a new international conference to consider a regime for subsea mineral resources alone.

Senator METCALF. Thank you. Mr. Henkin?

Mr. HENKIN. Mr. Chairman, I should like to second what Professor Burke has said and what Professor Auerbach has said. It is time we acted on the Stratton report as well as in other areas of assistance and research that Mr. Burke spoke of. I tend to agree also with Mr. Young that we have to take a position, although obviously he and I do not agree on what that position ought to be.

It seems to me that we have three arenas in which we have to develop positions and we should do so very soon. One is domestically, within the Government: it is time that we ceased what Senator Pell calls a no-policy policy. I believe the executive branch should recognize its overriding interests, conclude for a narrow shelf, make that known, start negotiating on that basis informally and try to get as much support for it as possible.

The other arena is the United Nations. We have to take clear, firm positions there. There is political ambiguity in the moratorium resolution: I view it more as a political tactic, an effort by the majority to reserve a voice in what will happen in the future, rather than an indication as to what kind of regime the majority wants. The other resolution, which called on the Secretary General to ask governments whether they would like to have a conference on all aspects of the sea, while it was worded to suggest a point of view, also requires a position by the United States: the answer to that inquiry could very well be: "No, we would not like to have a conference on all aspects of the sea, but we wish a conference to define the shelf."

In the United Nations we will be heavily engaged in the Seabed Committee and they will be drafting principles. We should proceed to offer principles which could later make it easier to go ahead with revising the convention. One of those draft principles should assert and maintain the freedom of the seas and the narrowness of the Continental Shelf. In drafting its principles the Seabed Committee might help limit the scope of an eventual conference; in view of its narrower jurisdiction, its principles will be narrowed and might make it easier to avoid issues we do not wish to reopen.

Perhaps most important is what the U.S. Government does. In addition to possible declarations, it is imperative that the Depart-

ment of Interior follow an agreed U.S. policy as to what it will do about leases. In my view it should not issue further leases beyond the 200-meter isobath. We can limit our leases and preserve a narrow shelf policy without saying that we don't have a right to lease in wider area, just saying nothing.

There are also some things which the Congress could do. It could adopt a "sense resolution" on the freedom of the seas and a narrow shelf, which would help make that executive policy, and help sustain that policy in international circles.

Senator PELL. Do you think my Senate resolution calling for 550 meters is too wide a shelf?

Mr. HENKIN. Senator, I would like it more with a narrower Continental Shelf, and perhaps a larger intermediate zone.

Senator PELL. I am very glad to be attacked from that quarter because all my criticisms are from the other.

Mr. HENKIN. Mr. Auerbach and I are seated at the left of the table, you see.

The other problem which the Congress may have to consider is the need to control American enterprise in the deep sea. As I read the Outer Continental Shelf Lands Act, the Secretary of the Interior has the authority to issue leases only on our "Continental Shelf," whatever that means. When it was adopted, it certainly meant the geological shelf, because that was all we were claiming under the Truman proclamation. There is an argument that he can issue leases as far out as the 1958 convention gives us, because that is now called Continental Shelf, but he does not have any authority, as far as I can see, to issue leases in areas which are not reasonably within the meaning of the 1958 convention.

I am not suggesting that the Secretary of the Interior be given authority to issue leases in the deep sea, but the desirability of regulating American entreprise in the deep sea requires congressional attention. Whether we prohibit companies from going out on their own, or encourage them, whether or not we regulate them through the Secretary of some department (surely not the Interior, by definition) something ought to be done to indicate a U.S. position with regard to the activities of American enterprise in the deep sea. If the Congress makes the proper choices on that question it will, incidentally, help the United States in negotiating the kind of regime it wants in the deep sea.

Senator METCALF. Professor Auerbach?

Mr. AUERBACH. I just want to add a note to Professor Henkin's comment that we are sitting to the left of the table. The Department of Defense seems to be with us on the left on this issue.

(The complete statement of Louis Henkin follows:)

STATEMENT OF LOUIS HENKIN, HAMILTON FISH PROFESSOR OF INTERNATIONAL LAW AND DIPLOMACY, COLUMBIA UNIVERSITY

I appreciate the invitation of your chairman, Senator Metcalf, to speak to you about a matter of great and growing import. In the course of my statement I attempt to give views on a series of questions he has put to me. The views I express are my own: I represent no other interests.

Consideration of United States policy in regard to the sea-bed and its resources might begin with what that policy has been, as reflected in the law which the United States launched and helped develop. The controlling law is familiar. The 1958 Convention on the Continental Shelf gives the coastal state sovereign rights over "the Continental Shelf," as defined, "for the purpose of

exploring it and exploiting its natural resources." The principal issues derive from the definition of the area in which these exclusive coastal rights obtain. Article 1 of the Convention provides:

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 areas adjacent to the coasts of islands.

Let us be plain as to what is clear about this definition and what is uncertain, what is agreed and what is in dispute. It is clear and agreed that every coastal state has exclusive rights in the resources of the sea-bed out to the 200 meter isobath. It has these even if the resources there are not exploitable and—it is commonly accepted, despite the literal language—regardless of how the sea-bed there is characterized geologically, or how far from shore it extends.

Beyond the 200 meter isobath the coastal state has rights in areas adjacent to the coast where the depth of waters admits of exploitation. It is now generally agreed, and recently confirmed in the United Nations General Assembly, that the special rights of coastal states end where the submarine areas cease to be "adjacent" to the coast. The notion that when the whole bed of the oceans becomes exploitable the coastal states might claim sea-bed out to midocean (or wherever else its claim would run into that of another coastal state) never had merit and is now exploded and dead.

Now we come to the matters in issue. I begin with one that in my view ought not to be an issue and is readily disposed of. It has been suggested that the legal Continental Shelf extends to areas adjacent to the coast which are not now exploitable but which will be exploitable some day. This suggestion is wholly without foundation. It flies in the face of the language of the Convention. There is not an iota of support for it anywhere in the long, entangled legislative history of the Convention.

Of course, the coastal state is entitled to explore sea-bed adjacent to its coast to determine whether it has become exploitable. An argument can also be made that other states should not be allowed to explore there since they can never exploit resources there: if resources are found and are exploitable they belong to the coastal state under the definition. Other states might argue, however, that nothing in the Convention denies their right to explore without hope of exploitation, indeed that they are entitled to explore in order to prove that the area is not yet the special preserve of the coastal state. But, I emphasize, even if one accepts the argument that others are excluded, the coastal state cannot now claim the area as Continental Shelf, cannot now exercise rights to regulate navigation or scientific research (as it may on its Continental Shelf), cannot extend the jurisdiction of its laws or claim special rights to establish defense facilities there, as nations have claimed the right to do on their Continental Shelf.

I repeat: there is no basis whatever for the notion that future exploitability gives the coastal state the right now to claim an area as Continental Shelf. Of course, if a coastal state is confident that an adjacent area will be exploitable some day, it can, for planning purposes, consider the resources of that area a potential asset. It can also refuse to join efforts to modify the Convention in ways that would keep that asset from being realized some day.

The difficult issue about the definition of the Continental Shelf is the meaning of the phrase "submarine areas adjacent to the coast." Some have claimed that it includes the entire submerged continental land mass of the coastal state regardless of distance from shore, apparently because it is contiguous to the coast. I believe that view to be indefensible. "Adjacent" here clearly means "near": if in some areas of the world the continental land mass, and even parts of the deep ocean basin, are still "adjacent," near the coast, in others they clearly are not. The opinion of the International Court of Justice in the *North Sea Cases* contradicts the notion that "adjacency" gives the coastal state exclusive mineral rights to the entire "natural prolongation" of its continent. The legislative history of the Convention, invoked by some to support the notion that contiguity is enough, in fact overwhelmingly supports the view that is not, that adjacency implies proximity, "nearness" to the coast. There is also strong evidence that as regards the coasts of continents the legal Continental Shelf was not intended to reach "far" beyond the geological shelf.

This is not the place for a detailed explanation of the legislative history of the 1958 Convention. I have examined that history with particular reference

to the suggestion we are discussing and have demonstrated, I believe, that the history clearly rejects it. (See my comments in the American Journal of International Law for January 1970). I particularly commend to the Committee the most thorough, disinterested study of the legislative history, Mr. Bernard Oxman's "The Preparation of Article 1 of the Convention on the Continental Shelf." At page 150, Mr. Oxman concludes that "article 1 was not intended to embrace areas at a substantial distance from the shore lying beyond the point where the waters become deep."

Under present law, then, the United States—and every other coastal state—can claim as Continental Shelf the sea-bed "near" its coast when it became exploitable. "Nearness", of course, is hardly a precise notion and there is room for disagreement as to how far out sea-bed ceases to be "near" to the coast. There is support for the view that twenty-five miles is the limit of adjacency. Some may urge that in the wide, wide seas even 200 miles from shore is still "adjacent," near the coast. The International Court of Justice has said, in a different but related context, that "by no stretch of imagination can a point on the continental shelf situated say a hundred miles, or even much less, from a given coast be regarded as 'adjacent' to it."

For the United States to claim sea-bed that is clearly not "adjacent," near its coasts would be legally indefensible. It would be a "grab" of what is the common domain, where legally the coastal state has no better rights than any other state. One can perhaps expect that if we made such extravagant claims other coastal states might join us but we would in fact be attempting to make new law by new agreement or consensus. Even if all the present parties to the Convention agreed, even if they purported to accept that view as an interpretation of the Convention, it would still be new law; surely, nations not party to the Convention could reject any such "boot-strap" attempt to grab what has been the common domain.

It is at best disingenuous, then, to say that not to make such claims gives away national rights: we have no rights beyond the near coastal area. I would add that even the rights we do have, and those we will have in the near coastal areas when they are exploitable, were not obtained by purchase or cession or discovery; before 1945 we had and claimed no greater rights there than anyone else and there was dispute as to whether any state could exploit there; since 1945 we have done nothing to acquire rights except to claim them and persuade other states to accept our claims and to make similar claims themselves. Not to claim more than was agreed, not to claim, even, all we might respectably claim under the Convention some day, surely not to claim all we could get away with, is hardly to give away our national heritage.

In determining its policy, then, the United States can in good conscience claim as its legal Continental Shelf the sea-bed out to 25, 50, perhaps more miles from its shores. Whether it should claim more or less, whether it should assert such claim by formal declaration or tacitly (by issuing leases there), whether it should seek the agreement of others to a "working" interpretation or to a formal clarification of the Convention, whether indeed it should seek a different definition, by what means, and what that new definition should be—these questions turn largely on whether the interests of the United States are favored by a narrower or a wider Shelf, for itself and therefore for all other coastal nations.

I am persuaded that the interests of the United States, even more than of many other states, lie in obtaining international agreement on the narrowest Continental Shelf possible. Some have urged a narrow Shelf because they see the resources of the sea as the heritage of all mankind, which coastal nations should not appropriate for themselves. Some would like to see as much of the sea-bed and of its resources as possible dedicated to international purposes, say, to the overwhelming goal of reducing world poverty and the chasm between rich and poor. I make no such appeals to idealism. In my view a narrow Shelf is required by the national interests of the United States, above all by the principle that has animated our national policy since our beginnings—the freedom of the seas.

The United States has always recognized that, overall, its many and varied interests, often pulling in different directions, require that the seas remain common and free. For a compelling example, although we have extensive coasts, we have resisted the temptation to claim wide territorial seas and have opposed such claims by other coastal states. Similarly, the interests of the United States require a narrow Continental Shelf because, I am persuaded, wherever the coastal state has sovereign rights for purposes of exploiting natural resources it acquires

in the long run, and in the less-than-long run too, exclusive rights for other and probably all purposes. Wide Continental Shelves, then, will mean wide areas under the increasing control of other coastal states from which various uses by the United States could be effectively barred. (Under some of the proposals before you, one-quarter of the whole sea-bed would be Continental Shelf, most of it, by far, belonging to other nations.)

My convictions reflect my reading of history. The very notion of a "territorial sea" in which the coastal state has full sovereign rights began with claims of jurisdiction for some limited purpose only. The movement—over the weakening resistance of the United States—from a territorial sea of three miles to one of twelve miles largely began with claims to a twelve-mile contiguous zone in which the coastal state had special rights for limited purposes only. It is virtually inevitable that exclusive rights over mineral resources will expand in the same way. For there is no persuasive reason why a coastal state should have exclusive jurisdiction in the sea-bed for some purposes (say, to exploit minerals or crabs) but not for others (say, to exclude the submarine-tracking devices of other states); indeed, there is no compelling reason why a coastal state should have special rights in sea-bed but not in the superjacent waters or its air space. Especially as the Continental Shelf brings ever-greater wealth to fortunate coastal states, the regime of the Continental Shelf will become an unacceptable anomaly. It will be difficult to persuade coastal states less blessed in minerals but rich in something else that they may not enjoy exclusive rights, say, to fish, or to other resources or uses in the same area. And if they are told that the doctrine of the Continental Shelf is and must remain limited to mineral resources (and sedentary fishes), they will claim the same area as territorial sea. Is this not the lesson taught by those Latin American countries which, inspired by President Truman's proclamations on the Continental Shelf and on coastal fisheries, have claimed a 200 mile territorial sea, principally in order to gain exclusive fishing rights?

But I need not invoke and debate historical tendencies. The brief history of the doctrine of the Continental Shelf tells the tale. Although the Truman Proclamation of 1945 claimed only the right to mineral resources, the 1958 Convention recognized new rights in the coastal state to regulate navigation and scientific research. In the few years since the Convention came into effect there has been interference with navigation; although that was not what the Convention intended, scientific research on the Continental Shelves of many other states has been virtually eliminated. In addition to these limitations, contemplated and expressly provided, coastal states have felt the need to extend their jurisdiction to other uses or have done so because it seemed reasonable to do so and there appeared no reason not to do so. The United States, we know, has extended the jurisdiction of its laws to the sea-bed and subsoil of its Continental Shelf. Writers have suggested that the coastal state may erect defense installations and take other measures on the Continental Shelf, at least to safeguard mining operations, perhaps also for general national defense. I have already heard it suggested that the United States Navy should sweep foreign submarines out of the waters above our Continental Shelf. If the United States should even glance in that direction, other coastal states, one can be sure, will better our instruction, as they have in the past.

I have ventured to predict that if the United States accepts a wide Continental Shelf it will begin to find wide areas of sea-bed (and later the corresponding waters and air space) of 100 other coastal states closed to it for military navigation, for defensive military activities, for scientific research, for fishing, and for other uses; at best they will be open only by grace of often unfriendly or unstable governments and shifting politics.

The point is, simply, that the United States cannot afford to be so fascinated by the prospect of a monoply over additional mineral wealth within increasing distances from its shores that it throws away larger interests. The very doctrine of the Continental Shelf has jeopardized our multivaried interests in part of the seas; every inch of additional Shelf sacrifices more. Is it not ludicrous for the United States to struggle to maintain a narrow territorial sea but accept a wide Continental Shelf that threatens before long to be tantamount to a far, far wider territorial sea? Some other coastal states, perhaps, can afford to be tempted to grab what they can, and that indeed will be the tendency of some of them, which we ought to be resisting. We should be bending every effort to reducing the extent of the Shelf and curtailing the rights of coastal states there.

I will perhaps be understood as saying that we should sacrifice present access to minerals for larger, longer interests. Perhaps I might be prepared to say that, but in fact that is not the issue. For, I am satisfied, the achievement of a narrow Shelf need not deprive us of access to any minerals and may even increase the area of sea-bed available to us for mining. Let us be clear about that. A wide Shelf will mean that the United States can exploit wide areas off its coasts, but it will also mean that we cannot mine in wide areas off foreign coasts all around the world. Narrow Shelves will mean effectively that only narrow areas around the world will be barred to us. All the rest will remain deep sea-bed in which the United States with its capital and technology will have a long lead over all other competitors.

That brings us of course to the question. What regime governs exploitation of sea-bed beyond national jurisdiction? International law has never had to face that question, and general principles asserted in the past are hypothetical, academic and largely immaterial. The United Nations Assembly recently resolved that pending establishment of a new regime to govern the sea-bed beyond national jurisdiction, states are bound not to exploit there. I view that resolution not as a ruling under present international law but as a political, tactical resolution, designed to assure the majority a voice in the determination of the new regime to be established there. It is important, then, to consider what law we desire and how we can achieve it.

In my view, the interests of the United States lie in preventing national claims to sovereignty or other permanent rights in the seas and sea-bed beyond coastal state jurisdiction. As regards the resources of that sea-bed, our interests are in order and law, in encouraging exploitation, in a fair opportunity for American enterprise, in avoiding international conflict, in minimizing interference with scientific research and other uses. These, I believe, require ground rules administered by an impartial, multinational or international, functional (not political) authority. Under such a regime, I see little reason to fear the spectre of an international bureaucracy, or the vagaries of international politics: the United States is generally not helpless to gain what it legitimately aspires to; surely, it can prevent institutions and practices to which it strongly objects. I see no objection to agreement that a reasonable tithe from the profits go for international purposes, say for the development of poorer countries.

If we can obtain such a regime beyond narrow Continental Shelves the United States will have the best of all worlds. It will continue to have its exclusive Continental Shelf. It will be able to compete effectively for the mineral resources of wide seas. It will largely retain the freedom of the seas for its various uses, except, I fear, on the narrow Continental Shelves of other nations.

I should add a word about the interests of American enterprise. Some companies, especially those that mine hard minerals, are apparently not opposed to a narrow Shelf, but representatives of the petroleum industry have come out strongly for a very wide Shelf. As a matter of interpretation of the 1958 Convention, their position is untenable, as I have shown, but of course they can properly urge that the United States seek a wide Shelf by new international agreement. But even their special interests, I believe, do not require wide Continental Shelves. If a wider Shelf would allow American oil companies to deal with the United States Government in familiar and comfortable ways as regards wider areas off our coasts, it would require them to deal with foreign governments about wider areas off their coasts. That may be familiar but it hardly seems comfortable. Are the caprices of foreign governments more desirable than the protection of law and of some international authority, backed by United States diplomacy and power? Is it preferable to court the dangers which we see realized every day—expropriation and confiscation, crippling taxation, repeated renegotiations, extortion, political pressure and blackmail, by unstable governments ever subject to political upheaval? It seems to me that the interests of our oil companies too would be better served by proposals like those of the Commission on Marine Science, Engineering and Resources. Beyond the narrow areas of coastal jurisdiction, American technology and American capital and American initiative would have a long lead over other comers. And under any sensible international regime, our companies would usually deal with the United States while our Government would deal with the international authority; where companies deal with other governments there would be an international authority to protect them against abuse.

The question of course is whether the United States can achieve the optimum arrangement, a narrow Shelf with a modest international regime beyond. As I read the debates and resolutions of the recent session of the General Assembly,

I fear that many states have contrary tendencies in both regards: they might be tempted to grab as wide a Shelf as possible for themselves; some are toying also with comprehensive, even rigid, international control of the seas beyond. But the United States and other powers are not at the mercy of majorities in this regard, and the negotiations have not even begun. The United States can and should resist both tendencies; immediately and urgently it should hold out for a narrow Shelf while it bargains on details of an international regime beyond.

It has been suggested that we refrain from taking a position on the width of the Continental Shelf until there is agreement on an acceptable regime for the deep sea-bed; and if the deep sea-bed regime that emerges is not acceptable we should claim as wide a shelf as possible. I agree that the width of the Shelf and the regime beyond are related issues and that one might be able to link them also in diplomatic bargaining. But the threat that we will insist on a wide Shelf if we do not achieve an acceptable deep sea regime would not help us in negotiation, since the states that might press for a deep-sea regime which we would not like seem to desire a wide Shelf also. In fact, a narrow Shelf is in our interest regardless of what regime prevails in the deep sea and we are in a strong position to insist on it since that is present law. At the same time we are hardly without bargaining power in regard to the deep sea-bed; if need be, we can simply announce our intention to exploit freely in the deep sea-bed under international law as we understand it until it is modified by a sensible and acceptable regime. In my view, our legal position is sounder, our bargaining position stronger, our over-all interests better protected, if we assert the right to dig beyond a narrow Shelf on the ground that all States have that right under customary international law, than if we do so under the claim that our Continental Shelf extends "way out."

In sum, I am largely in agreement with the views and proposals of the Commission on Marine Science, Engineering and Resources. I would stress in particular the possibilities for compromise and accommodation in the Commission's proposal for an intermediate zone. Such a zone would be part of the deep sea-bed and subject to the new international regime but the coastal state would have the exclusive right, or a right of first refusal, to exploit it under the terms of the agreed international regime.

Inevitably, the appeal of the intermediate zone depends to some extent on the width of the Shelf to which it is attached, even more to the character of the international regime to which it is subject, but whatever these are the suggestion has much to commend it. A coastal state could exclude major operations by other states which might conceivably mask hostile operations. It could exploit the resources there as on its Continental Shelf (subject to some payment). It would have no other rights in the zone and its right or power to bar other uses by other states would be severely circumscribed. In a sense this is all that the doctrine of the Continental Shelf originally contemplated. For its part, the United States would have exclusive access to all the minerals that it would have under a wide Shelf, subject only to some agreed international payment. American companies would obtain licenses from the United States for exploitation in its intermediate zone; as regards the zones of other states, American companies would deal with those governments in familiar ways but would enjoy international protection against their abuse. The intermediate zone has the additional interim advantage of making it easier to encourage exploitation there without interruption: the coastal state can continue to issue leases for mining in those areas and it can settle accounts with the international regime when it is established and functioning.

What I have said, gentlemen, contains my views on most of the questions put to me by your Chairman. For convenience and clarity I will summarize and direct them to specific questions:

1. The Convention on the Continental Shelf gives the United States (and other coastal states) exclusive mineral rights in sea-bed out to the 200 meter isobath and beyond that only in sea-bed that is "adjacent," iear to its coasts, and only when that sea-bed becomes exploitable. Exactly how far that would be can not be stated precisely, but it would not be difficult to say that some distances are clearly too far: there is authority that it is "much less" than 100 miles from shore. In areas that are adjacent and exploitable the United States has full freedom to explore and exploit resources and to exclude such activities by other states. Under the Outer Continental Shelf Lands Act the Secretary of the Interior can grant leases there. (When the Act was adopted it probably applied only to the geological continental shelf claimed by President Truman in 1945, but an argument can be made that the Act now authorizes leases on "the Continental Shelf" of the United States as defined by the 1958 Convention.)

2. Whether nations have the right to exploit beyond the Continental Shelf is not dealt with by any convention: customary international law is uncertain and in dispute, though clearly the nearest coastal state has no greater right than any other state. The General Assembly has purported to put a moratorium on exploitation there pending the establishment of a new international regime, but the binding quality of that resolution is open to question, although the United States would doubtless incur some political cost in flouting it. The United States, then, might issue leases beyond "adjacent" waters as an assertion of a right under international law to exploit the deep sea bed. Or it might issue such leases as an assertion of a claim to a wider Continental Shelf by purported interpretation of the 1958 Convention. On either basis, issuing leases would not increase our rights there. It would, of course, encourage other states to do likewise and might lead to mutual estoppels, and perhaps to the growth of new law. The Secretary of the Interior, however, has no authority under the 1953 Act to lead us into such law-making: his authority to issue leases extends at most to our Continental Shelf under the 1958 Convention as fairly interpreted.

3. The policies of the United States in regard to the resources of the sea-bed must take full account of its over-all interests, particularly its interests in maintaining the freedom of the seas for various uses. Because coastal states control and will steadily increase their control of other uses of their Continental Shelf, the interests of the United States require the narrowest Shelf possible. Beyond such narrow Shelves the interests of the United States favor a modest international regime under functional (not political) authority, that encourages orderly exploitation, gives a fair opportunity to American enterprise, minimizes interference with other uses, avoids international conflict, provides some revenue for nonpolitical, international purposes. In international negotiations we can afford to bargain about the details of the international regime especially if it will help assure a narrow Continental Shelf. The concept of an intermediate zone offers possibilities for accommodation and compromise.

4. The United States can seek to achieve a precise definition of the Continental Shelf in agreement with other nations. If the definition it seeks is fairly an interpretation of the Convention, designed only to make the present definition more certain, initiative by the United States might lead to informal agreement by the parties to the Convention and readily become universal law. On the other hand, a new definition, even in the guise of an "interpretation," that substantially extends (or narrows) the present definition would be a proposal for new law and would bind only those who accept it. While virtually all states have accepted the doctrine of the Continental Shelf even if they have not adhered by the Convention, they would not be bound by extravagant extensions or reinterpretations of it.

5. The United States should seek international agreement redefining the Shelf precisely and narrowly. While the width of the Shelf is linked to other issues, including the regime for the seabed beyond, a narrow Shelf is in our interest regardless of how other issues are decided, and the extent of the Shelf can be decided separately by a short protocol to the 1958 Convention. If others insist that final disposition of ths issue must be linked to the international regime for the sea-bed beyond, or to other issues, we should seek informal agreement—by diplomatic negotiation, in the UN Sea-bed Committee, by GA resolution—to freeze the extent of the Continental Shelf pending final resolution.

6. Pending new agreement, or in the absence of it, the United States should avoid any action, and should resist any action by others, that would extend the reach of coastal state jurisdiction, and should declare for a narrow Shelf as a matter of fair interpretation of the 1958 Convention. It should refrain from issuing licenses beyond the 200 meter isobath in areas more than, say, 50 miles from shore under claim that it may do so under the 1958 Convention, and urge similar restraint on other coastal states. It should declare the right of all nations equally to exploit the resources of the deep sea-bed and its readiness to develop an international regime to regulate such exploitation in the common interest. It might reserve the right to issue leases beyond the 200 meter isobath (or 50 miles from shore) under claim of right to do so in the deep sea-bed according to customary international law, declaring that such leases would be subject to any new, agreed international regime; it should reserve a similar position in regard to any leases that other coastal states issue beyond the narrow Shelf.

Senator METCALF. Well, our time has run out. It has been a very challenging and I think very worthwhile symposium today.

I am very grateful to have my colleague, Senator Pell, here to participate. He has always been kind in coming and sitting with us on this committee and shared in their deliberations.

I will tell the members of the panel that, of course, their prepared statements will be incorporated in the record in their entirety as if read.

The transcript of this hearing will be available in the committee rooms tomorrow for correction, if some of you are staying over. Otherwise, galley proofs will be sent to each of you for your editing and correcting. At the conclusion of your reading the galley proofs, if you feel that you want to submit another letter or additional material for the record, you can incorporate it in a letter to the staff and it will be incorporated in the record plainly showing that it was an afterthought and was not a part of the discussion.

I am going to try to have this symposium printed up as soon as possible for the information of some of the witnesses that are to follow.

I wrote to the State Department to get its opinion as to the impact and effect of the moratorium resolution of the United Nations. I have a long letter from them answering some questions about it and unless there is objection, this will be incorporated in the record immediately after the conclusion of this hearing.

(The material referred to above follows:)

U.S. SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C., December 23, 1969.

Mr. JOHN R. STEVENSON,
Legal Adviser, Department of State,
Washington, D.C.

DEAR MR. STEVENSON: Recent action by the United Nations General Assembly regarding the seabed has caused concern in Congress. I refer particularly to the resolution commonly called the Moratorium Resolution. It is the one declaring that "pending the establishment (of an international deep seabed regime) (a) States and persons, physical or juridical, are bound to refrain from all activities of exploitation of the resources of the area of the seabed and ocean floor and subsoil thereof beyond the limits of national jurisdiction; (b) No claim to any part of that area or its resources shall be recognized."

This resolution raises several questions, among them:

(1) Did the General Assembly exceed its lawful authority in declaring that exploitation beyond the limits of national jurisdiction should be prohibited?

(2) Assuming that the General Assembly did not exceed its authority in passing this Resolution, is the Resolution binding (legally, morally or politically) upon the United States? In either event, what is the basis for your opinion?

(3) What would be the effect of expression, either by individual members of Congress or by a Committee, of disagreement with the Resolution?

(4) What rights has the United States pursuant to the relevant Federal law and the 1958 Geneva Convention on the Continental Shelf to regulate United States and foreign commercial and scientific exploration of the seabed on the continental margin in areas beyond either the 200-meter isobath or the most seaward or deepest area in which a United States lease has been issued?

(5) In regard to the UN Moratorium Resolution, what position does the State Department anticipate toward U.S. nationals who express an intention to exploit minerals from the deep seabed, such as manganese nodules?

I will appreciate a copy of the remarks made by the United States delegation in explaining the vote against the Resolution.

As the issue of the effect of this Resolution is crucial to the inquiry of the hearings now in progress by the Subcommittee on the Outer Continental Shelf of the Senate Committee on Interior and Insular Affairs, I will appreciate your reply as soon as possible.

Very truly yours,

LEE METCALF,
Chairman, Special Subcommittee on the Outer Continental Shelf.

JANUARY 16, 1970.

HON. LEE METCALF,
Chairman, Special Subcommittee on the Outer Continental Shelf,
U.S. Senate

DEAR MR. CHAIRMAN: Thank you very much for your letter of December 23, 1969 regarding the Seabed Moratorium Resolution passed at the last United Nations General Assembly. As you know, the United States strongly opposed the Resolution. I am enclosing Ambassador Phillips' statements setting forth the reasons for the United States vote against the Moratorium Resolution.

I share your concern about the General Assembly's Moratorium Resolution. I hope that the answers to your specific questions will be of use to you and your Committee in weighing the effect of the General Assembly's action.

(1) "Did the General Assembly exceed its lawful authority in declaring that exploitation beyond the limits of national jurisdiction should be prohibited?"

The General Assembly was legally competent to adopt its so-called Moratorium Resolution. It is empowered by the Charter of the United Nations to discuss and make recommendations upon the subject of that resolution. Article 10 of the Charter provides that "The General Assembly may discuss any questions or any matters within the scope of the present Charter or relating to the power and functions of any organs provided for in the present Charter, and except as provided in Article 12, may make recommendations to the Members of the United Nations or to the Security Council or to both on any such questions or matters." Article 13 of the Charter establishes that "The General Assembly shall initiate studies and make recommendations for the purpose of: . . . b. promoting international cooperation in the economic . . . fields." Article 55 of the Charter requires the United Nations to "promote a . . . conditions of economic and social progress and development; b. solutions of international economic . . . and related problems." Exploitation of the seabed may be taken to fall within these terms of reference. The drafting history of the Charter supports the view that the phrase "any quesions or any matters within the scope of the present Charter" is to be construed liberally.

(2) "Assuming that the General Assembly did not exceed its authority in passing this Resolution, is the Resolution binding (legally, morally, or politically) upon the United States? In either event what is the basis for your opinion?

The Resolution is recommendatory and not obligatory. The United States is, therefore, not legally bound by it. The United States is, however required to give good faith consideration to the Resolution in determining its policies.

Article 2, paragraph 2 of the Charter states that "All Members, in order to ensure to all of them the rights and benefits resulting from membership, shall fulfill in good faith the obligations assumed by them in accordance with the present Charter." With the exception of certain expressly delineated areas such as membership and the budget, however, the General Assembly is not empowered to make decisions which impose obligations upon Members. The Moratorium Resolution does not fall within one of the special areas in which the General Assembly is empowered to make binding decisions, but rather within the mandate of Articles 10 and 13 that permits the General Assembly to discuss a matter within the scope of the Charter and make recommendations. There is extensive authority that such a resolution cannot impose upon a Member a legal obligation to implement it.

The United States considers the recommendation contained in the Moratorium Resolution an important statement to be given weight in the determination of United States policy. The United States is not, however, obligated to implement the recommendations and has made clear its opposition to the concept.

(3) "What would be the effect of expression, either by individual members of Congress or by a Committee, of disagreement with the Resolution?"

The United States' strong disapproval of the Moratorium Resolution was already indicated by its negative vote on it and Ambassador Phillips' statements. Congressional endorsement of the stand taken by the United States in the General Assembly would not alter the legal obligations of the United States under the Charter of the United Nations.

(4) "What rights has the United States pursuant to the relevant Federal law and the 1958 Geneva Convention on the Continental Shelf to regulate United States and foreign commercial and scientific exploration of the seabed on the continental margin in areas beyond either the 200-meter isobath or the most seaward or deepest area in which a United States lease has been issued?"

Commercial exploration of the continental shelf of the United States requires its consent under the Convention on the Continental Shelf. Scientific research concerning the continental shelf and undertaken there also requires such consent, although Article 5(8) of the Convention provides that consent should not normally be denied. The Outer Continental Shelf Lands Act does not contain provisions dealing with scientific research. A provision designed to facilitate fisheries research by international organizations can be found in Section 1 of Public Law 88–308.

With respect to seabed areas beyond the 200 meter isobath, the rights of the United States would depend upon the seaward limit of the "continental shelf" as defined in Article 1 of the Continental Shelf Convention. An identical definition is used in Section 5 of Public Law 88–308. These rights would not in any event extend to areas of the continental shelf beyond the 200 meter isobath where the depth of the superjacent waters does not admit of the exploitation of the natural resources of the seabed and subsoil.

(5) "In regard to the UN Moratorium Resolution, what position does the State Department anticipate toward U.S. nationals who express an intention to exploit minerals from the deep seabed, such as manganese nodules?"

The Department does not anticipate any efforts to discourage U.S. nationals from continuing with their current exploration plans. In the event that U.S. nationals should desire to engage in commercial exploitation prior to the establishment of an internationally agreed regime, we would seek to assure that their activities are conducted in accordance with relevant principles of international law, including the freedom of the seas and that the integrity of their investment receives due protection in any subsequent international agreement.

If I can be of any further assistance on this or any other matter, please do not hesitate to let me know.

Sincerely yours,

JOHN R. STEVENSON,
The Legal Adviser.

If there is nothing else to come before the meeting today, we will adjourn subject to the call of the Chair and hear the President tell us about the state of the Union.

(Whereupon, at 12 noon, the subcommittee recessed, subject to the call of the Chair.)

OUTER CONTINENTAL SHELF

WEDNESDAY, MARCH 4, 1970

U.S. SENATE,
SPECIAL SUBCOMMITTEE ON OUTER CONTINENTAL SHELF
OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C.

The special subcommittee met at 10:05 a.m., pursuant to call, in room 3110, New Senate Office Building, Senator Frank E. Moss presiding.

Present: Senators Moss and Bellmon.

Also present: Senators Hansen, Hatfield, and Stevens.

Staff members present: Jerry T. Verkler, staff director; Stewart French, chief counsel; and Charles F. Cook, Jr., minority counsel.

Senator Moss. The subcommittee will come to order.

Senator Metcalf had intended to be here, but he is having some difficulty with an accident that he had and was not able to come because of his health this morning.

In previous hearings, we have heard testimony from various witnesses on the domestic and international legal aspects of mineral resource jurisdiction over the Continental Shelf and deep seabed areas.

We would now like to turn to policy considerations relating to the impact of alternative boundary locations on the present and future exploitation of living and nonliving resources from the marine environment.

As a result of overly optimistic statements on both the size and near-term evolution of a marine minerals industry, many individuals have expressed serious concern about the potential impact on the environment from minerals extraction operations.

There is certainly an historical basis for this concern. As a result of population and industrial growth and the accompanying creation of waste products, environmental degradation with its related social and economic costs has emerged as a critical problem of concern to all of us.

Vigorous action is now being taken to alleviate this problem in some areas. However, this response for the most part resulted from the enactment or threat of enactment of effective regulatory ligislation. Effective legislation is based only on an adequate knowledge of the problem under consideration.

Historically, industrial development of mineral extraction technology and techniques that are compatible with the public interest has occurred only as a result of imposed regulation. Unfortunately, regulation of this kind has generally been imposed after substantial damage has been done and the need is urgent.

It is apparent, then, that a vital role of the Congress, in conjunction with the executive branch and the coastal States is the development of comprehensive legislation which has a major objective to the prevention of environmental damage from mineral extraction operations on the Continental Shelf. Legislation to accomplish this objective must have a broad base of social, technological, economic, and ecological information. Much of this information does not exist today. Much of what does exist is not readily available to those of us who are deeply concerned about this problem.

It is possible that the present value of seabed minerals can be enhanced by new Federal programs and regulations. It is difficult to determine, however, what the appropriate Federal role should be.

To what extent do you think the Government should provide incentives for marine mining? What kinds of incentives would be best, and what time frame would you recommend for their implementation? If Federal research programs are desirable, should these be restricted to basic research, or should they include general surveys, the delineation and evaluation of resource sites, or the development of mining technology? If financial incentives are desirable, should these be in the form of tax easements, market controls, or other more direct forms of support?

It is recognized that specific answers to these questions may be quite difficult. It would be appreciated, therefore, if you could suggest some criteria that would be helpful in making choices among alternative programs, such as those indicated above.

This is only a brief summary of many of the complex problems that must be faced in the marine environment. The effective solution to these problems lies only in an enlightened and aggressive approach to developing our Nation's marine mineral resources.

Many of the issues of concern to us have been provided to you in the letter of invitation to appear here today. Rather than reading your statement, which will be placed in the record in its entirety, please briefly summarize your statements, and we will proceed to an open discussion of the relevant issues.

Will you also provide for insertion in the record immediately following your statement a personal résumé?

This is directed to those who will appear before us this morning.

We have four very distinguished witnesses. I am going to ask three of those witnesses to come to the table now as a group, Dr. Wilbert M. Chapman, of the Ralston Purina Co., Mr. C. H. Burgess of the American Mining Congress; and Prof. James a Crutchfield, University of Washington.

Before we hear from any of these gentlemen, I will ask my colleague, the Senator from Oregon, if he has any comments or opening statement.

Senator HATFIELD. No, I have not.

Senator MOSS. Thank you very much.

I am pleased to have my colleagues here to hear the testimony.

I suppose the best way to proceed is to have the first man whose name I called, Mr. Chapman.

If you gentlemen have arranged any other sequence among yourselevs, and would like to follow it, we will have no objection to it.

STATEMENT OF DR. WILBERT M. CHAPMAN, DIRECTOR, MARINE RESOURCES, RALSTON PURINA CO.

Dr. CHAPMAN. We all just arrived here and said hello to each other, and have done no plotting.

I am Dr. W. M. Chapman. I have identified myself in my statement. I have filed a statement with three or four appendixes containing material relevant to the questions asked.

With your permission, then, I will follow your instructions and just skim through the highlights and be prepared to answer questions.

Senator MOSS. All right. Thank you.

Dr. CHAPMAN. In answer to the first question, I advocate that the present definition of the outer boundary of the Continental Shelf is adequate.

With respect to the second question, as far as I know the U.S. Government has not developed a position on this question yet. I have cited the statement from the President's foreign policy statement for the 1970's, which comes as close as I know to a governmental decision on the question. He says:

> In addition, as man's use of the oceans grow, international law must keep pace. The most pressing issue regarding the law of the sea is the need to achieve agreement on the breadth of the territorial sea, to head off the threat of escalating national claims over the ocean. We also believe it important to make parallel progress toward establishing an internationally agreed boundary between the Continental Shelf and the deep seabeds and on a regime for exploitation of deep seabed resources.

I think that what he says is just exactly that, that the freedom of the sea is the paramount issue, and the precision of the outer boundary of the Continental Shelf and the exploitation of deep seabed minerals are secondary considerations to this. If my construction of his thinking is correct, I agree with him.

I might also say that he added a very pertinent sentence: "These are issues that transcend national differences and ideology and should respond to effective multilateral action."

With respect to interim policy, I have treated that subject considerably in one of the attached statements to my statement. Essentially, my recommendations come down to this: That the Congress adopting legislation giving the appropriate agency of the executive branch of the United States power to regulate and control in such manners as it believes appropriate all the activities of U.S. nationals and firms beyond the exclusive jurisdiction of the United States, whether on and in the seabed, in or on the water column, or over the water column.

Secondly, to strengthen the appropriate branch of the Department of State to handle adequately the foreign policy problems that arise in this field.

And thirdly, that there be a greatly strengthened and broadening of the ability of the U.S. Government and its citizens to deal with ocean and atmospheric problems on a global basis.

As a first step in that, I would recommend the establishment of a national oceanographic and atmospheric agency.

In question 4, there are three positions stated, and then the three questions asked.

With respect to the first question, my opinion is that the position on the boundary of the Continental Shelf contained in the 1958 convention is the best solution of the problem it is possible for the United States to get at this stage of history, and I go on to explain my reason for believing so.

With respect to the second of the parts of question 4, I don't accept any of the three foregoing alternatives as being tolerable to the welfare of the United States.

I hope the United States will successfully oppose their adoption in the United Nations, and if it is unsuccessful in doing so, it will exercise its rights as an independent sovereign to ignore the effects of such adoption upon the activities of it or its citizens in the international common of the high seas, the airspace above it, and the seabed below.

With respect to the third part of question 4, I don't think the question is even a very good one. I think there are three things involved that can't be separated, and those are the seabed and the water column and the air column above it.

This subquestion should deal with activities in all three of those categories. I think the word "undue" should be eliminated from the question. Unless it is defined by a proper court of law, I don't know what undue jurisdiction is.

I think that the United States should exercise its full power within the context of its then existing foreign policy to prevent and preclude any foreign government from exerting jurisdiction over any of its citizens or firms which it has licensed to exercise any of its rights under international law in any part of the international common.

I go on to say some of the things that might be done, and are done in diplomatic circles.

With respect to the opinion of private industry, the most desirable timing of a U.S. Government decision, I don't have any idea what that is. You can find out from the other industry people.

Also about the impact of the lack of decision on these issues at the Federal level on the industry's willingness to develop the requisite technology for exploration and exploitation beyond the 200 isobath, they can advise you on that much better than I.

"Finally, what other factors do you consider to be relevant in making a decision on the breadth of the Continental Shelf and the type of international regime which would relate to deep seabed exploration and exploitation?"

I believe that the existing regime for the exploration and exploitation of the deep seabed, in the international law sense of regime, is adequate to deal with any problem among nations that is likely to arise in the future, as far as I can see it. This is the flag-nation approach, with accommodation made from time to time as necessary between nations through normal international diplomatic and legal procedures.

I believe, further, that the existing regime for the Continental Shelf is adequate to permit a rational development of the use of its resources by the coastal States, without any considerable friction among nations that cannot be handled by available diplomatic and legal procedures.

I want to note several points which have arisen since I wrote my last attached testimony.

The General Assembly has taken action in the first week of December that I think throws a different cast on these matters entirely. The law of the sea, as a result of those actions, has once more emerged from the jungle of legal theory into the full glare of international politics, where it belonged in the first place.

I think, second, that the control of the vote on these issues in an international conference rests with the developing countries, and at this stage of history they are ill prepared to use that vote in the long-term interest of the world as a whole or themselves as a group.

They are antiestablishment at this stage of history, and simply wish to break down the establishment, in the belief that any system, including chaos, is better than any system that exists.

Third, Russia, in this view, is as much a part of the establishment as is the United States, or even more so.

Fourth, any issue which the United States or Russia support jointly in a new Law of the Sea Conference is quite unlikely to get a winning vote.

Fifth, the United States and Russia, plus the allies of both, will be very hard pressed to drum up a blocking third of votes on issues they do not want adopted at such a conference.

Sixth, neither the United States nor Russia will control enough votes at such a conference to put across an issue the other does not want, and on issues where their views are split, neither will be able to control a blocking third of the votes.

Seventh, there will be a new Law of the Sea Conference, and the United States and Russia, plus the allies of both, will not be able to control the agenda. The agenda will deal with all aspects of the law of the sea; that is, the seabed, water column, and the air column.

Eighth, the sorts of items that will be on the agenda are not possible to anticipate fully at this time, but will likely include a number of those put forward by Ambassador Oribe of Uruguay recently, and he lists naval military operations and maneuvers, operations concerning the testing of rockets and missiles, the testing of nuclear weapons, using the high seas as a dumping ground, particularly for radioactive wastes, operations of submarines and stationing of submarines armed with nuclear missiles, scientific investigations, blockade, quarantines and in general the exercise of sea power in situations that are not clear-cut war situations, operations concerning astronauts and recovery of astronauts, and lastly, the most recent one to be publicly advertised, the so-called data gathering by electronic procedures along the coasts of other States.

I think that the United States, Russia, and the allies of both will not come out well in the consideration of any of these items, or a longer list that will probably arise when the agenda is completed.

In my view, the really delicate and important issues involved in the law of the sea at this juncture of history do not include the precise definition of the outer boundary of the Continental Shelf or a new regime for the deep seabed to replace the existing one, but include the different following issues, which I list with my statement, of how each is likely to fare with the voting that will be involved in the Sea Conference.

The most important in these, as the President stated, is the breadth of the territorial sea. I think the breadth of the territorial sea will either not be agreed upon, or it will be set at 12 marine miles or broader. This will affect materially rights of navigation through international straits.

Secondly, jurisdiction by the coastal State over fisheries lying in the high seas: The extent of jurisdiction by the coastal State over fisheries lying in the high seas adjacent to its coast will likely be increased as to breadth of contiguous zone for exclusive fishery jurisdiction. It is almost certain to involve the demersal fishes related to the Continental Shelf, no matter how wide it is, and is likely to include all living resources over the Continental Shelf and to a minimum distance of 200 marine miles.

This will lead to further disputes among nations over this aspect of the law of the sea, without mitigating any of those that exist. It will not contribute usefully to the rational use of the living resources of the sea.

It will slow down the rate of increase in producing food from the sea, by increasing costs. The chief benefactor of this will be the U.S.-flag fishing industry, which has the markets and the broad Continental Shelf and major unutilized resources available to it. The chief loser will be the developing countries who stand most to gain from free entry to the harvest of living marine resources.

It will lead to further broadening of the breadth of the territorial sea, with consequent damage to world use of the sea freely, in exactly the same manner that the U.S. adoption of the 12-mile exclusive fishery zone has lost for it any chance of getting agreement to a territorial sea breadth less than 12 miles.

Thirdly, on freedom of trade, the right of peaceful commerce to pass through present important channels of trade without being taxed or impeded by the coastal sovereigns will be modified. This will follow with certainty from what will happen under the breadth of the territorial sea and the jurisdiction by the coastal State over the fisheries lying in the high seas, and the rights of military craft.

This has already been foreshadowed in diplomatic exchanges between Japan and Indonesia over passage of Japanese-flag oil tankers through the Straits of Mollucca, and in debates in the Canadian Parliament over the possible passage of U.S.-flag oil tankers through the Northwest Passage from Alaska to the east coast.

Fourthly, on the rights of military craft, the rights of warships and military planes to transit international or formerly international straits, and the air space above them without the consent of the coastal State sovereign will certainly disappear, and it is more than likely that such innocent passage past open coasts to a 200-mile limit or some such broad boundary will also be interdicted.

Interdiction of military traffic will be followed in time by interdiction of peaceful commerce in the same sea areas, as certainly as night follows day.

Fifth, the rights of research vessels: The fight of bona fide research vessels to conduct research on the high seas is already hamstrung by the provisions of the Convention on the Continental Shelf, and the growing practice of nations related thereto.

This will certainly be further circumscribed in any new convention, and if an international agency is established to handle deep seabed exploration and exploitation, the area in which research vessels will be able to operate without the consent of the coastal sovereign for the international authority will be restricted to the sea area under the exclusive jurisdiction of the soverign whose flag it wears.

As President Nixon said in his carefully diplomatic wording, "These are issues that transcend national differences and ideology * * *." I translate that clause to mean that the fat is in the fire, and that the United States, Russia, and the allies of both will either hang together on these issues or they will hang separately.

This makes such a strange set of bedfellows that it will undoubtedly result in political controversy within the United States that will hamper the President's ability to handle the matter. From what little knowledge I have of ocean affairs in Russia, the internal divisive forces in Russia over these issues will give about equal trouble to Messrs. Breznev and Kosygin.

How the President is going to pull this one out of the fire beats me. One assistance would be for the partisans of both the National Petroleum Council and the National Marine Commission viewpoints on what have become the secondary issues of the outer boundary of the Continental Shelf and the regime of the deep seabed to at least lower their voices, and, if possible, to compose their differences, with some remedial legislative help from the Congress, so that they could jointly support the President in these difficult times ahead, which are now certainly upon us, because of the actions taken by the General Assembly.

Thank you, sir. That is all I have to say.

Senator Moss. Thank you, Dr. Chapman.

Senator Stevens. I did not hear the last statement made in connection with the General Assembly. That was not in your text, here.

Dr. Chapman. Which are now certainly upon us, because of the actions taken by the General Assembly, in the first week of December 1969.

Senator Moss. Your estimate of the problems that we face now in the United Nations and otherwise certainly is cause for great concern, but we are pleased to have you put it on our record, so that we can be aware of it here.

I think perhaps we can proceed to hear the other witnesses.

My colleagues, of course, may want to ask questions at this point, or we may wait until all three of the gentlemen have spoken. Do you care to question Mr. Chapman now, or shall we go on? They are going to remain at the table as a panel.

Senator Stevens. I will be happy to accede to whatever procedure you want to follow.

(Mr. Chapman's complete statement follows:)

Statement of Dr. Wilbert M. Chapman, Director, Marine Resources, Ralston Purina Co.

My name is Wilbert McLeod Chapman, 739 Golden Park Avenue, San Diego, California. I make my living as Director, Marine Resources, Ralston Purina Company and am also a member of the Board of Directors of that Company's wholly owned subsidiary, Living Marine Resources, Inc., a firm which is engaged

in the application of science and technology to the development, conservation and management of fisheries on a global basis. I spend most of my time acting in an advisory capacity to various entities at the State (California), national and international levels. So that you can discover my background and prejudices I attach hereto a biographic sketch which shows, as of February 1970, my current professional activities, and those in which I have engaged over the past decade or so.

What does not appear in detail on that sketch that may be of interest to this particular sub-committee is that I was an observer to the 10th Inter-American Conference that dealt with this subject in Caracas in 1954, the sessions of the General Assembly of the United Nations that dealt with it in 1954, 1957, and 1958, the sessions of the International Law Commission that dealt with it in Geneva in 1955 and 1956, and served on the U.S. delegations dealing with this subject at the United Nations Conference on the Conservation of the Living Resources of the Sea, Rome, 1955; conference on Fishery limits among Chile; Ecuador, Peru and the United States, Santiago de Chile, 1955; Inter-American Conference on the Living Resources of the Sea, Santo Domingo, 1956; United Nations Conference on the Law of the Sea, Geneva, 1958; United Nations Conference on the Law of the Sea, 1960; and Conference on Fishing Limits among Chile, Ecuador, Peru and the United States, Buenos Aires, 1969.

In addition I have kept in fair touch with the development of this subject since I came to the Department of State in 1948 to deal with part of it for a three year period as Special Assistant to the Under-Secretary of State for Fisheries and Wildlife, and have written extensively on it in professional journals as well as testifying on the subject, or parts thereof, before various committees of the Congress from 1948 to date.

This will be the fourth committee of the Congress that has asked and received my testimony on this subject within the year. In July 1969 I gave testimony on S. Res. 33 before the Sub-Committee on Ocean Space of the Senate Committee on Foreign Affairs and what I said is printed in the record of those hearings; in September 1969 I gave testimony on H.R. 13247 to Sub-Committee on Oceanography of the House Committee on Merchant Marine and Fisheries, and what I said is printed in the record of those hearings; in November 1969, I testified before the Sub-Committee on Oceanography of the Senate Committee on Commerce in its Hearings on Special Study on United Nations Suboceanic Lands Policy. Since the records of that hearing have not yet been published, and I do not wish to cover that same ground again, I attach a copy of that testimony hereto, because I will have need to refer to it herein.

I attach hereto also as pertinent to my testimony an article "Ocean Regime of the Real World," presented in June 1969, at the Law of the Sea Institute, University of Rhode Island. It is in the course of publication there and has been printed as an attachment to the House hearings of last fall, referred to above, but is not otherwise available yet to the Senate. I will refer to background information in it in answering the questions you have posed. Lastly, I attach hereto a copy of "Seafood and World Famine—Positive Approach," a paper presented at the Christmas sessions of the American Association for the Advancement of Science, Boston, 1969. It will not be published for a few months yet, and includes background material required to answer some of the questions you have put to me.

In presenting this testimony I wish to point out clearly that it does not purport to represent the views of my employer, or any of the other entities with which I am associated. In particular I do not purport to represent the views of any branch of the U.S. fish business, most parts of which hold views opposed, on one side or the other, to mine.

With tihs amount of background information in the record I will go forward to answering the questions you have posed more succinctly than I otherwise could.

Question 1: "Would you advocate that the United States adopt a position that the present definition of the outer boundary of the continental shelf is adequate and that we should not press for additional refinement?"

Answer: I do so advocate. There will probably require changes in United State's internal law and administrative practices to make this recommendation palatable to United States internal interests, and particularly the petroleum industry. I have listed what some of these may be in some detail in my November testimony to the Senate Committee on Commerce, attached hereto. I will go on

to say bluntly that there is no way apparent by which the United States can attend to these internal problems by seeking further changes in governing international law which will leave these internal interests as well off as they are now, and which will not end up in disastrous effects on the foreign policy, posture, and security of the United States. The background for those statements is given in the attached testimony referred to, and in the attached article "The Ocean Regime of the Real World."

Question 2: "Does this position indicate that the United States supports the contention that the ultimate legal limit to the continental shelf extends to the seaward edge of the continental rise?"

Answer: To the best of my knowledge the United States Government has not fully adopted a position on this question as yet. The question is so critical to the future of the United States, both short term and long term, that it must be decided personally by the President because he, personally, will be answerable to history for the results that flow from his decision.

In his report "United States Foreign Policy for the 1970's: A New Strategy for Peace, to the Congress on 19 February, 1970 the President addressed this subject as follows:

"In addition, as man's use of the oceans grow, international law must keep pace. The most pressing issue regarding the law of the sea is the need to achieve agreement on the breadth of the territorial sea, to head off the threat of escalating the national claims over the ocean. We also believe it important to make parallel progress toward establishing an internationally agreed boundary between the continental shelf and the deep seabeds and on a regime for expolitation of deep seabed resources."

The setting off of this material into two sentences indicates to me that the President at this stage of his thinking believes the freedom of the sea to be the paramount issue, and the precision of the outer boundary of the continental shelf and exploitation of deep seabed mineral to be secondary considerations to be dealt with as adjuncts of the primary issue. If my construction of his thinking to this stage is correct, I agree with him wholeheartedly and congratulate him on his statesmanlike probity. I also agree with his following paragraph:

"*These are issues that transcend national differences and ideology* and should respond to effective multilateral action. (Emphasis supplied.)

Question 3: "What type of an interim policy should be established with respect to the regulation and control of the activities of U.S. nationals related to the exploration and exploitation of resources located on the deep seabed beyond the seaward limits of the outer continental shelf prior to reaching international agreement on a deep seabed regime?"

Answer: I have treated this subject in greater detail than I have time to do today in the attached November testimony to the Senate Committee on Commerce. Essentially the recommendations come down to this: (a) the Congress adopting legislation giving the appropriate agency of the Executive Branch of the United States Government power to regulate and control, in such manners as it believes appropriate, all the activities of U.S. nationals (and firms) beyond the exclusive jurisdiction of the United States whether on and in the seabed, in or on the water column, or over the water column; (b) strengthening the appropriate branch of the Department of State to handle adequately the foreign policy problems that arise in this field, and (c) greatly strengthening and broadening the ability of the United States Government (and its citizens) to deal with ocean and atmospheric problems on a global basis.

Specific recommendations of necessary steps in this process are set out in the attached documents. Dealing with these recommendations in a piece-meal fashion will not do because all aspects of this freedom of the sea question are interacting, and correction of only *some* inadequacies in United States law and practice will not remedy the whole.

Question 4: "If the United States decides to take a position on a more precise boundary, there are at least three general alternatives.

"The first is a narrow shelf extending no further than a point between the 200 and 550 meter isobath with an international deep seabed regime having some jurisdiction over the exploration and exploitation of mineral resources in ocean bottom areas seaward of the narrow shelf cut-off point.

"The second is a wide shelf extending to the seaward edge of the continental rise coupled with an international regime having some jurisdiction over the

exploration and exploitation of mineral resources in deep seabed areas seaward of the broad shelf.

"The third is an intermediate zone arrangement which would extend from the 200-meter isobath to the seaward edge of the continental rise. Under an intermediate zone arrangement, limitations would be placed on the coastal nation's sovereign rights over seabed resources under the Geneva Continental Shelf Convention, but the coastal nation would retain the exclusive right to explore and exploit the natural resources of the seabed and subsoil within the intermediate zone. A deep seabed regime, subject to arrangements among nations, would have some relationship to the exploration and exploitation of mineral resources in seabed areas beyond the intermediate zone.

Question 4a: "In your opinion, how would this nation's long and short range economic and national security interests fare under each alternative?" My opinion is that the position on the boundary of the continental shelf contained in the 1958 "Convention on the Continental Shelf" is the best solution to this problem that is possible for the United States to obtain at this stage of history. It is:

"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 depths of the superjacent waters admits of the exploitation of the natural resources of the said areas."

My opinion is that the United States should bend every effort internationally to retain that definition in international law and practice because there is no possibility at this stage of history to obtain a definition of the continental shelf more precise than that which will further United States economic interests in a consequential way or which will not do serious damage to national security.

This definition was the best that could be done in the period 1945–1958 by the most energetic and capable diplomacy of the United States to rectify the basic, strategic error of the Truman Proclamation of September 1945. The definition was developed by the International Law Commission in 1955 and 1956 in an effort to contain and limit disturbing effect on the Law of the Sea by the Truman Proclamation, which had already unleashed critical divisiveness among the nations over this subject. The definition of the outer edge of the shelf was left purposely vague for the reason that legislation adopted ahead of need is ordinarily bad legislation. There was no practical need for a more precise definition of the continental shelf than this in 1955, 1956, or 1958 and until such a need developed the International Law Commission decided that it was prudent to allow international practice (the chief source of international law) to develop within the terms of this vague definition. The Conference of Plenipotentiaries to the Law of the Sea Conference in 1958 adopted this philosophy and text, not in ignorance of the consequences as some would have you believe, but after full consideration of the consequences as they appeared then. I am unaware of any changes in the practical operating situation since that merits a reopening of this issue.

It was the Truman Proclamation which set in train the forces which have led continuously since, and are still leading, to the erosion of the freedom of the seas. Senators interested in the background for that statement can find it in the volume "Towards a Better Use of the Oceans, A Study and Prognosis" published in 1969 by the International Institute for Peace and Conflict Research, Stockholm, and in various papers in the volume "The Law of the Sea, International Rules and Organization for the Sea," Proceedings of the Third Annual Conference of the Law of the Sea Institute, published in 1969 by the University of Rhode Island.

The Truman Proclamation arose from petroleum politics within the United States primarily, and in the Persian Gulf (Aramco, et.,) secondarily. The Persian Gulf problems got settled fairly amicably, to be followed later by a similarly amicable settlement of the petroleum problems in the North Sea, and I venture that those now pending in the Timor Sea and the China Sea will lend themselves just as amicably to normal international diplomatic practices.

The Truman Proclamation and the resulting Tidelands Act and Outer Continental Shelf Act have not settled the purely domestic, internal United States, problem of division of petroleum revenues as between the Federal Government and the States of the Union, which as the prime urgency that called it into existence, because the States got the short end of the stick and they don't intend to stand for it indefinitely. This has led to continuous litigation within the

United States resulting in considerable action before the Supreme Court, and I predict that we are now at the beginning of another cycle of this as we begin to deal with the management of the coastal zone. The States of California, Texas, and Louisiana, among others, in any event have no great faith in the Federal Government being able to manage its part of the coastal zone in a manner that leaves a habitable coastal environment for the citizens of those states, and they are going to do something about it, politically or otherwise. They also don't like the absentee landlord spoiling their environment and taking all the short-term earnings that result from doing so back to Washington to spend on his frivolities.

Thus the Truman Proclamation was not needed internationally to settle problems among nations, and it has not settled the internal problems between the Federal Government and the States of the Union it was designed to solve. Instead it opened up the Pandora box of international activities by nations that have lead steadily toward the the erosion of the freedom of the sea, and which are now culminating in general international activities that bring the gravest concern to the Department of Defense. Also it has led to some of the most ridiculous bickering among public and private interests in the United States that I have seen in 22 years of dealing with this subject and which, viewed from the international level, seems perfectly irresponsible.

The second position cited above is that developed and promoted by the National Petroleum Council, which has now become the position held by the Department of the Interior.

The third position is the frantic, almost frenetic, response of the National Marine Commission to the position of the National Petroleum Council, which has led to so much embarrassing internal bickering between the partisans (advocates) of these two entities, which still goes on apace to the astonishment of our foes and friends alike, and their complete bewilderment as to what on earth the United States is up to now.

The first position is a putative compromise which would take the force of the President internally to impose on the combatants. Were he successful in doing this internally it would be of little use externally because it is quite impossible to get a two-thirds majority vote in favor of any of these positions, except the second, in a general international forum, and that second position would cause so much long term damage to the national security that the Department of Defense could not live with it.

As will be further detailed below, adoption of the second solution would not benefit any element of the United States economy in any consequential manner. It would only lead to further erosion of the freedom of the sea through resultant actions in the international sphere.

In twenty-two years of dealing with this subject I have not been unduly impressed by the beneficial aspects of petroleum statesmanship on the status of the United States in the use of the sea, with all of the implications of that to the posture of the country in the world. I think these matters must be thought through from the standpoint of the welfare of the United States, with the welfare of the petroleum industry being a prominent, but not controlling, element of that process. This is the sort of action I had hoped to initiate in my attached testimony of Senator Holling's Subcommittee. The petroleum industry does not wish new viewpoints or examinations. It has viewed its own and is quite satisfied therewith.

Question 4b: "How would U.S. private industry (petroleum and hard minerals) acquire ready access to seabed resources in its dealing with the United States Government, other coastal states and an international deep seabed regime under the foregoing alternatives?"

I do not accept any of the three foregoing alternatives as being tolerable to the welfare of the United States, hope the United States will successfully oppose their adoption in the United Nations and, if it is unsuccessful in doing so, that it will exercise its rights as an independent sovereign to ignore the effects of any such adoption upon the activities of it or its citizens in the international common of the high seas, the air space above it, and the seabed below it.

Under the suggested alternative put forth under Question 3 (above) and dealt with at greater length in my attached testimony before the Committee on Commerce, the United States would adopt legislation permitting it to regulate and control the activities of its citizens and firms in this international common to

the end that it could, itself, fulfill any commitments in this respect it might make with other independent sovereigns, or within the United Nations structure, while still protecting its citizens and firms in exercising what of its rights in the international common it has and wants exercised, in the light of its views of its international responsibilities and interests.

It needs to be kept clearly in mind that the United States (and any other sovereign) under international law has a perfect right to license any of its citizens or firms to do anything it has a right to do in this international common, for whatever length of time it desires, under any regulations or controls it desires, within any geographic segment of it it desires, under such financial terms as it cares to stipulate, and to divide out the revenues it obtains from so doing to any entity in any manner and amount it chooses. It can do this, and does in many instances, without purporting to interfere in the slightest with the citizens or firms of any other sovereign. What the United States lacks is any internal legislation to equip an agency of its Executive Branch with the appropriate powers to do this for mining ventures. This is a fault of the United States Congress, not the United Nations General Assembly, and can be corrected only by the Congress.

The United States (or any other sovereign) also has, under international law, the right (and responsibility) of protecting its citizens while so engaged in the international common, and with reasonable regard to the right of citizens of other sovereigns similarly engaged, from interference in that exercise of its rights by other sovereigns or their citizens. Diplomatic machinery and precedents are available and adequate to these purposes.

Question 4C: "What safeguards are warranted to preclude coastal states from exercising undue jurisdiction over the superjacent water column?" Three things, not one, are involved. These are the seabed, the water column, and the air column. As was so lucidly put by the International Law Commission in its 1956 report, and has been repeatedly emphasized by events since then (right up to the actions of the General Assembly in December, 1969) :

"Judging from its own experience, the Commission considers—and the comments of Governments have confirmed this view—that the various sections of the law of the sea hold together, and are so closely inter-dependent that it would be extremely difficult to deal with only one part and leave the others aside."

This dictum was agreed to by the General Assembly in 1954, in 1957 and again in 1969, and is as valid today as before. In fact, despite all the talk about the deep seabed, all of the marine law Utopies designed over the last few years (see bibliography in "The Ocean Regime of the Real World") recognize this by the breadth of their scope.

Accordingly this sub-question should deal equally with activities in or on the seabed, in or on the water column, or in the air column above.

The word *undue* should be eliminated from the question until defined by a competent Court of Law, either the United States Supreme Court or the International Court of Justice in a case where the United States has stipulated that it could render such a decision.

The United States should exercise its full power (diplomatic, moral, military, and any other) within the context of its then existing foreign policy, to prevent and preclude any foreign government from exerting jurisdiction over any of its citizens or firms which it has licensed to exercise any of its rights under international law in any part of the international common.

The phrase "within the context of its then existing foreign policy" is not an attempt at weazel-wording. It recognizes the real world of humans in which we exist.

Occasionally it may be necessary, because of existing foreign policy, to lie publicly to obtain the release of our citizens, as was the case in the "Pueblo" situation off North Korea.

Occasionally it may be prudent to prevent temporarily our citizens from exercising our clear rights, as was the case with the Coast Guard cutters seeking to transit the Arctic Sea past Russia.

Occasionally it may be prudent to pay tribute to the coastal state for long periods to enable our citizens to exercise our rights, as has been the case with Ecuador and Peru for nearly 20 years.

Occasionally it may be prudent for one of our military planes to fly past a coastal state far out to sea, as has been the case in some instances.

Occasionally it may be prudent to employ military force to protect our citizens in the exercise of our rights as was the case at Matsu Island and in the Gulf of Tonkin (and off the Barbary Coast earlier in our history).

Occasionally it may be prudent to engage in general war to protect our citizens and our allies in the exercise of rights in the international common, as was the case in World War I and World War II, or in bilateral war, as was the case in the War of 1812, and the Revolutionary War.

The level of action warranted to be taken to safeguard our rights, or the rights of our allies, from interference in their use of the international common by foreign nations under the guise of jurisdiction, must be judged by the President, often with advice and consent of the Senate, and normally with the advice and consent of the Congress. The gravity of the incident, the current status of foreign policy, and the state of public attitude must be weighed in the decision, among other things. There is no general rule that is applicable because it is the sovereign right of the United States that is attacked, not the economic welfare of the citizen or the firm.

Question 5: "Generally, what is the opinion of private industry as to the most desirable timing of a U.S. Government decision on the outer continental shelf boundary and deep seabed issue?"

Answer: I have no idea and have no inclination to seek out an answer to the question from industry. Entirely too many industrialists who know substantially nothing about the Law of the Sea or international affairs, and very little about the ocean, have already sounded off on this subject on the basis of what they consider to be the short term interest of their private firm, or have instructed their lawyers to sound off on these uninformed and short-term financial grounds.

All aspects of the Law of the Sea are so close to the central nerve of the power structure of the world that I hope my sovereign in all his further moves in this area will consult the wisest and most experienced counsel that he can obtain, and that this be chiefly from the fields of general strategy and diplomacy, and not the law. The Law of the Sea is entirely too important to the welfare of society to be left in the hands of lawyers, and anything industrialists have to say on the subject should be ignored.

Question 6: "What impact does a lack of decision on these issues at the Federal level have on industry's willingness to develop the requisite technology for exploration and exploitation beyond the 200 isobath?"

Answer: I have looked assiduously in this country and abroad for an honest industrialist who would tell me that a lack of decision on these issues at the Federal level has affected his decision, or lack thereof, in the employment of his firm's capital and skills either in developing the requisite technology for exploration and exploitation beyond the 200 meter isobath, or in the actual exploration and exploitation.

I have found none. If you find one I hope you will inquire of him whether this is the real reason, or whether he doubts that he could recover a good enough return on his assets so employed, if these issues were settled, to satisfy his Board of Directors and stockholders.

One notes that the petroleum industry is going forward with the development of technology for exploration and exploitation beyond the 200 meter isobath about as rapidly as is humanly possible, and that such very large aerospace firms as Lockheed, North American Rockwell and others have employed substantial funds toward the same goals. Despite the normal secrecy of the trade, the trade journals are full of accounts of such activity.

I do not know of any firm more broadly experienced in the technology of exploration and exploitation on the continental shelf, however defined out of mid-ocean, of any seabed resource (whether aquifers, drilling holes, finding and scraping up diamonds, tin or gold, or whatever) than Ocean Science and Engineering, and its President Willard Bascom. Furthermore they make money at it and continue to expand. If the Committee has not done so it should seek his views on it. I hesitate to give the blunt answer that I think he might.

So far as I know there is nothing on the deep seabed that anyone knows of that is likely to be profitable in scraping up and marketing except manganese nodules. There has been a good deal of exploratory and technology development work going on by several large companies that are financially competent to the job. I know of none of these who believe a lack of decision on these issues at the Federal level has inhibited their willingness to develop the requisite technology for exploration and exploitation beyond the 200 meter isobath.

Among companies whose representatives could comment usefully on this subject are Kennecott, International Nickel, and Tenneco.

Question 7: "Finally, what other factors do you consider to be relevant in making a decision on the breadth of the continental shelf and the type of international regime which would relate to deep seabed exploration and exploitation?"

Answer: I believe that the existing regime for the exploration and exploitation of the deep seabed, in the international law sense of regime, is adequate to deal with any problem among nations that is likely to arise in the future as far as I can see it. This is the flag-nation approach with accomodation made from time to time as necessary between nations through normal international diplomatic and legal procedures.

I believe, further, that the existing regime for the continental shelf is adequate to permit a rational development of the use of its resources by the coastal states, without any considerable friction among nations that cannot be handled by available diplomatic and legal procedures.

Lastly, I think the factors relevant to this discussion are not the regime of the continental shelf or the regime of the deep seabed. The wrong issues are being considered at the wrong time with the wrong emphasis. The key relevant issues are those involved in eroding the freedom of the sea.

Since I wrote the attached testimony for the Committee on Commerce in November the General Assembly adopted a series of resolutions respecting the Law of the Sea which have clarified a good many issues.

1. The Law of the Sea has once more emerged from the jungle of legal theory, and the consideration of "iffy" questions, into the full glare of international power politics, which is where it should be because the issues involved are closely entwined with whether this many people can live on earth in peace and prosper, and if so, how.

2. The control of the vote on these issues in an international conference rests with the developing countries, and at this stage of history they are ill prepared to use that vote in the long term interest of the world as a whole or themselves as a group. They are anti-Establishment at this stage of history and simply wish to break down the establishment, in the belief that any system, including chaos, is better than any system that exists.

3. Russia, in this view, is as much a part of the establishment as is the United States, or even more so.

4. Any issue which the United States or Russia support jointly in a new Law of the Sea Conference is quite unlikely to get a winning vote.

5. The United States and Russia, plus the allies of both, will be very hard pressed to drum up a blocking third of votes on issues they do not want adopted at such a conference.

6. Neither the United States nor Russia will control enough votes at such a conference to put across an issue the other does not want and on issues where their views are split neither will be able to control a blocking third of the votes.

7. There will be a new Law of the Sea Conference and the United States and Russia, plus the allies of both, will not be able to control the agenda. The agenda with deal with all aspects of the law of the Sea—seabed,water column, air-column.

8. The sorts of items that will be on the agenda are not possible to anticipate fully at this time but will likely include a number of those in the following list (put forward by Ambassador Oribe of Uruguay, Proceedings of the Third Annual Conference of the Law of the Sea Institute, University of Rhode Island, 1969, pp. 86–87):

(*a*) Naval military operations and maneuvers;

(*b*) Operations concerning the testing of rockets and missiles;

(*c*) The testing of nuclear weapons;

(*d*) Using the high seas as a dumping ground, particularly for radio active wastes;

(*e*) Operations by submarines, and stationing of submarines armed with nuclear missiles;

(*f*) Scientific investigations;

(*g*) Blockades, quarantines and in general the exercise of "sea-power" in situations that are not clear-cut war situations;

(*h*) Operations concerning astronauts and recovery of astronauts; and,

(*i*) The most recent one to be publicly advertised, the so-called data gathering by electronic procedures along the coasts of other States.

The United States, Russia, and the allies of both, will not come out well from the consideration of any of these items, or a longer list that will arise.

9. In my view the really delicate and important issues involved in the Law of the Sea at this juncture of history do not include the precise definition of the outer boundary of the continent or the creation of a new regime for the deep seabed to replace the existing one, but include the following five issues which I list, with my estimate of how each is likely to fare in the voting at a new Law of the Sea Conference:

a. The Breadth of the Territorial Sea.—The breadth of the territorial sea will either not be agreed upon (as happend in 1958 and 1960, and at former conferences under the League of Nations), or it will be settled at 12 marine miles or broader.

A 12 mile breadth will sharply reduce the number of international straits open to the use of nations without the consent of the adjacent sovereign. It will also impinge on freedom of passage, particularly of military planes and vessels, elsewhere in the worlds ocean at critical points. Important instances include the passes through the Philippines to the South China Sea; the passes through Indonesia between the Pacific and Indian Oceans; the Aegean Sea; the passes between Cyprus and Turkey; the entrance to the Mediterranean Sea; the northwest passage between the Pacific and Atlantic; the passes between the Pacific, the Sea of Japan and the Sea of Ohkotsk; a number of passes to the eastern approach to the Panama Canal; the entrance to the Baltic Sea, etc.

b. Jurisdiction by the coastal state over fisheries lying in the high seas.—The extent of jurisdiction by the coastal state over fisheries lying in the high seas adjacent to its coast will likely be increased as to breadth of contiguous zone for exclusive fishery jurisdiction. It is almost certain to involve the demersal fishes related to the continental shelf, no matter how wide it is, and is likely to include all living resources over the continental shelf and to a minimum distance of 200 marine miles. This will lead to further disputes among nations over this aspect of the Law of the Sea, without mitigating any of those that exist. It will not contribute usefully to the rational use of the living resources of the sea.

It will slow down the rate of increase in producing food from the sea by increasing costs. The chief benefactor of this will be the U.S. flag fishing industry, which has the markets and the broad continental shelf and major unutilized resources available to it. The chief loser will be the developing countries who stand most to gain from free entry to the harvest of living marine resources (see attached paper "Seafood and World Famine").

It will lead to further broadening of the breadth of the territorial sea with consequent damage to world use of the sea freely (as noted above), in exactly the same manner that the U.S. adoption of the 12 mile exclusive fishery zone has lost for it any chance of getting agreement to a territorial sea breadth less than 12 miles.

c. Freedom of Trade.—The right of peaceful commerce to pass through present important channels of trade without being taxed or impeded by the coastal sovereigns will be modified. This will follow with certainty from what will happen under (a) and (b) above, and (d) below. This has already been foreshadowed in diplomatic exchanges between Japan and Indonesia over passage of Japanese flag oil tankers through the Straits of Mollucca, and in debates in the Canadian Parliament over the possible passage of U.S. flag oil tankers through the Northwest Passage from Alaska to the east coast.

d. The rights of military craft.—The rights of warships and military planes to transit international (or formerly international) straits, and the air space above them without the consent of the coastal state sovereign will certainly disappear, and it is more than likely that such innocent passage past open coasts to a 200 mile limit, or some such broad boundary, will also be interdicted.

Interdiction of military traffic will be followed in time by interdiction of peaceful commerce in the same sea areas as certainly as night follows day.

e. The rights or research vessels.—The right of bona-fide research vessels to conduct research on the high-seas is already ham-strung by the provisions of the Convention on the Continental Shelf and the growing practices of nations related thereto. This will certainly be further circumscribed in any new Convention, and if an international agency is established to handle deep seabed exploration and exploitation the area in which research vessels will be able to operate without the consent of the coastal sovereign or the international authority will

be restricted to the sea area under the exclusive jurisdiction of the sovereign whose flag it wears. As President Nixon said in his carefully diplomatic wording: "*These are issues that transcend national differences and ideology . . .*" I translate that clause to mean that the fat is in the fire and that the United States, Russia, and the allies of both, will either hang together on these issues or they will hang separately. This makes such a strange set of bed fellows that it will undoubtedly result in political controversy within the United States that will hamper the President's ability to handle the matter. From what little knowledge I have of ocean affairs in Russia the internal divisive forces in Russia over these issues will give about equal trouble to Messrs. Breznev and Kosygin.

How the President is going to pull this one out of the fire beats me. One assistance would be for the partisans of both the National Petroleum Council and the National Marine Commission viewpoints on what have become the secondary issues of the outer boundary of the continental shelf and the regime of the deep seabed to at least lower their voices, and, if possible, to compose their differences (with some remedial legislative help from the Congress) so that they could jointly support the President in these difficult times ahead, which are now certainly upon us.

Senator Moss. I think perhaps we will ask Mr. Burgess of the American Mining Congress if he will give us his statement now, and then we will reserve our questions until he is through.

STATEMENT OF C. H. BURGESS, AMERICAN MINING CONGRESS

Mr. BURGESS. Mr. Chairman, my name is C. H. Burgess. I am the vice president-exploration of Kennecott Copper Corp. I appear here today in response to the invitation of Senator Metcalf to the American Mining Congress to testify at this hearing.

I append hereto the declared policy of the American Mining Congress on undersea mineral resources. This is the complete and only statement of the American Mining Congress on this subject.

I have had the benefit of discussions that were covered in Senator Metcalf's invitation with members of the ad hoc committee of the Mining Congress, and, although I believe that some of the other members concur with the views stated below, I believe that others do not.

Other members of the ad hoc committee who are present and who will be available to answer specific questions you may have are Mr. Patrick J. Morgan of Union Carbide, Mr. John C. Keenan of Newmont Mining Corp., Mr. Seymour S. Beanfeld of the American Metal Climax, and Mr. Marne Dubs of Kennecott Copper Corp.

What has prompted this committee's hearing is the possible future value of mineral resources in the deep seabed, because all hard mineral production to date has come from shallow areas landward of the 200-meter isobath. None has come from the sea beyond this depth.

From surficial deposits on the bottom extending seaward from beaches, placer mining methods have been employed to mine sand, gravel, shell, and a number of mineral concentrates, tin, diamonds, gold, iron, titanium-bearing sands.

Coal, iron ore, and a number of other minerals have been mined beneath the shelves in underground workings extended from shafts sunk on the land or on artificial islands. In such cases, the deposits were discovered and worked on the land before the undersea extensions were driven. The cases are very rare in which conditions for such mining are practicable.

Sulfur, salt, and other saline minerals are produced from the Continental Shelf through wells drilled from surface vessels or platforms.

The value of hard minerals produced annually from the continental shelves of the world is estimated at about $600 million, and constitutes a small part of all production, including that from terrestrial sources.

Of possible future importance are deposits of hard minerals in the deep ocean beds that have not yet been mined. Manganese oxide crusts, pavements, and nodules occur on the bed of the ocean far seaward of the continental margin. The manganese nodules in some areas have notable quantities of nickel, copper, and cobalt, and are the most important known occurrence of hard minerals in the deep ocean basins.

Although serious investigations of these occurrences have been under way for only a decade, considerable attention and speculation have been given to the possibility that they may constitute in the future major sources of the contained metals.

It should be borne in mind in all considerations of ocean sources of hard minerals that their importance will vary inversely, and competitively, with terrestrial sources. If the minerals can be produced from the land sources at lower costs than from the ocean, the marine deposits will not be exploited. It seems probable that the production from sources on and in the Continental Shelves will continue to supplement the terrestrial supply.

INTERNATIONAL CONFERENCE

The question has been raised whether it would be appropriate now to call an international conference to redefine the boundary of the Continental Shelf, and to establish a regime for the deep seabed and perhaps to go into other matters such as the determination of the territorial sea.

The letter of Chairman Metcalf commented that: "In view of the recent actions in the General Assembly of the United Nations, it is doubtful that the opening of such a conference would be in the best interests of the United States."

I heartily endorse this. The convening of such a conference would, in my opinion, not be in the best interests of the United States, or in the interests of any other nation.

INTERIM ARRANGEMENTS

What is needed at the present time, and would be a positive response to the aspirations expressed in resolutions of the United Nations General Assembly, is the working out of interim arrangement such as envisaged in the declaration of the American Mining Congress, and, I believe, in the resolution adopted in 1968 by the House of Delegates of the American Bar Association.

These have been elaborated upon in certain respects in a supplemental statement submitted to this committee by an earlier witness, Mr. John G. Laylin.

In a word, the recommendation is that the United States cooperate with other nations—notably the parties to the 1958 Convention on the Continental Shelf—to arrive at an agreed definition of the

boundary of the area of exclusive national jurisdiction within the framework of the 1958 convention, and in establishing by uniform announcements a pattern of rules and practices to be observed by common accord and on the basis of reciprocity.

These could effectively form the basis for formal agreements 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.

The program as elaborated in Mr. Laylin's statement contemplates registration and the payment of a registration fee, together with annual fee payments calculated on the value of the products recovered less the cost of recovery. These payments would go into a fund which would be available for lending to the less developed nations.

INTERPRETATION OF THE DEFINITION OF THE CONTINENTAL SHELF BOUNDARY IN THE 1958 CONVENTION

In response to your questions in regard to the present treaty definition, there are several valid objections which can be raised.

Under the definition, the boundary is at least to a depth of 200 meters, but if exploitation in fact already has gone beyond that depth, the boundary has moved seaward. In any case, under the present definition, there is a constantly shifting boundary, the location of which may change from time to time.

What is to be desired is a fixed precise boundary which is susceptible of clear and unquestioned ascertainment.

Under the recommendations of the American Mining Congress and also the American Bar Association, the desired clarification might be accomplished by the parallel declarations by the parties to the 1958 convention.

In saying that the definition should be worked out within the framework of the 1958 convention, I do not mean to say that there should be extended technical discussions of legal interpretation, or of the preparatory work of the convention.

It is my view that the spirit of the convention should be maintained, but that the boundary should be fixed at the place that best fits the interests of all of the nations of the world. In order to know where that line should be, we need to know what sort of regime will exist beyond that boundary.

The chairman asks for a statement of preference between alternatives—a "narrow shelf," a "wide shelf," or a narrow shelf with an intermediate zone.

I see complications in any device of an intermediate zone.

As between a narrow shelf and a wide one, it is my view, already suggested, that this question can properly be answered only after we know what sort or regime is to be worked out for the region beyond the area of exclusive coastal state jurisdiction.

TIMING OF A U.S. GOVERNMENT DECISION ON THE OUTER CONTINENTAL SHELF BOUNDARY AND DEEP SEABED REGIME

From what I have already said it will be apparent that I think it would be desirable for the United States to reach its decision on these

two issues in cooperation with the other nations—certainly with a substantial number of the parties to the 1958 convention. It will also be apparent that I would think it to be unfortunate to reach a decision on either issue except with reference to the other.

I appreciate that uncertainty as to the precise boundary of the coastal State's area of exclusive jurisdiction may be creating apprehension on the part of some, and I would favor the United States taking the initative now toward resolving this issue, and at the same time reaching agreement on the regime we are to have for the deep seabed.

While exploration of the resources of the deep seabed is not currently inhibited by the present uncertainties, it is desirable that we should move forward as expeditiously as possible, since exploitation could well be crippled by procrastination.

The American Mining Congress would like to express its appreciation for this oportunity to participate in these hearings.

Senator Moss. Thank you very much, Mr. Burgess.

I wondered what underlies the real or apparent lack of interest on the part of the hard minerals industry in leasing tracts on the Outer Continental Shelf under present outer shelf regulations.

Mr. Burgess. I believe that the reason is that there is not known to be any mineral deposit within the reach of present technology on the Outer Continental Shelf.

Up to I guess a year or two ago, I was informed in the Department of the Interior that they had had no applications for any leases other than for sulfur and salt.

The problem is that, although the continental margin and the submerged portion presumably contains the same kind of minerals and similar deposits to those known on land, the problem of discovering them, and then of testing them, is extremely difficult.

The only scientific selective way that one could imagine this might be done would be through some geophysical instrumentation, and none so far has been developed which can apprehend these.

This is very different from the oil industry, where the technique of finding and producing oil in marginal swampy bayou areas along the coast was a stepping stone into progressively deeper water beyond the strand.

Senator Moss. Hasn't the mining of these nodules, or recovery of these nodules ever proved to be economic?

Mr. Burgess. Well, to begin with, the nodules are not on the Continental Shelf. They are far beyond.

Senator Moss. They are out in deep, deep water?

Mr. Burgess. They are out in the deep ocean. There have not yet been any commercial attempts to mine these. The only work that has been done on them so far has been preliminary exploration and testing.

Senator Moss. Well, is there any change that you would recommend in the leasing procedures that might stimulate interest in the mining community?

Mr. Burgess. Well, at present, as I understand it, sir, the part of the ocean where the nodules occur is not within the jurisdiction of the United States to issue leases on.

Senator Moss. What about on the shelf itself? Is there any change that we might make that would stimulate interest in exploring for and finding minerals there on the Continental Shelf?

Mr. BURGESS. I believe that the provision of a marine mine claim type of law, hearings on which have been held before the Public Land Law Review Commission, would provide the legal framework within which a miner might well function.

This still does not solve the question of whether or not there is anything there to prospect for. To date the only thing that is known on the shelf is the surficial deposits in the sediment on top of the shelf at the bottom of the water column and at depths where underground mining has gone out from the land.

The problem here is to find a deposit on the land which extends under the ocean in mining conditions that would make it practicable to pursue this.

Senator Moss. Getting back to the nodule again, do you have any suggestions as to appropriate rules and regulations that should govern the exploitation of the area beyond the limits of our national jurisdiction?

Mr. BURGESS. My written statement and the attached declaration of policy of the American Mining Congress indicates that we believe that some sort of an international regime should be established which would provide security of tenure of areas in the deep seabed and other conditions which would protect the rights of investors and miners who would go into that environment.

These are the usual conditions that any miner needs to have on land. He needs to know that he is going to be able to mine an area over a long enough period of time to amortize his investment and to make a profit on it.

The job of mining nodules in these depths is one that has never been tackled before. The nodules that contain the nickel and copper and cobalt of interest occur in depths of 2,000 to 15,000 feet. The problem of gathering those on the bottom of the ocean and elevating them to a surface vessel is an engineering problem that has never been tried in any other environment.

Senator Moss. Thank you, sir.

Are there any other questions at this point, or do you want to wait until we finish the third witness?

Senator BELLMON. I prefer to wait until all witnesses have testified.

Senator Moss. Have you any questions?

Senator STEVENS. I prefer to wait.

(The complete statement of Mr. Burgess follows:)

STATEMENT OF C. H. BURGESS, AMERICAN MINING CONGRESS

My name is C. H. Burgess. I am the Vice President-Exploration of Kennecott Copper Corporation. I appear here today in response to the invitation of Senator Metcalf to the American Mining Congress to testify on policy considerations relating to the impact on present and future exploitation of mineral resources from the marine environment, of alternative locations of the legal boundary of the Continental Shelf, and of an international regime for the deep sea bed beyond the legal boundary of the Continental Shelf. Mr. Malcolm R. Wilkey, formerly chairman of the Ad Hoc Committee on Undersea Mineral Resources of the Mining Congress, has recently been nominated and confirmed as a judge in the

Circuit Court of Appeals of the District of Columbia. He has asked me to serve in his stead at these hearings.

The American Mining Congress is a trade association founded in 1897. Its membership is composed of (1) U.S. companies that produce most of the nation's metals, coal and industrial and agricultural minerals; (2) more than 200 companies that manufacture mining and mineral processing equipment and supplies, and (3) commercial banks and other institutions serving the mining industry and the financial community.

I append hereto the declared policy of the American Mining Congress on undersea mineral resources. This is the complete and only statement of the Mining Congress on this subject. I have had the benefit of discussions of the material covered in Senator Metcalf's invitation with members of the Ad Hoc Committee, and although I believe that some of the other members concur with the views stated below, I believe that others do not. *Where these views are not clearly* embraced within the declared policy of the American Mining Congress, they must be considered as my personal views.

The actions recommended by the American Mining Congress are as follows:

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. Such clarification might be accomplished by parallel declarations by the parties to that Convention.

2. The United States and other nations having jurisdiction over adjacent continental shelves should at the earliest opportunity formulate definite working rules to encourage and regulate exploration and exploitation. The United States, which has a proven, workable body of mining claim laws, can, and should, promulgate a Continental Shelf Mining Claim Law.

3. Beyond the areas of national jurisdiction, deep ocean mining can proceed in a reasonably orderly fashion without benefit of new legal arrangements by recognizing that accepted principles of international law governing high seas activity extend to ocean mining. Eventually, more precise international arrangements and possibly new legal concepts may be needed to assure a favorable international context for extensive deep ocean mining.

4. Until such an overall international agreement is reached, we recommended 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.

What has prompted this Committee's hearing is the possible future value of mineral resources in the deep sea bed because all hard mineral production to date has come from shallow areas landward of the 200 meter isobath. None has come from the sea bed beyond this depth. From surficial deposits on the bottom extending seaward from beaches, placer mining methods have been employed to mine sand, gravel, shell, and a number of mineral concentrates, tin, diamonds, gold, iron, titanium-bearing sands. Coal, iron ore, and a number of other minerals have been mined beneath the shelves in underground workings extended from shafts sunk on the land or on artificial islands. In such cases, the deposits were discovered and worked on the land before the undersea extensions were driven. The cases are very rare in which conditions for such mining are practicable. Sulfur, salt, and other saline minerals are produced from the continental shelf through wells drilled from surface vessels or platforms.

The value of hard minerals produced annually from the continental shelves of the world is estimated at about $600 million, and constitutes a small part of all production including that from terrestrial sources.

Of possible future importance are deposits of hard minerals in the deep ocean beds that have not yet been mined. Manganese oxide crusts, pavements, and nodules occur on the bed of the deep ocean for seaward of the continental margin. The manganese nodules in some areas have notable quantities of nickel, copper, and cobalt and are the most important known occurrence of hard minerals in the deep ocean basins. Although serious investigations of these occurrences have been under way for only a decade, considerable attention and speculation has been given to the possibility that they may constitute in the future major sources of the contained metals.

It should be borne in mind in all considerations of ocean sources of hard minerals that their importance will vary inversely, and competitively, with terrestrial sources. If the minerals can be produced from the land sources at lower costs than from the ocean, the marine deposits will not be exploited. It seems probable that the production from sources on and in the continental shelves will continue to supplement the terrestrial supply.

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The question has been raised whether it would be appropriate now to call an international conference to redefine the boundary of the continental shelf and to establish a regime for the deepsea bed and perhaps to go into other matters such as the determination of the territorial sea. The letter of Chairman Metcalf commented that "In view of the recent actions in the General Assembly of the United Nations, it is doubtful that the opening of such a Conference would be in the best interests of the United States." I heartily endorse this. The convening of such a conference would, in my opinion, not be in the best interests of the United States or in the interests of any other nation.

INTERIM ARRANGEMENTS

What is needed at the present time and would be a positive response to the aspirations expressed in resolutions of the United Nations General Assembly is the working out of interim arrangements such as envisaged in the declaration of the American Mining Congress, and, I believe, in the resolution adopted in 1968 by the House of Delegates of the American Bar Association. These have been elaborated upon in certain respects in a supplemental statement submitted to this Committee by an earlier witness, Mr. John G. Laylin.

In a word, the recommendation is that the United States cooperate with other nations—notably the parties to the 1958 Convention on the Continental Shelf—to arrive at an agreed definition of the boundary of the area of exclusive national jurisdiction within the framework of the 1958 Convention and in establishing by uniform announcements a pattern of rules and practices to be observed by common accord and on the basis of reciprocity. These could effectively form the basis for formal agreements 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. The program, as elaborated in Mr. Laylin's statement, contemplates registration and the payment of a registration fee, together with annual fee payments calculated on the value of the products recovered, less the cost of recovery. These payments would go into a fund which would be available for lending to the less developed nations.

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In saying that the definition should be worked out within the framework of the 1958 Convention I do not mean to say that there should be extended technical discussions of legal interpretation or of the preparatory work of the Convention. It is my view that the spirit of the Convention should be maintained but that the boundary should be fixed at the place that best fits the interests of all of the nations of the world. In order to know where that line should be, we need to know what sort of regime will exist beyond that boundary.

The Chairman asks for a statement of preference between alternatives—a "narrow shelf," a "wide shelf," or a narrow shelf with an intermediate zone. I see complications in any device of an intermediate zone. As between a narrow

shelf and a wide one it is my view, already suggested, that this question can properly be answered only after we know what sort of regime is to be worked out for the region beyond the area of exclusive coastal state jurisdiction.

Timing of a U.S. Government Decision on the Outer Continental Shelf Boundary and Deepsea Bed Regime

From what I have already said, it will be apparent that I think it would be desirable for the United States to reach its decision on these two issues in cooperation with the other nations—certainly with a substantial number of the parties to the 1958 Convention. It will also be apparent that I would think it to be unfortunate to reach a decision on either issue except with reference to the other. I appreciate that uncertainty as to the precise boundary of the coastal state's area of exclusive jurisdiction may be creating apprehension on the part of some and I would favor the United States taking the initiative now toward resolving this issue and at the same time reaching agreement on the regime we are to have for the deepsea bed. While exploration of the resources of the deepsea bed is not currently inhibited by the present uncertainties, it is desirable that we should move forward as expeditiously as possible since exploitation could well be crippled by procrastination.

The American Mining Congress would like to express its appreciation for this opportunity to participate in these hearings.

Attachment I.—Declaration of Policy as to Undersea Mineral Resources

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 reasonable definite legal framework, and a return on investment competitive with comparable opportunities on dry land.

The ocean environment is still largely unknown. The mining industry 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 research and exploration of the sea bed beyond the limits of national jurisdiction.

General legal principles already govern ocean activity but certain rights need sharper definition, for example, in regard to the right to explore, the right to access, the exclusive right to mine if an ore body is found, and suitable space for ancillary purposes. Certainly in advance that these rights may be secured on economically rewarding terms will further encourage exploration.

To secure the requisite certainty, the following action should be taken:

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. Such clarification might be accomplished by parallel declarations by the parties to that Convention.

2. The United States and other nations having jurisdiction over adjacent continental shelves should at the earliest opportunity formulate definite working rules to encourage and regulate exploration and exploitation. The United States, which has a proven, workable body of mining claim laws, can, and should, promulgate a Continental Shelf Mining Claim Law.

3. Beyond the areas of national jurisdiction, deep ocean mining can proceed in a reasonably orderly fashion without benefit of new legal arrangements by recognizing that accepted principles of international law governing high seas activity extend to ocean mining. Eventually, more precise international arrangements and possibly new legal concepts may be needed to assure a favorable international context for extensive deep ocean mining.

4. 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.

The more precise definition of the boundary between the area of national jurisdiction and the international deep ocean beyond is interrelated with the more detailed legal rules which in the future will be needed for mining in the international area of ocean space. In the negotiations with other nations to work out these arrangements, we urge that the U.S. Government give realistic consideration to the enormous interest of the United States in both the deep ocean and its four continental shelves. Given this important interest, without the participation of the United States there can be no international agreement on a worldwide legal regime for ocean space and, therefore, no system for providing revenue from the ocean space. Recognizing the historical stake of the United States in the public order of the oceans, the United States should not hesitate to take the lead to secure public order in ocean space on fair and reasonable terms.

Senator Moss. All right. We will ask Prof. James Crutchfield of the University of Washington if he would give his testimony.

STATEMENT OF PROF. JAMES A. CRUTCHFIELD, UNIVERSITY OF WASHINGTON

Professor CRUTCHFIELD. Thank you, Mr. Chairman.

My name is James Crutchfield. I am professor of economics in the Graduate School of Public Affairs at the University of Washington in Seattle. I am extremely happy to have the opportunity to appear before the subcommittee.

I would like to make it clear that my views do not necessarily reflect those of my fellow faculty. I speak as an individual.

For many years, my major field of interest, in both teaching and research, has been the development and management of natural resources, with considerable emphasis on those coming from the marine environment.

In 1967 and 1968, I had the honor of serving on the Commission for Marine Science, Engineering, and Resources under the distinguished chairmanship of Dr. Julius Stratton. The comments summarized in this paper and in my remarks before the subcommittee, therefore, reflect both a longstanding professional interest in the capacity of man to use wisely the resources available from the sea and my deep concern, as an American citizen, that these matters receive full consideration in deliberations at all levels where government policy will be made.

Before addressing the specific issues of concern to the subcommittee, I should like to make clear two basic sets of considerations underlying my responses to those questions.

First, in matters relating to the seabed, as in so many others, the United States is an integral part of a larger community of nations—some friendly, some not—all of which have legitimate interests in the development of marine resources, who have different political, social, institutional arrangements, and each is going to have different views as to the optimal way of developing and dividing up marine resources.

The experience we have had with international development of living resources of the sea suggests strongly to me that we lay great emphasis on the longer run interests of the United States in terms of its relations to that broader international community.

The basic problems to be resolved are the concern of all nations, large and small, many of which do not have borders touching on the

sea, and our inquiry, our objectives, and our policies have to give full credence to the views of that larger community of nations, not just on humanitarian grounds, but in our own national interest as we see it.

The second major premise I think important to emphasize is the difference between the hard facts about minerals from the seabed and the mythology that a great deal of the public talk seems to reflect.

The previous witnesses testified, I think, very effectively to that, and I can skip over it very briefly.

The total amount of dollar value extracted from the sea by the fisheries and the petroleum industry simply swamps out any other recoveries that are going on at the present time, with a few limited exceptions which Mr. Burgess has carefully noted.

For the rest, this is a long-term proposition. I don't think this implies any disillusionment with the belief and hope that over the long run supplies of minerals from the sea will become competitive with supplies from more conventional sources.

What it does imply is that we have the time and are very fortunate to have the time to develop a policy toward the exploitation of seabed minerals that is orderly and measured. There is no crash, urgent aspect to it.

I would like to take a look, then, if I may, at the specific questions raised in Senator Metcalf's letter of February 16, 1970.

I do not feel that the United States should adopt the position that the present definition of the Continental Shelf boundary is adequate.

The reasons for that have been explored by many others. I need not elaborate. It is not really a definition, at the present time.

The exploitability criterion raises some issues that could become very embarrassing to American industry on its own Continental Shelf, and in other areas as well.

On the other hand, to say that the present definition is not satisfactory, and that we should look over the longer period to a more precise definition, does not mean that we need to or should press immediately for some hard solution that will get into dogma and may be very difficult to change at a later date.

As Dr. Chapman has indicated, any present conference aimed at delineating precisely the boundaries of the Continental Shelf inevitably is going to get wound up with a great many other issues involving the uses of the sea, including, in my opinion, the use of living resources of the sea, despite the apparent separation of these two; and we are simply not ready to deal with all of those tremendously complicated problems in the course, ostensibly, of simply defining the shelf.

I think this suggests that there is no contradiction in my view that while we should be in no pressing hurry to define precisely the limits of the shelf, that this is no excuse for not thinking about all possible ramifications of all alternative definitions in all segments of the Government, executive and legislative, that will be concerned with the issue.

The Commission in its deliberations was more than slightly disturbed by evidence of a willingness in substantial areas of govern-

ment and industry to simply let things drift in the hope that the problems either wouldn't arise or would go away.

The events in the United Nations have dispelled that possibility, and I think we should be looking hard at the stance that will ultimately be taken. We simply don't know what it is, at this stage.

I think this provides an answer, obviously, to the question as to whether the ultimate legal limit to the Continental Shelf, from the standpoint of the United States, should extend to the seaward edge of the continental rise. I think this would be highly undesirable. There is no basis for it at the present time, and it raises the possibility of some very disagreeable outcomes from the standpoint of American interests.

Some of these Dr. Chapman has already mentioned. I would raise perhaps a different one.

For all practical purposes, the great bulk of any value that will be derived from minerals from the sea for a long time to come will be derived from the Continental Shelf, slope, and possibly the rise, so that extending the definition of the Continental Shelf to that area is in effect a declaration to the rest of the world that all of the really worthwhile possibilities are being reserved for one set of nations at the present time.

I think the international politics of that position are anything but strong, and I think that the impossibility of getting any kind of international regime that will prevent the kind of chaos that would seriously inhibit development of marine resources would be very real if we tried to press this point.

Of the three alternatives that are posed in Senator Metcalf's letter, I would be inclined, and I assume I am the only one here who would, to speak rather strongly to the third of these, the idea of an intermediate zone beyond a narrowly defined Continental Shelf proper.

The reasons for that have been developed in detail in the Commission report. I will not try to elaborate on that fully by any means, but there are three important aspects that suggest that it is a worthwhile approach a least to explore.

One is that my limited knowledge of the national security issues involved—these are not only our own, but the national security views of other nations for whom the sea is a potential arena of conflict, suggests that a narrowly defined Continental Shelf with a further intermediate zone within which the coastal nation would control exploration and exploitation would be an acceptable compromise between security interests as they are seen and the desire to get exploitation underway as soon as it is economically feasible.

Secondly, the provision of a regime of that type, coupled with an international registry for mineral claims, would provide a flexible basis for development on an orderly basis as each new phase of technological capability develops.

Again, we simply do not know what we are going to get first, where we are going to get it, or with what technology we are going to get it. Any regime that is established must have a degree of flexibility that will permit us to alter the arrangements in accordance with that additional knowledge.

Thirdly, the intermediate zone arrangement would, it seems to me, offer an opportunity for the smaller nations and the noncoastal States to derive in an orderly way some benefits from the increased outputs from the seabed as technology makes it possible to obtain these.

I think it can balance in a practical way the conflicting objectives that I have mentioned, without prejudicing later developments that might be more flexible. It would bring some support for the view, which I would also maintain, that we have no sovereign claim over all of the resources of the sea simply because our borders happen to be contiguous to it. These are in many respects world resources beyond our immediate sovereign waters.

Any regime which directly or indirectly seeks to divide up the swag now is not going to be very acceptable to many other nations.

Whatever choice is made, and I think it may well be long deferred, it is going to be a long time before anything gets done, and I do feel that there are certain positive steps that can be taken.

I think I agree solidly with both of the other speakers, that at the present time uncertainty about the legal regime of the seabed and the fragility of the rights that exist out there at the present time are not major obstacles to economic progress in getting at these minerals. These obstacles lie further back.

More specifically, they lie in the absence of a broad based technology that would provide the materials, the sources of power, the life support systems, the transport systems that are required to make man operate more efficiently in the sea.

This is basically a hostile environment. There are costs to overcome compared to land-based sources that at the moment are staggering, and we must develop the technical capability to cut those costs down to size. This isn't a matter of legal consideration.

We need to know in three dimensions a great deal more than we do about the Continental Shelf and slope on a broad grid and in more detailed fashion, for the promising areas where we feel minerals are most likely to be. As Mr. Burgess has clearly outlined, we simply do not have the technology at the moment to discover economically where those more promising areas may be.

This suggests to me that what we will need to get ahead on these problems is a partnership between Government and industrial capacity. The costs involved, the risks involved, are such that that kind of exploration and basic technology development are not going to be done by individual firms. They simply cannot hope to recover all of the benefits that will accrue to a lot of other people.

It will be essentially a partnership problem, and it seems to me equally obvious that that partnership would be far more productive if it were international in scope rather than narrowly national. Far more work is to be done at lower cost in this expensive area of offshore exploration if it can be done on a multinational basis.

I agree that there are some things that need to be done to protect the position of the pioneers who do get out there. An orderly system of registry and licensing is obviously essential.

It is also essential that the rights of the man who first gets out there to exploitation without interference by others is clearly established.

At the same time, it seems critically important, as the chairman

mentioned at the outset, that we understand as fully as possible the impact of mineral exploitation by one operation on those of other mineral exploiters and on other users of the water column.

We have found out too late in too many instances of environmental damage that could have been prevented without serious impediment to the industry involved. This time we have a chance to at least anticipate the worst of these problems before rather than after they occur. That chance should be seized.

Finally, I would stress the urgent need for flexibility in management of offshore lands. What has worked well in the leasing of oil lands does not necessarily apply to the very different kind of situation that will be faced by placer or hard-rock mining in the deep sea.

Again, I think the Commission report has some useful suggestions to make about that kind of flexibility.

It may well be that in the more risky types of operations, the exploration right should carry with it an exclusive right to exploit whatever may be developed out there. Without that sort of incentive, I rather doubt that we would achieve the speed that would otherwise be possible in converting these resources to economic resources.

Let me close by emphasizing an obvious but frequently neglected fact, that there is nothing better in any way that I can see about minerals produced from the sea just because they came from salt water. Consequently, I do not see any particular reason for forcing the pace of mineral development from the sea.

The companies that are interested in this activity are research oriented, competent firms. The fact that they are not more active in exploitation at the moment simply reflects a solid business judgment that for a long time to come they can find cheaper and more accessible sources elsewhere.

To drive for mineral exploitation from the sea just to say that we could do it seems to me to serve no useful purpose.

I would close by reiterating, as a lot of us have so often, that all discussions of policies that might encourage mineral exploration and exploitation assume the existence of a strong integrated agency of government that has a concern with, a knowledge of, and logistic capability to operate in the sea on behalf of the Federal Government. That does not exist at the moment. The fragmentation is so obvious to everyone that it need not be amplified.

We need a strong ocean-oriented agency.

Thank you, gentlemen.

Senator Moss. Thank you, Professor Crutchfield, for your very fine statement.

You spoke of the conflict that might exist with the mining and other uses in the column. To what extent, for instance, would mining for magnesium nodules interfere with fishing in the same area?

Professor Crutchfield. To the extent that the nodules are anywhere from 12,000 to 15,000 feet, I think that would be the least of our worries, Senator.

To the extent that we are talking about dredging operations for sand, gravel, perhaps tin and similar surface materials, the possibility of conflict is real, but it is also capable of resolution.

I don't think that it is inevitable that mining activity, even close in to the shore, will do serious or even perceptible damage to living resources, if those rules are worked out well in advance.

The basic issue is whether you harm the fish directly, or create a physical setting in which you obstruct fishing activities, and these, it seems to me, can be worked out.

Senator Moss. You suggest that there ought to be an intermediate area where we would be prepared to exploit to the degree that economically it become feasible.

Professor CRUTCHFIELD. Yes, sir. I think that the suggestion which originated initially with Professor Auerbach represents the kind of workable compromise that I think must be found between the objections that Dr. Chapman has eptomized so well to a broad Continental Shelf, and at the same time the need for some preservation of security in tenure for our own people who will be exploiting out beyond that narrowly defined limit.

The intermediate zone concept makes it very clear that the coastal State will determine who is to explore, and who is to exploit. The difference is that it is thereafter a part of the international regime, rather than being under direct control of the coastal State.

It is a compromise, surely, but I think it is a workable one.

Senator Moss. Do we have any example now of mining oil, sulfur, anything beyond the claimed legal limit of a country? Do we have people that are out in what you are calling the intermediate zone?

Professor CRUTCHFIELD. Yes, the petroleum industry surely is.

Senator Moss. That is in the North Sea, primarily.

Professor CRUTCHFIELD. In the gulf.

Senator Moss. In the gulf, they are that far out? How remote are the wells they are drilling in the North Sea from the shore?

Professor CRUTCHFIELD. I could not give you those exact figures in miles, Senator. It is obvious that the North Sea situation creates immediately a need for immediate agreement among the nations concerned. The waters are so narrow there that you simply cannot carry on activity without a pretty precise definition, and on an ad hoc basis.

Senator Moss. I am not very knowledgeable in this, so that I am just asking for information.

I understood that in the North Sea the bounding countries came to some sort of agreement among themselves, but made no reference to the world community or international waters as we have known them in international law, in dividing up the bed of the North Sea. Is that your understanding?

Professor CRUTCHFIELD. That is correct, sir.

Senator Moss. So we have an accomplished fact situation to deal with in that particular area.

Professor CRUTCHFIELD. We do, and I think that the danger of this steady seaward movement, the conversion of the oceans into a series of national lakes in which the rights and benefits simply go to the people now equipped to push those claims, and to exercise technical capability in those areas is something that on a world basis, and therefore in terms of American interest, is not the best solution to this problem.

Senator Moss. Senator Bellmon.

Senator BELLMON. Mr. Chairman, I assume that Mr. Olmstead is not here.

Senator MOSS. He will be called later. We will hear from him.

Any of these gentlemen at the table are available for questions, if you have them now.

Senator BELLMON. I would like to ask a couple of questions of Dr. Crutchfield.

On page 5 you make a statement in the last paragraph that, "* * * the intermediate zone arrangement would offer an opportunity for smaller nations and noncoastal States to share in some of the benefits of increased outputs from the seabed."

Can you give us some of the reasoning back of that statement?

To be candid about it, why do you feel that the smaller nations and the noncoastal States should share in these benefits, if they don't participate in the development of the technology or producing it?

Professor CRUTCHFIELD. I think, Senator, I could best express it this way. As of the moment, many of the mineral outputs that may come from the area are purely potential. They are nobody's property, as you are making the assumption, I think, that they are somehow our property now that we are giving up to someone else.

Senator BELLMON. I have not made any assumptions at all.

Professor CRUTCHFIELD. I am sorry. I misunderstood you then.

The point I was trying to make perhaps could be expressed this way: the mere fact that coastal States are adjacent to particular areas of the Continental Shelf and the slope does not seem to me to give those States permanent and inalienable rights to all of the benefits that might accrue from it.

This represents a view of my own, that the resources in the deep sea area at the moment are properly regarded as the properties of the world at large. If the technical capabilities to exploit these profitably will bring incomes over and above satisfactory rates of return to the companies doing the exploitation, part of that might well go to the community of nations as well as to the coastal nations.

Senator BELLMON. Where do you consider the deep sea to begin? At what depth? You used this term in your testimony.

Professor CRUTCHFIELD. I perhaps should not have used the term that loosely.

I would consider it to exist beyond the continental rise.

Senator BELLMON. We are back again. Where does it begin?

Would you apply this same reasoning to the living resources of the sea?

Professor CRUTCHFIELD. No, I would prefer to treat the living resources of the sea as an entirely separate matter. The conditions under which they are exploited are entirely different. The nature of the resources exploited is entirely different, and we are dealing in the case of living resources with some very old industries, with some very longstanding international agreements already in effect, some of which work very well, some of which work very poorly.

Senator BELLMON. So that it is your feeling, then, that we need two separate sets of laws or conditions to deal with the harvesting of the living resources and the exploitation of the mineral resources?

Professor CRUTCHFIELD. Yes, sir. I believe that they are very dif- in nature, and call for different handling.

Senator BELLMON. I have one other question.

You mentioned on page 6 your feeling that the exploitation of these resources, and I assume from what you have just said that you mean the mineral resources, should come, "* * * as a partnership between Government and industry."

Professor CRUTCHFIELD. Yes, sir.

Senator BELLMON. I am not sure I quite understand what you mean here.

Professor CRUTCHFIELD. The point that I was trying to make, Senator, is that the cost and the risk of no payoff in the kind of research and development needed in basic materials, basic life support systems, power sources for operation in the sea, this sort of thing, are likely to be beyond the capacity of single firms to undertake in the broad sense that would be of greatest benefit. They simply can't collect in all cases for it, even though they have the technical capacity.

What I am proposing is that this is one of the cases in which the role of the Government can be to facilitate a broad based, generally applicable knowledge and technology. They will do that with the assistance of private industry which would provide the tools and techniques for that research and development work.

Thereafter, the actual exploitation would be carried on by private enterprise, but it seems to me that that is the combination most likely to produce nonsubsidized, efficient availability of marine resources.

Senator BELLMON. But from the language you use, I take it you mean that this would be a partnership between one government, and you are not talking about a partnership between some international regime and industry.

Professor CRUTCHFIELD. I was speaking here specifically of our own Government and our own industry, but I did add that the possibility for extension of the partnership idea in exploration of the sea on an international basis may offer us some further real economies.

This is an expensive business, and there is much that can be done jointly with other nations that would increase the effectiveness of a given dollar's worth of research work.

Senator BELLMON. You have testified that you feel that perhaps it is too early to work out any definite agreements as to how the mineral resources of the deep sea should be explored.

How would you go about working up such an international partnership to make exploration possible?

Professor CRUTCHFIELD. You are getting beyond my competence, Senator. I can only say that the ideas embodied in the International Decade of Ocean Exploration reflect careful and mature consideration by respected members of the scientific community and of the governments involved, and the many useful things that can be done jointly that will be of benefit to all the nations concerned and that will lower the cost to each nation of getting that knowledge.

I believe this is a good example of the kind of thing that can be done.

Senator BELLMON. Let me ask one other question. Again, you are talking about the mineral resources, but you would not apply this same kind of reasoning to harvesting the living resources?

Professor CRUTCHFIELD. There, I certainly would. I was deely discouraged by the fact that the International Decade of Ocean Explora-

tion paid little or no attention to the living resources. In my opinion, this was a very substantial error that I hoped would be rectified.

With respect to the assessment of where the fish are, best ways of concentrating and harvesting, there are, again, I think, excellent reasons for cooperating among nations as well as cooperation among our own national fishery agency and the industry that it served.

Senator BELLMON. Mr. Chairman, that is all.

Senator Moss. Thank you.

Senator Hansen, do you have questions?

Senator HANSEN. Thank you, Mr. Chairman.

It may possibly have been covered, and if it has, I apologize. I think I will refer you, again, Doctor, to page 5 of your testimony, the second full paragraph—

> First, my limited knowledge of the national security aspects suggests that a narrowly defined Continental Shelf, with a further intermediate zone within which the coastal State would exercise exclusive rights to explore and exploit the natural resources of the seabed and subsoil, would represent a workable compromise acceptable to the several nations for whom these security considerations are crucial.

My question is, as I understand it, at the present time seaward 3 miles from the coast is presumed to be the exclusive property of those States lying contiguous to the sea. Am I right about that?

Professor CRUTCHFIELD. Yes, sir.

Senator HANSEN. And if there is any oil production or whatever, and this is exclusive of living resources, it would accrue to the benefit of the State. Would you agree that there might reasonably be an extension of that concept beyond the 3-mile limit with the idea that the development of those nonrenewable resources, so to speak, would accrue to the benefit of the entire Nation and not to a specific State and this would serve our national interest well?

Professor CRUTCHFIELD. Yes, sir.

Senator HANSEN. Thank you, Mr. Chairman.

Senator Moss. Senator Stevens?

Senator STEVENS. I should start off by apologizing to you, Professor Crutchfield, for my smiling when you were reading. I was catching up with Dr. Chapman's statement and I was taken, as a lawyer, with the statement that he made on page 14, "The law of the sea is entirely too important to the welfare of society to be left in the hands of lawyers, and anything industrialists have to say on the subject should be ignored."

I just couldn't help but chuckle a little bit about that. I will talk to the doctor about that in a minute. I wanted to make sure that you understood.

Professor CRUTCHFIELD. I have a file of Mr. Chapman's letters which is about 8 feet long and it is full of equally pithy excellent statements.

Senator STEVENS. I knew of his frank expression when I was with the Department of the Interior.

I was interested in your comments about the necessity for a Government agency to deal with the total problem related here. Have you ever gone into that? What are you talking about, a Department of Exterior or a Department of Oceanography, or what are you talking about?

Professor CRUTCHFIELD. No, sir. I was a member of the Stratton Commission and its proposal for a National Oceangraphic Agency was essentially the proposal that I would espouse.

Senator STEVENS. I see.

Professor CRUTCHFIELD. The idea behind that was twofold and I think there is a good deal of failure to comprehend the reason for the suggestion of a substantial independent agency that would incorporate a number of the obvious ocean-oriented agencies now attached to other departments of Government.

The reason for consolidating these into a viable unit—for example, of combining the fleets of the Bureau of Commercial Fisheries and of ESSA and Coast Guard for operational efficiency in doing work is the sea, seemed obvious. What is perhaps less obvious is that the Commission was keenly aware of the fact that the structure of the Federal Government in total is being considered very carefully with respect to possible reorganization of a more major nature and what we ought to do was to create an agency that would work effectively and with one voice in the sea but could easily by fitted into any one of the several alternative governmental reorganization programs that might come after that.

But even the regime of the deep seabed involves so many people that I would defy you to define in a month of intensive staff work who has a piece of the action.

Senator Moss. If the Senator will yield a minute, I might refer to my bill that is pending to create a Department of Natural Resources and Environment with an Assistant Secretary for Oceanography which would be one division of that Department.

Senator STEVENS. In all due respect to the chairman of the subcommittee, I still don't know how that will take care of the Department of Defense's aspects. I understood the professor to refer to the fractionalized concept of jurisdiction in the Federal Government over this total area, with part in State, part in Commerce, part in Interior, part in Defense, and I was hoping that he would espouse the total creation of a Department of Exterior to take care of all of the aspects of international interest as far as the Federal Government was concerned as opposed to foreign relations, developmental aspects of our foreign interests. But that wasn't the case.

Let me ask you this. We know about the plane that was shot down as it flew over international waters off Korea. We know about the vessels that are seized off of Ecuador and Peru. We know about the actions of the Soviet trawlers as they go throughthe Alaska king crab pots and use their vacuum cleaner methods on our ground fish. When it comes right down to it, how, other than force, do you anticipate we could enforce any regime dealing with the development or exploitation of the resources beyond the national jurisdiction as is recognized in international law?

Professor CRUTCHFIELD. I think the alternative to force, Senator, must be an internationally agreed to regime. I share your concern with respect to the living resources of the sea. The absence of an international regime that is inclusive in the North Pacific creates situations in which all of us are engaged in imposing losses on one another that we all know how to avoid.

It has been very detrimental to our interests in that area. I think at the moment the matter with respect to the minerals is almos moot because nobody is out there doing that much, but the time will come, I am sure, when they will be and what I am hoping is that prior to the time there is a real reason to be concerned about overlapping activities, conflicts, destruction of property, draining of other people's development and research efforts by those who didn't participate, we would have a workable international regime that would permit something other than a unilateral force to protect the firm involved.

Senator STEVENS. Thank you.

Dr. Chapman, could I ask you this question: Isn't it about time that we forgot about the concept of the fear of the loss of military surface vessel free passage as being something that the State Department and those who agree with the State Department bring forward to preserve the 3-mile limit concept? It seems very strange to me that it is normally the State Department that is arguing that the Navy has to have a 3-mile limit because if it doesn't we are going to lose some very valuable international prerogatives throughout the world. Whenever I have heard the matter discussed, it has been based upon a military concept to preserve the 3-mile limit. I seem to read that into your statement. Am I wrong?

Dr. CHAPMAN. You read it correctly. I am in favor of the 3-mile limit strictly applied.

Senator STEVENS. Why use the military concept? Are you familiar with the fact that off our North Pacific we have established what we call the Alaska warning zone and any aircraft that enters into that zone we have announced that we reserve the right to shoot it down? That certainly doesn't recognize any 3-mile limit. We have announced, in effect, that because aircraft were moving in mach III, if we are going to get them before they get to us anyone that enters that zone without letting us know is considered an intruder. Isn't that really related to the 3-mile zone?

At the time we established the 3-mile zone, it is my understanding it was because that was the average range for a cannon of a shore battery.

Dr. CHAPMAN. I think, in the first place, the range of the cannon was not 3 miles when that rule was established. In the second place, I think that under international law a nation has a right to take all reasonable precautions to defend itself from intruders. There is no conflict at all in international law for doing that.

The safety and security of the country you are able to defend.

If you do so wrongly, you then must pay damages and we have done that from time to time.

Senator STEVENS. How does that relate to the 200-mile limit off of Peru and how does it relate to the North Sea activity as far as the claim of sovereignty and the dividing up of that pie as the professor said?

Dr. CHAPMAN. The North Sea is all Continental Shelf, all shallow. The North Sea and the Persian Gulf are all Continental Shelf, with the exception of the Norweigian trench.

My reading of history is that the freedom to use the sea has never lasted very long unless it was accompanied by military force. I think with the decay of the ability to use force on the ocean the right for

commerce to use the ocean will inevitably decay. This will first become apparent in the narrow Pacific.

I point out to you, as I did in my testimony, two examples of this arising already, one is in the Straits of Mollucca, the work Japan wished to do to deepen the Straits of Mollucca, the opposition of the Government of Indonesia to this, the desire to send oil tankers through the Lombok Straits where they clearly needed to pay dues.

The other case is the Northwest Passage, and I read in the morning paper coming in on the plane this morning that Humble has asked the Government of Canada for rights again to go through the Northwest Passage and the Foreign Minister said they will graciously permit this.

Senator STEVENS. I think we are putting apples and oranges together. Those in the north country have not objected to Canadian exertion of the right to regulate passage.

Dr. CHAPMAN. I think you will find, sir, that the United States has. I may be in error on this.

Senator STEVENS. I am talking about the Arctic areas of Alaska, for instance. I would remind you that Alaska seized the Japanese fishing vessel that was in the Shelikof Strait and successfully prosecuted that vessel for an intrusion upon Alaskan waters, although it was in fact an area that would have been open to free passage if it were a commercial vessel. I think that you are demonstrating, as far as I am concerned, why the law of the sea is entirely in a correct spot if left in the hands of lawyers because we draw interesting distinctions between rights whereas those who criticize us do not. There are indeed distinctions such as the right of Canada to be assured that precautions have been taken by the oil industry as it goes through their straits with the largest tankers in the world. I don't think anyone in the north country has disagreed.

Maybe the State Department does, but the States Department, as far as I am concerned, again, ought to listen to their lawyers.

Thank you, Mr. Chairman.

Senator Moss. Thank you, Senator Stevens.

Thank you, gentlemen, for your very fine testimony, all of you, and for responding to our invitation to be here today. It has been most helpful to us.

We may have additional questions at some future point, but for now you are excused, and we appreciate it.

(Dr. Crutchfield's complete statement follows:)

STATEMENT OF DR. JAMES A. CRUTCHFIELD, PROFESSOR, DEPARTMENT OF ECONOMICS AND GRADUATE SCHOOL OF PUBLIC AFFAIRS, UNIVERSITY OF WASHINGTON, SEATTLE, WASH.

I am deeply grateful to the Subcommitte for extending me the opportunity to present my views on the impact of alternative definitions of the continental shelf. They are, of course, my own, and do not necessarily reflect those of other members of the faculty of my University.

For many years my major field of interest, in both teaching and research, has been the development and management of natural resources, with considerable emphasis on those coming from the marine environment. In 1967 and 1968 I had the honor of serving on the Commission for Marine Science, Engineering and Resources under the distinguished chairmanship of Dr. Julius Stratton. The comments summarized in this paper and in my remarks before the Subcommittee therefore reflect both a long-standing professional interest in the capacity

of man to use wisely the resources available from the sea and my deep concern, as an American citizen, that these matters receive full consideration in deliberations at all levels where government policy will be made.

Before addressing the specific issues of concern to the Subcommittee, I should like to make clear two basic sets of considerations underlying my responses to those questions.

First, in matters relating to the seabed, as in so many others, the United States is an integral part of a larger community of nations—some friendly, some not—all of which have legitimate interests in the development of marine resources. Since these countries operate under somewhat different types of political, social, and economic organization, each is likely to view the optimal ways of making use of the sea's resources (and of dividing the resulting benefits) with different eyes. The experience with competitive development of living resources of the sea drives home the imperative need to consider the longer run interests of the United States in terms of its relation to that broader international community. Those long term interests may often be served best by policies that fall short of achieving shorter term objectives, particularly those that of more immediate benefit to individual groups within the United States. Certainly Congress, the President, and the average citizen of this country are all profoundly concerned that American interests in this emerging frontier of human activity be fully served. I simply venture the opinion that the basic problems to be resolved are the concern of all nations, including many whose borders do not touch on the sea; and that we must conduct our inquiry, frame our objectives, and settle upon policies that give full credence to the welfare of the community nations—not from purely humanitarian reasons, but in our own national interest as well.

Second, it seems imperative to emphasize the difference between the mythology that surrounds the resources available from the ocean's floor, and the hard facts as we now know them. The report of the Stratton Commission and its separate panels provide some badly needed perspective in this respect. Despite the public infatuation with the prospects for minerals from the sea, it remains true that on a world-wide basis the fisheries and petroleum produce far more useful natural resources from the marine environment than all other activities together. American firms are extracting useful amounts of salt, magnesium compounds, and bromine from dissolved seawater, and sulphur from the Gulf of Mexico has contributed significantly to American industrial output. For the rest, the sea itself and the seabeds remain a hostile environment, in which the location and composition of potentially rich mineral deposits remains largely unknown, and even those that can be pinpointed with some accuracy are far from cost competitive with land based supplies and promise to remain so for decades. Apart from sand, gravel, oyster shells, and some tin, offshore mining remains a very small operation world-wide.

This does not imply, in any sense, disillusionment with the prospects for obtaining mineral resources from the sea. It simply expresses the general belief among qualified mineral economists that land-based supplies will continue to meet American industrial needs at least to the year 2000, and probably well beyond without significant increases in costs. True, this assumes access to some foreign supplies and a continued rate of discovery and technological advance in the use of mineral materials comparable to that of the recent past, but these are not unreasonable assumptions. In short, we are blessed with the opportunity to approach the problems of development, management, and allocation of mineral resources from the seabed in a measured, orderly fashion—provided the essential groundwork is undertaken now rather than later. The time will certainly come when minerals from the sea floor will provide an important and economically attractive alternative to shrinking supplies from more conventional sources. The task before the United States and the other nations is to develop a framework that will insure efficient and timely use of those opportunities.

Let me turn now to the specific questions raised in Senator Metcalf's letter of February 16, 1970. Despite the confusion that has attended the debate about the need for a more precise definition of the outer boundary of the continental shelf, I do not feel that the United States should adopt the position that the present definition of that boundary is adequate; nor should it resist efforts to provide additional refinement. There is, in my opinion, justifiable concern that some current interpretations of the exploitability criterion and other fuzzy aspects of the present conventions could be distinctly prejudicial to the interests of this country.

The developing controversy between the United States and Canada over the latter's claim to sovereignty over Arctic waters through which the potential tanker traffic from Prudhoe Bay would have to travel is a case in point. The exploitability criterion, pressed to its logical conclusion, implies that any small or larger nation, with or without direct access to the sea, can read technical material in libraries, hire technically proficient personnel and equipment, and is therefore capable of exploiting the seabed as well as the United States. Some very unpleasant conclusions might then emerge with respect to access to promising areas of exploitation by American firms operating in the international arena.

To say that the present definition is not satisfactory, however, is not to argue that we must proceed, with all possible haste, to determine an alternative that seems best to the United States at the moment and press immediately for its adoption on an international basis. The legal controversy on this point has made it clear that any debate over the definition of the continental shelf will inevitably expand into a debate over far broader issues, many of which may have an unfavorable impact on American firms producing both fishery and nonfishery products. It would not appear contradictory to argue that the American government should be hard at work on all possible ramifications of alternative definitions of the continental shelf in preparation for the day—inevitable, in my opinion—when greater precision must be achieved. But the dimensions of the several alternatives that might seem most attractive from both world and American points of view simply cannot be determined at this time. The tremendous gaps in both scientific and industrial knowledge that limit commercial mineral activity in the sea to a very small level, with the exceptions noted above, are testimony to the changes that may occur in the future.

This line of argument clearly contravenes the contention that the ultimate legal limit to the continental shelf should, from the standpoint of the United States extend to the seaward edge of the continental rise. At the moment, oil is king among marine minerals, and American technical capacity in offshore oil is supreme. Such a definition might appear to be advantageous to this particular industry, insofar as it relates to that portion of the continental shelf adjacent to the United States.

It is anything but clear, however, that the same conclusion would be reached when the broader world scene is surveyed, or when we look to the longer term prospects for exploitation of placer minerals and hard rock products from the seabed. The major contribution of marine mineral resources to economic output over the next fifty years or more will surely come frm the areas bounded by the continental rise. Such a broad definition of the shelf is really tantamount to blocking out, for the sole enjoyment of coastal states, all of the marine minerals that show any real prospect for short or intermediate term development. The international politics of this position seem weak, to say the least. If the mineral wealth of the deep sea, whatever it may turn out to be, is presently regarded as beyond sovereign claims, it can hardly be expected that the noncoastal nations of the world will acquiesce quietly in a division of most of the potential benefits by a geographically favored group. Any attempt to extend the boundaries of the shelf to that extent, may well result in a chaotic situation in the international arena that will ultimately redound to the benefit of no one, including the United States.

Of the three alternatives posed in Senator Metcalf's letter of February 17, 1970, the third, though more complex than either of the others, comes closest to meeting three fundamental requirements for a sound initial position to be taken by the United States.

First, my limited knowledge of the national security aspects suggests that a narrowly defined continental shelf, with a further intermediate zone within which the coastal state would exercise exclusive rights to explore and exploit the natural resources of the seabed and subsoil, would represent a workable compromise acceptable to the several nations for whom these security considerations are crucial.

Second, a regime of this type, coupled with an international registry for mineral claims in both the intermediate zone and the deeper waters beyond, would provide a basis for orderly development of each new phase of technological capability as it develops, while retaining some measure of control over potential conflicts. No one knows yet what we will first recover from the seabed, where it will be recovered, or the technology that will be used to recover it. But it is

obvious that the first claimant must not be permitted to block off exploratory or productive activities by others, nor should his investment be dissipated by allowing latecomers to reap the benefits of his research and development outlays, particularly if his own interests are harmed in the process.

Third, the intermediate zone arrangement would offer an opportunity for smaller nations and noncoastal states to share in some of the benefits of increased outputs from the seabed as future technology brings it with man's economic grasp. From this standpoint its acceptability, as an arrangement with benefits to all and penalties to few, would do much to improve its acceptability in the United Nations and other arenas for international negotiation. Perhaps most important, it would achieve some reasonable balance of conflicting objectives without prejudicing in any way the development of other, more suitable institutional arrangements as knowledge of the seabed and our ability to exploit it expand. Nothing could be more disastrous to progress in both scientific and industrial development of the seabed than a hardening of continental shelf and related definitions into accepted dogma that could be changed only with the greatest difficulty even if it turned out to be singularly inappropriate.

Whatever choice is made among these three alternatives (or any other variations that may be developed), the mechanics of international negotiations are so time-consuming that some interim measures may well have to be considered if incentives for pioneering activity in utilization of seabed resources is to be encouraged. Frankly, I do not feel that uncertainty about the legal regime of the seabed and the fragility of the rights to explore and exploit on or beyond the continental shelf are major obstacles to economic progress at the present time. The real obstacles lie much further back. They include, for example, the absence of a broad based technology needed to provide materials, power sources, life support systems, etc., to enable man to operate efficiently in the sea; the absence of three dimensional knowledge of the continental shelf on a broad grid and of detailed mapping of the more promising areas; and the absence of relatively inexpensive techniques and equipment for locating and assessing most types of minerals lying beneath the surface of the ocean floor. These are problems that cannot be solved by industry alone, though industrial knowledge and capability will play a major part in their solution. The benefits to be derived from breakthroughs in any of these dimensions will be so widespread that no single firm could hope to capture all of them; thus, the major impetus toward a broad-based technology that will make private exploitation of marine resources profitable must come from a partnership between government and industry. And, equally important, that partnership will produce its results at very much lower costs if it is international rather than national in scope.

Even with this caveat, there remain immediate questions of protection of the rights of pioneers in exploration for and production of minerals from the sea. Since there can be no expectation of early development of a definitive international regime for the seabed, interim measures will be needed to encourage the more hardy and the more technically advanced to venture into the sea. An orderly system of registry and licensing of industrial operations based on seabed minerals is clearly essential. It is important to assure that arrangements between potential mineral producers and both the American government and any international agency that may come into being take full cognizance of the possibility of conflict among users. Thus, rights to exploit mineral resources must be on terms that guarantee against mutual imposition of external costs upon one another, and they must take full account of the possibility that mineral activities may damage oher economic activities making use of the water column above (including but not limited to fishing and shellfish production). In this connection, incidentally, I share Dr. Chapman's concern that it would seem feasible and desirable that the federal government guarantee firms pioneering in seabed production against losses from subsequent changes in legal regimes to which the United States Government may become a party.

Finally, I would stress as strongly as possible the need for flexibility in management of offshore lands. The fact that a particular bidding technique has worked reasonably well with respect to offshore petroleum provides no guarantee that it would be equally applicable to the different problems faced in the mining or placer or hard rock minerals.

As the Stratton report suggests, where a promising mineral development opportunity has been identified by the government or by government supported scientific institutions, bidding procedures would appear most appropriate. But where knowledge of mineral potential is too limited to permit successful use

of the bidding technique, it might be more desirable to allow an applicant company to explore a described area under a concession system which would also yield to it the rights to developed any minerals that may be found. Details of such arrangements could be arranged to discourage purely speculative holdings and to insure maximum incentive for actual exploration and development.

It follows that royalty and lease terms should be designed to permit a corresponding degree of flexibility while providing industry with the clearest possible basis for estimating potential returns from its activities.

I should like to close by emphasizing an obvious, but frequently neglected fact—there is nothing inherently better about minerals that come from the sea as compared to those that come from less exotic sources. With a few exceptions, involving national security reasons, there does not appear to be any compelling reason to force the peace of industrial development of mineral production from the seabed to any particular depth or under any particular regime. At the same time, it is essential to use the breathing spell we have to establish a legal regime that does not compound the technological and economic barriers. These are substantial enough. To resolve them will involve major investment outlays, and no combination of public and private enterprise can be expected to mount such an effort without reasonable assurance that the benefits will accrue largely to the firm or nation that generated them. Much time will elapse between the initiation of international action and ultimate agreemen on a satisfactory regime for exploitation of the seabed. It is imperative that the United States make fullest use of that time, not only to take full advantage of such opportunities as already exist, but to lay a solid basis for a flexible management and development program consistent with international as well as national responsibilities and goals.

(Subsequent to the hearing Dr. Crutchfield submitted additional information which is on p. 271.)

Senator Moss. We have one more witness to hear. Mr. Cecil Olmstead of the National Petroleum Council is here and is prepared to testify.

Mr. Olmstead, will you come forward, please. You have a very well documented and fine paper prepared. It will be placed in the record in full, and we will ask you to proceed with highlighting those parts of it which you would particularly like to present to the committee.

STATEMENT OF CECIL J. OLMSTEAD, NATIONAL PETROLEUM COUNCIL

Mr. Olmstead. Mr. Chairman, and members of the subcommittee, it is a privilege to be here this morning and to have the opportunity to discuss with you the views of the National Petroleum Council on this critical question.

I serve as assistant to the chairman of Texaco. I am not appearing as a National Petroleum Council representative, but I did serve on its committee that drafted the report in response to the request of the Secretary of the Interior.

My statement to which you referred is based upon that report to the extent that it was responsive to the questions submitted to us. There has been some water over the dam since that report was filed, but my statement is based upon that report.

If I may briefly summarize, Mr. Chairman, although it wasn't requested, the position that the council took on the extent of coastal State jurisdiction, I would like to do so to provide a basis for the questions which were specifically put to us.

Our recommendation, our conclusion, was that the mineral resource jurisdiction of coastal States including the United States is protected to the full extent of the continental margin and extends to the junc-

tion of that margin with the abyssal ocean floor. As I will indicate later, we think that there is an abundance of legal and geological justification for that position.

Suffice it to say, now, that this legal position provides the basis upon which the United States, and indeed other coastal nations, may exercise a policy choice in reaching decisions as to where the line of demarcation may ultimately be determined.

It seems to me quite clear that the policy choice for the United States is the full extent of the offshore continental margin as described. I think for any decisionmaker in this country that the overriding policy consideration is the national security of the United States.

Now, national security, as you know better than I, is composed of a variety of elements, but certainly among the most significant are military forces and the economic base supporting those forces. Now, the interrelationship of national security and energy is a close one. Petroleum energy is a vital ingredient to national security. Petroleum is the dominant fuel for energy in this country providing some three-fourths of the requirements for energy. The American Armed Forces have an exceedingly high dependency upon petroleum. Their flexibility, their mobility could be impaired promptly without supplies of petroleum without interruption and subject to U.S. control. Their equipment, their materiel, involves petroleum in one way or another—either the production, the manufacture of that equipment, or its maintenance.

The U.S. economy itself is the largest consumer of energy petroleum by far in the world. Highly industrialized economies evidence a direct ratio between extent of industrialization and the use of energy. So that the ability of the U.S. economy to support civilian requirements and military requirements, relies heavily upon petroleum.

Now, the United States demand for energy is growing quite rapidly. The United States population, according to the Census Bureau estimates, is expected to reach some 350 million people by the year 2000. This, alone, would place tremendous increases upon the requirements for energy. But along with this increase in population per capita demand is also rising rapidly.

As I said, oil and gas today supply three-fourths of the total energy demand of the United States, and this ratio will not change in the foreseeable future.

Just to give you the range of increase, in 1970 U.S. demand for petroleum will amount to 14 million barrels per day. During the decade of the 1970's, by 1980, this will rise to 20 million barrels per day.

To continue the present ratio of reserves to production, the oil industry must find 80 billion barrels of new domestic oil by the year 1980. This would be 2½ times the present reserves of the United States.

Since 1950 the ratio of United States land reserves to production has been in a decline. Exploration on land has also been declining. Contrariwise, since the year 1946 when offshore petroleum operations were begun off the United States coast, the ratio has been increasing so that today 14 percent of our domestic crude oil and 12 percent of our domestic natural gas is found in the offshore areas.

By the year 1980 if there is no change in the legal environment and in the economic environment in the offshore area, it is estimated that

30 percent of United States crude oil requirements will be drawn from the offshore area, it is estimated that 30 percent of U.S. crude oil requirements will be drawn from the offshore areas. That is a doubling. The continental margins off the United States coast are prospective for hydrocarbons although only initial and preliminary approximations are known regarding the outer areas of the margin.

The United States, in its history, has never been required to rely heavily upon imported energy. Today only about 20 percent of United States petroleum is imported. Today the United States maintains some excess of producing capacity. This ability of the United States to provide most of its requirements from domestic sources and to maintain some excess or spare capacity is indeed a valuable national asset.

Now, the United States dependence on foreign oil to an extent that deprivation would impair its economy would impose real dangers to the freedom of choice of our country in foreign affairs. It would impair our ability to support our allies and provide them with leadership as we have done in the past, and it would in the long run, I am sure, Mr. Chairman, greatly increase the cost of the essential energy components of our economy.

The United States, unlike some industrialized countries abroad, is not required to make a policy choice that would lead to extreme reliance on foreign sources of supply. Indeed, were the countries of Western Europe in the position we are in today to be able to supply from their own domestic source their petroleum needs, I assure you there would be a much greater sense of security in Europe than there is today.

Now, the position of the NPC on the extent of coastal jurisdiction that I mentioned before is based upon an analysis of the history of the Geneva Convention on the Continental Shelf, an interpretation of its language in the light of that history itself, but we don't rest our position solely upon the Geneva Convention. After all, it is not the only source of international law. Our interpretation rests upon the record of the executive branch in proposing ratification to the Senate. It rests upon the Senate's understanding in hearings on the treaty itself when Ambassador Arthur Dean was before the Foregn Relations Committee. It rests upon what is perhaps the most significant basis of international law, and that is practice and custom among nations. An increasingly large number of nations today in all parts of the world are leasing submarine areas in water depths considerably deeper than 200 meters. This is occurring off the west coast of Africa. It is beginning to occur in the Caribbean and certainly in the United States there are leases beyond 200 meters of water.

I think that the decision of the International Court of Justice in the North Sea Continental Shelf cases properly interpreted provides justification for the continental margin offshore coastal States being at least under that state's natural resource jurisdiction.

Finally, the geologists tell us—and I am no geologist—I happen to be a lawyer, as is Senator Stevens—the geologists tell us that there is no differentiation between the geomorphic or geological nature of the continental margin and the land territory of coastal states. I suppose an ice age or two ago they would have been surface areas. As the International Court of Justice said, they are a natural prolongation of

the coastal state into and under the sea. Indeed, in that decision the Court said that the coastal state had *ipso facto* title. Certainly the convention doesn't go that far and neither did the report of the National Petroleum Council.

I want to say that there is ample and abundant legal and geological justification for the position of the National Petroleum Council. Beyond that, it seems to me (and the map displayed in the committee room is quite striking in this connection) that a coastal state, as Senator Stevens indicated, has the primary interest in things that occur close to its shores, that standards for, say, petroleum operations, requirements for operations, safety requirements, these things, it seems to me, are better in the hands of coastal states in those areas that we are talking about that are comparatively close to the coastal states, than in the hands of the international community or some international agency which may have different interests than those of the coastal state. Particularly if the proceeds from operations were going to some international welfare fund, which might seek to maximize revenue, whereas the coastal state might well favor less maximization of revenue, but higher costs resulting from standards which it might want to impose.

In that connection, Mr. Chairman, I was struck by your remarks in the beginning about the relationship between conservation of this environment and operation. I am pleased to say that the Secretary of the Interior has requested the National Petroleum Council to do a thorough study and report to him on the matter of petroleum operations and environmental conservation. A committee has been organized. We are hard at work and we hope to have something helpful in this respect in the next few months to become a part of the entire inquiry preliminary to decisionmaking in that area.

Senator STEVENS. May I interrupt right there, Mr. Chairman?

Senator MOSS. Yes, certainly.

Senator STEVENS. I think that is very important. I am hopeful that the council will respond because you know how much concern was raised after the Santa Barbara incident and yet one of these tankers that we are going into now, if it had a real sizable accident, would so dwarf the Santa Barbara incident that it would look like a tempest in a teapot. Yet we seem to be going toward the theory that the Nation would be better off to import more of its oil; in other words, to increase the risk of serious environmental damage due to increased transportation of oil by water. I would hope that the council would respond to that and I am very interested in your comment also about the coastal States. As you look at this, and I wasn't relating it to the comment before, but I think you can very clearly see the Canadian interest in the transportation through the Northwest Passage from the point of view of environmental protection. Not from the point of view of interfering with international law concepts built up over the years, but from the sheer point of view of their country, I think they have the right to limit that passage just as we have the right to limit the passage through the Shelikof Straits or the Inside Passage, as we call it, in Alaska. I think it is something that has been recognized for years.

I would hope that your technical people in particular would concentrate on finding a way to express what we all think is a proper exercise

of the sovereignty of the coastal State consistent with the traditional customs and usages that have been recognized as part of the international law. I think that is very good. Thank you.

Mr. OLMSTEAD. Mr. Chairman, if I may respond briefly to Senator Stevens' remarks, I had, I think I can call it, the pleasure of speaking at the University of Toronto in January on the question of the legal status of the Arctic Archipelago in the northland, in the northern area of Canada. Two aspects of the question we are talking about now were of vital concern there—the Continental Shelf interest and the question of the status of the waters of the Northwest Passage. I must say that I was quite impressed by what I think is the reasonable position that the Canadian Government is taking on the question of passage through these waters. Of course they are subject to the opposition on trying to push them into perhaps an embarrassing position but, nevertheless, I think Canada has every right to insist that operations carried out there protect the environment and ecology. I think, again, this concern illustrates the coastal State's interest in affairs that take place near its shores.

I don't think Canada should be subjected to some international regime that is going to determine the rules and regulations for operations that are so vitally connected with its area.

Senator STEVENS. I think it is interesting to point out in that regard that, to my knowledge, there has been no assertion of the right to control the activities of the U.S. Coast Guard icebreakers as they now proceed to exploit the Northwest Passage, and as we get larger icebreakers I think that there may well be more frequent use of the Northwest Passage.

But, contrary to the situation off the Russian Arctic coast, the Canadians have never, to my knowledge, interfered at all with the right of the free passage of military vessels or as far as that is concerned with the passage of our military vessels under the ice cap, which we all have known about.

Mr. OLMSTEAD. I think that the most severe position that might materialize would be the adoption of the right of innocent passage through those areas. I think the opinion in the Corfu Channel Case between Albania and Britain in the International Court would assure innocent passage, which would cover commercial passage through the Northwest Passage.

Again, I think Canada has the right to insist and expect that the environment and ecology, just as in the case of the State of Alaska, will be protected and the question of oil spills, as you mentioned, is very pertinent in this regard and the NPC Committee on Environment is studying it comprehensively.

Senator STEVENS. Along that line, I think you will find that the *Rebecca* was seized in Cook Inlet, seized by the State of Alaska and turned over to the Federal Government when it left an oil spill there but, to my knowledge, the right of the coastal State was never successfully challenged in exerting that jurisdiction.

Mr. OLMSTEAD. I agree. Mr. Chairman, there are two points I would like to address myself to briefly, if I may, in the remaining time.

The first is the question of whether mineral or petroleum operations on the Continental Shelf can be harmonized with freedom of the seas.

Certainly our experience thus far would indicate that these operations and other uses of the water column and the surface can be carried on harmoniously. You have the extensive activity going on in the North Sea now, exploration and some producing. You have long-standing operations in the Persian Gulf of this nature, and the Gulf of Mexico. There is no question in my mind but what these activities can be harmonized. They have been harmonized. If there is any doubt that seabed mineral activities would lead to infringements, and I don't believe that this is a valid position, there is no question but what a protocol to the Geneva Convention without its reopening could be drafted, submitted for ratification, that would expressly assure this. I think the convention does now in conjunction with the convention on the high seas assure these freedoms, but I don't think that there is any necessity for the United States to compromise its interest in the mineral domain of its continental margin in order to assure that other freedoms will be accommodated.

Lastly, some people take the position that industry, I suppose the petroleum industry and the hard minerals industry are those that are considered in the forefront of this, would be better off dealing with an international regime, perhaps in the United Nations, than dealing with individual nation states, and indeed they question whether industry has fully analyzed this and has reached the proper conclusion. I can say several things about that.

So far as the petroleum industry is concerned, it has been operating abroad for almost 40 years all over the free world. Its relations with foreign governments vary but, on the whole, I think it has shown, and perhaps the hard mineral industry as well, that they can deal with foreign governments on a basis that is mutually beneficial to all the interests concerned. The contribution of the minerals industry, petroleum and the hard minerals industry, to the economic development of the emerging countries has been greater than all of the other input to the economic development of the developing nations. The transfer of know-how and resources, the investments, the generation of revenue to the producing countries, both hard minerals and petroleum, has been outstanding. So that if there is concern for an international development fund, it seems to me that the free enterprise process of going abroad and carrying skills and resources and producing minerals with the resulting income to the developing countries, is indeed the best economic development fund that I have come across.

Now, our Government has also had since 1890 a very strong policy for competition and free enterprise. It seems to me to take a major portion of the world's resources and put them into a single international regime for this international regime to deal on a uniform basis would promote the greatest monopoly, the greatest restraint of trade that one has ever contemplated.

So I think this would be wholly inconsistent with our own policies and views about economic competition and free enterprise. So far as the developing countries are concerned, operations are going on all up and down the coasts of Latin America and Africa. If these countries have continental shelves, they can deal with private enterprise on whatever basis they wish for licensing exploration and production. They will receive the major share of the economic benefits from this just as they now are from operations on their land areas.

What is the difference between their sea areas and their land areas in terms of dealing with these countries, for the production of petroleum, and the revenue that would accrue to the developing world? So, in conclusion, I feel very strongly, Mr. Chairman, that our position on the extent of coastal State jurisdiction is a widely shared one, a position that the United States should adopt and adhere to, and that as far as the deep ocean area beyond coastal jurisdiction is concerned we should proceed slowly in anything very definitive to deal with the resources that may or may not occur there.

Thank you very much.

Senator Moss. Thank you very much, Mr. Olmstead, for your statement stating the position generally of the Petroleum Council, a very extensive and effective statement.

My colleagues may have some questions. I am going to have to be excused, and I am going to ask Senator Hansen if he would take over the chair for whatever period of time. If there are questions, also, of the other witnesses who have remained, they can be recalled for that purpose.

Unfortunately, I have an appointment right at 12 o'clock that I must keep.

Senator Hansen, if you would do so, I would appreciate it.

May I express my appreciation to you, sir, and to the other witnesses who came here today and gave us their testimony.

Mr. OLMSTEAD. It has been a privilege to be here.

Senator HANSEN (presiding). Senator Stevens, do you have any questions to ask of the witness?

Senator STEVENS. No.

I appreciate your testimony.

Senator HANSEN. Mr. Olmstead, let me also express my appreciation for your testimony. I am delighted that you have underscored the great importance of the issue of national security in our understanding and evaluating this whole issue. Your position happens to be one which reflects my convictions, also. I think you have done an excellent job in calling attention to some very serious considerations that we must not overlook as we try to formulate a policy.

If there are no further questions, the hearing is adjourned.

Mr. OLMSTEAD. Thank you, sir.

(Mr. Olmstead's complete statement follows:)

STATEMENT OF CECIL J. OLMSTEAD, ASSISTANT TO CHAIRMAN OF THE BOARD, TEXACO INC.

My name is Cecil J. Olmstead and I serve as Assistant to the Chairman of the Board of Texaco Inc. I am Adjunct Professor of Law at New York University School of Law where I teach International Law. I served as a member of the Technical Subcommittee that drafted the National Petroleum Council's Report to the Secretary of the Interior, *Petroleum Resources Under the Ocean Floor*, and presently serve as President of the American Branch of the International Law Association. I am, however, appearing in a personal capacity and do not speak for any of these organizations.

Mr. Chairman, I am grateful for the invitation extended to me through the National Petroleum Council to appear and to have the opportunity to respond to the issues raised in your letter of February 16, 1970, addressed to Mr. Vincent M. Brown, Executive Director of the National Petroleum Council. My statement, in answer to the questions contained in your letter, represents the position of the National Petroleum Council to the extent its report deals with those questions.

Although I am a lawyer, it is particularly gratifying that you have requested the industry witnesses appearing before this Subcommittee today to focus on the policy considerations relating to the impact of alternative boundary locations on the present and future exploitation of living and non-living resources from the marine environment. The legal aspects concerning the exploitation of these resources are extremely important, but the policy considerations are vital.

Your letter requests comments on numerous basic issues. Fundamental to analysis of these issues and to the formulation of policy for their resolution is consideration of the national security and economic interests of the United States.

Before responding specifically to the questions posed in your letter, it may be appropriate to present the views of the NPC concerning the security and economic well-being of the United States without regard to what may be of particular interest to the petroleum industry. The issues at stake are of great consequence to the future of this Nation and its role in contributing to the stability, welfare, and security of the free world.

The fundamental objective of public policies relating to petroleum should be to serve the general welfare by:

Assuring adequate supplies of oil and gas for national security;

Encouraging ample supplies of oil and gas at reasonable prices for an expanding economy; and

Promoting efficient and effective use of resources and sound environmental conservation in all oil and gas operations.

The recommendations of the National Petroleum Council on the subject of national security are stated in its 1966 study entitled *Petroleum Policies for the United States*. To make clear the fundamental considerations in answering the questions raised by this Subcommittee, it seems appropriate to quote one of these policies and to elaborate on some of the reasons that support its validity.

National Security.—"A healthy and expanding domestic petroleum industry continues to be essential to the security of the United States and to the defense of the free world."

In a more recent report, *U.S. Petroleum Imports 1969*, the NPC dealt with the concept of national security and the critical role therein that is played by petroleum.

A nation's security is composed of a number of elements including its scientific and technological base, its population effectiveness and a myriad of others. Perhaps the two most vital are military security and the economy which supports it. A strong and effective military is absolutely dependent upon economic strength.

Energy is intimately related to both military security and to economic well-being. As will be shown below, petroleum is the dominant energy upon which both rely. The flexible and highly mobile U.S. armed forces would be immobilized without petroleum as a fuel for transportation. Petroleum is also employed in some way with the production, use, and maintenance of virtually every item of the equipment and material of those forces.

Since energy is the life blood of any economy, then the more highly developed and industrialized is the economy, the greater the reliance upon energy. The U.S. economy is no exception to this relationship between development and energy, but rather proves the relationship.

The civilian economy, this Nation's ability to produce goods and services for peacetime economic growth and for national defense, rests heavily upon the availability of petroleum. A few examples indicate the diverse U.S. dependence upon this fuel:

(1) Some 99 percent of transport in the U.S. runs on petroleum;

(2) The average American farm today consumes about 2,750 gallons of petroleum fuel a year for all purposes;

(3) Oil and gas together account for about 36 percent of the fuel used in electric power generation;

(4) Some 90 percent of the homes in the United States are heated by either oil or gas.

The capability of the United States to meet the rising domestic demands upon its resources and to continue to meet its international responsibilities of free-world leadership depends in large measure upon the sustained long-range growth of its own economy. And there is no question but that this growth cannot occur

without an adequate and secure supply of petroleum for both the immediate and future requirements of the Nation.

With respect to the security of petroleum supply, the NPC emphasizes the fact that today the U.S. domestic petroleum industry can meet our Nation's military requirements and sustain the U.S. economy in the face of supply disruption abroad, and also assist in the petroleum supply of our allies. The United States, with substantial oil reserves on land and offshore, is not reduced to accepting the option of dependence upon petroleum supplies which are not within U.S. jurisdiction. To accept such an option would endanger this Nation's freedom of choice, its national security and its position of free-world leadership.

Under wise leadership and strong and sustained effort, the United States has reached its preeminent position on the firm foundation of its national security, that is, its military capability, its economic strength, and its ability to act independently of foreign coercion. This position could not have been attained, nor can it be maintained, without an additional security—the security of a sufficient energy supply. Assured domestic energy resources have been among the fundamental ingredients of U.S. national security. The maintenance of such resources, therefore, should be the prime consideration in assessing the impact of alternative lines of demarcation regarding the extent of U.S. jurisdiction as a coastal nation over the mineral resources of the submerged continental mass off its shores.

The future energy requirements of the United States, the proportion of these which must be supplied by oil and gas resources and where the petroleum reserves are located for these supplies are basic considerations in determining which of the boundary alternatives is in the best interest of this Nation. And all estimates of future demand for energy and petroleum reflect enormously increasing requirements.

During the past 50 years the United States population has doubled to 200 million and by the year 2000 is estimated to approximate 350 million. At today's per capita demand, this would in itself require a tremendous increase in energy supply. However, per capita demand is also increasing. The changes in energy demand as predicted by the Department of the Interior are shown in *Figure 1.* Using oil as our yardstick, the total combined energy expansion will, by 1980, have reached the energy equivalent of an additional 20 million barrels of oil per day. The critical significance of having the capacity to meet this tremendous energy requirement to the well-being of the Nation is obvious.

At present, petroleum—oil and natural gas—supplies ¾ of our total energy demand, and it is expected that this ratio will remain essentially constant through 1980. As shown in *Figure 1,* oil and natural gas will be required in far greater quantities than heretofore. In view of these facts it is of the utmost national importance that the domestic petroleum industry be maintained in a viable and expanding condition. Today the U.S. consumes approximately 14 million barrels of oil per day. By 1980 the daily oil requirement is estimated to be over 20 million barrels per day. If a substantial portion of this crude oil is to be provided from domestic sources without excessively depleting our national reserves, the oil industry must find close to 80 billion barrels of new domestic oil by 1980. This is almost 2½ times the total U.S. proven reserves at present, or about ⅕ of total known free-world reserves. Where will the U.S. look for its oil supply?

In spite of these indicated needs for domestic petroleum the ratio of crude oil reserves to production *on land* has been declining since 1950; and, exploration *on land* has declined since 1955 with a noticeable lag in new discoveries *on land.* A major reason for this has been the lack of large field discoveries. The Alaskan North Slope discovery is a notable exception. Yet even if the estimates as to the recoverable reserves prove accurate, these Alaskan reserves would only provide us with a few years supply of crude oil at present rates of consumption. Other factors being equal, it costs at least as much to find a small oil field as it does to find a large one. Thus the industry tends to direct its exploration to the less explored regions where the probability of finding large fields is greater. A logical place for such exploration is the near offshore where proven conditions on land suggest similar prospects for finding oil.

In 1946 the U.S. petroleum industry began significant drilling and producing operations in areas offshore this Nation's coasts. Offshore production has grown rapidly in this short period as is shown in *Figure 2* and at present accounts for about 14 percent of domestic crude and about 12 percent of natural gas. The con-

tribution from offshore will continue to grow and it is expected that the increase will be about 15 percent per year for the next several years. At this rate about 30 percent of domestic crude demand would be supplied by petroleum from areas of the continental shelf offshore the U.S. coasts by 1980. Unlike the shallow-water near-shore portion of the continental shelf, the outer portions of the continental margins have undergone little exploration. There is only a first approximation of the petroleum prospects of the outer shelf, the slope and the rise. It is known, however, that sediment thicknesses are adequate and there is a high probability of good source potential, reservoir beds and accumulation traps of promise. Available data seems to suggest that sediment volumes beneath the rises and slopes may be substantially larger than beneath the shelves.

I should like now to deal with the specific questions put to the National Petroleum Council in your letter of invitation to appear before this Subcommittee.

Would you advocate that the United States adopt a position that the present definition of the outer boundary of the continental shelf is adequate and that we should not press for additional refinement?

The National Petroleum Council in its Report to the Secretary of the Interior, *Petroleum Resources Under the Ocean Floor*, reached the conclusion that the United States should stand on its rights under the present language of the Geneva Convention on the Continental Shelf and under no circumstances be drawn into negotiations which would lead to a reopening of that Convention. The Council recognized, however, that clarification was desirable to establish clearly the extent of the claims, and the limitations on those claims, of coastal nations' jurisdiction over the mineral resources of the seabed and subsoil thereof.

The Council recommended that the parties to the 1958 Convention, with such additional nations as may join them, promulgate parallel uniform declarations stating the extent of their claims and the limits thereon under the Convention. There is precedent for such action. The 1954 International Convention for the Prevention of Pollution of the Seas by Oil was subsequently clarified in 1962 by the Conference of Contracting Governments, signed by 29 of the original 38 participants in that Convention. In order to draft a clarifying declaration or protocol to the Continental Shelf Convention and without necessity of reopening it, our Government should take the lead in conferring with the coastal nations which with the United States have ratified the Convention.

The practice of many coastal states, including the United States, has been to move seaward in exploiting the mineral resources of the seabeds beyond the 200-meter isobath. If the United States should seek to establish a narrow shelf boundary at the 200-meter isobath, or at some other arbitrary point beyond this but short of the full extent of the submerged continental margin off its shores, or to seek an intermediate zone as proposed by the Marine Science Commission, this could involve a reopening of the Geneva Convention or would at least require a protocol to be agreed to by the nations party to the Convention. A conference of nations convened to negotiate another convention might open Pandora's box.

In the December meeting of the United Nations General Assembly there was a strong movement culminating in a resolution to start the machinery in motion to reopen not only the Geneva Convention on the Continental Shelf, but a Law of the Sea Conference "to review the regimes of the high seas, the continental shelf, the territorial sea and contiguous zone, fishing and conservation of the living resources of the high seas, particularly in order to arrive at a clear, precise and internationally accepted definition of the area beyond national jurisdiction in the light of the international regime to be established for that area." The efforts of the United States and some of the developed countries to restrict the resolution to ascertaining the views of Member States on the desirability of convening at an early date a conference confined to a review of the Continental Shelf Convention and an interational regime to be established for the area beyond national jurisdiction was overwhelmingly rejected. This is a clear indication that if the United States risks reopening even the Continental Shelf Convention it is highly unlikely that we could effectively guide the course of the negotiations and much less the results.

If it is assumed that the interests of the United States require a narrow shelf or a broad shelf or a combination involving an intermediate zone, there

is no assurance in reopening the Geneva Convention that any of these objectives could be secured. To reopen the Continental Shelf Convention would be to "buy a pig in a poke."

Does this position indicate that the United States supports the contention that the ultimate legal limit to the continental shelf extends to the seaward edge of the continental rise?

The position stated in answer to the previous question would not indicate, *ipso facto*, that the United States would support the contention that the ultimate legal limit to mineral resources jurisdiction extends to the seaward edge of the continental rise. Nonetheless, such contention is not inconsistent with this position. In fact, it is in essence the position that NPC has urged in its Report to the Secretary of the Interior that the U.S. Government support. In the view of the NPC, the Continental Shelf Convention clearly confirmed the rights of coastal nations to jurisdiction over the seabed and subsoil mineral resources of the submerged portion of the continent adjacent to their shores extending over the continental shelf, the continental slope, and at least the landward portion of the continental rise (rather than the seaward edge of the continental rise as referred to in the question). This view was arrived at after the most careful analysis and study.

The NPC concluded and recommended to the United States Government that based upon the "exploitability," "adjacency" and "exclusivity" criteria of the Geneva Convention on the Continental Shelf, the jurisdiction of the coastal nation with respect to mineral resources under the ocean floor extending seaward is protected so as to encompass the submerged continent down to its junction with the abyssal ocean floor. This conclusion and recommendation is based upon: (1) the language of the Convention on the Continental Shelf itself; (2) the preparatory work and records of the International Law Commission which drafted it; (3) the conference which negotiated and signed it; (4) the record of the U.S. executive branch and the Senate during the ratification process; (5) the practice of a large number of nations (including the United States) in leasing submarine areas in water depths considerably deeper than 200 meters; (6) the rationale of the learned recent judgment of the International Court of Justice in the North Sea Channel Continental Shelf cases; (7) the conclusions of the vast majority of professional and scholarly bodies that have studied the question; and last, the views and recommendations of geology experts concerning the profound differentiation between the submerged continental mass and the deep ocean basin.

This posititon is in complete harmony with existing U.S. practice and with the practice of other nations that have taken action in this matter. This position also protects the interest of the United States and other coastal nations in resources that are by nature a part of their domain and vital to their economic development and progress.

What type of an interim policy should be established with respect to the regulation and control of the activities of U.S. nationals related to the exploration and exploitation of resources located on the deep seabed beyond the seaward limits of the outer continental shelf prior to reaching international agreement on a deep seabed regime?

Several factors need to be taken into consideration with regard to operations that may be undertaken prior to the conclusion of an agreement on international arrangements relating to the area beyond the limits of coastal state jurisdiction. Initial consideration is the fact that the greatest immediate interest in offshore petroleum activity will be in areas under the exclusive mineral jurisdiction of the coastal state. As pointed out by the 1969 Report of the NPC, within less than five years technology will allow drilling and exploitation in water depths up to 1500 feet (557 meters). Within ten years, technical capability to drill and produce in water depths of 4000–6000 feet (1219–1829 meters) will probably be obtained. Progress of industry into ever deeper waters is limited primarily by economic attractiveness rather than by technological capability. About 80 percent of the total U.S. domestic offshore oil supply is currently being produced from water depths of less than 100 feet (30 meters). Costs of petroleum operations increase rapidly with increasing water depth and distance from shore. Thus the advance of petroleum production into deeper waters has been relatively slow. There is, therefore, no great urgency from the standpoint of the development of petroleum exploitation to establish an interim policy regulating and controlling the activities of U.S. nationals related to the exploration

and exploitation of petroleum resources that may be located in the deep seabed beyond the limitations of national jurisdiction.

The question posed above refers to resources located "on" the deep seabed. It is assumed, therefore, that this question is related solely to exploration and exploitation of minerals lying on the ocean floor, such as nodules bearing hard minerals. Nevertheless, as the NPC did take a position with respect to mineral resources development in the area seaward of costal states' exclusive jurisdiction which is applicable to minerals both on or in the seabeds, it is appropriate to include it in this statement.

Based upon a thorough study of international law pertaining to the high seas and a review of the authorities, the NPC concluded that international law imposes no prohibition upon the freedom of a state or its nationals to explore or exploit the resources of the bed of the high seas, if this freedom is exercised with reasonable regard for the interests of other states in their exercise of high seas freedoms. Although general rules of international law may not be sufficiently detailed to provide the necessary certainty for long-range mineral exploitation in the deep-ocean region, they are sufficient to cover preliminary deep-seabed activities. As an interim policy therefore, standards of conduct should be formulated by the United States and other nations individually regarding the operations of their nationals engaged in activity pursuant to national license. Specifically these standards should eliminate present uncertainty as to the accommodation of mining with other uses of deep-sea areas, and should include a means of defining and establishing claims and the conditions whereby they might be forfeited.

Prior to the establishment of internationally agreed deep-seabed arrangements, a step which might further international [cooperation would be the establishment of an international] registry; first, to serve only as a record of exploratory activity, and later, after acceptance of a code of conduct, to serve as a means of filing claim over minerals in a specific area. Initially at least, the procedure should provide for registration of claims by nations only, with respect to those which may be licensed by them. The establishment of such a registry and agreed standards of conduct could provide a measure of certainty about rights and interests which would encourage feasible mineral exploitation during the interim period.

If the United States decides to take a position on a more precise boundary there are at least three general alternatives:

(1) A narrow shelf extending no further than a point between the 200 and 550-meter isobath;

(2) A wide shelf extending to the seaward edge of the continental rise;

(3) An intermediate zone arrangement which would extend from the 200-meter isobath to the seaward edge of the continental rise.

How would this Nation's long and short-range economic and national security interests fare under each of the alternatives?

In considering the policy aspects of this question, we are of necessity not in a position to assess the implications of military uses of the seabed. Thus, the NPC refrained from any discussion of these uses.

Futhermore, while some legal authorities differ with the interpretation by the NPC of the 1958 Continental Shelf Convention, the weight of opinion by those organizations and countries which are taking a position on the issue increasingly supports that of the NPC. Hence the interpretation of the Shelf Convention confirming exclusive seabed mineral resources jurisdiction to the coastal state outward to encompass the submerged continent down to its junction with the abyssal ocean floor is a sound one and finds increasing favor with governments and experts. There is, therefore, no legal impediment concerning a choice among the three alternative boundaries framed in the given question. Thus, policy considerations are paramount in arriving at a decision as to which alternative is in the best interest of the United States.

WIDE SHELF

The NPC supports the wide shelf alternative and rests its case on the policy considerations which are treated in the introductory section of this statement. The conclusion to be drawn is that in view of the tremendous energy needs of our Nation, the petroleum resource potential of our continental margin is so valuable and strategic that prudence dictates our country should protect as fully as possible all its existing rights to them.

The offshore margins of the U.S. have promise of holding extremely important

reserves of oil and gas under U.S. control, with highly significant implications for national security and economic well-being. As the Department of Defense recently stated, it is imperative that the U.S. domestic industry be capable of sustaining this Nation's requirements for oil under any conditions, because oil is absolutely essential to the Nation's defense posture. Thus, the seaward extent of the U.S. offshore domain over petroleum resources is of critical importance to the future of this country.

The potential of the far outer continental margin may not be realized for some years. The United States, however, should take a stand now to assure that its long-range economic and national security interests with respect to the promising petroleum provinces of the entire submerged continental mass are not jeopardized. Vacillation may well cause an erosion and forfeiture of the rights which the United States already has to the mineral resources out to the edge of its continental margins.

NARROW SHELF

For the reasons previously stated, no known advantage would accrue to the United States in terms of either long or short-range economic and national security interests in opting for a narrow shelf. Among the many disadvantages, the following are worthy of consideration:

(*a*) The United States would be in the position of releasing its existing rights to a very considerable portion of its potential mineral estate which, in terms of its national security and economic well-being, is a priceless heritage it can ill afford to abandon. It is highly questionable whether the American people should acquiesce in the abdication of natural resource jurisdiction over submarine areas that has been confirmed to this country by international agreement and widely shared state practice.

(*b*) In considering a line of demarcation between 200 and 550-meter isobath the question arises why 300, 400 or 500 meters, or some other depth. If the natural zone of demarcation provided by the geomorphic distinction between continental mass and abyssal ocean area should be departed from, the decision as to where to establish the line would almost undoubtedly be an arbitray one arrived at by compromise or purely political considerations.

(*c*) Under this alternative, at some point a line of demarcation would be established between the 200 and 550-meter isobath. The line then would be on the geological continental shelf. The area beyond would be administered under an international regime. Presumably concessions in this area of the continental margin offshore the U.S. would be granted under the international regime not only to Americans but also to foreign nationals to explore and exploit on the continental shelves off our coast. In such circumstances foreign nationals would be outside the jurisdiction of the U.S. to prescribe standards and regulations for their operations despite the proximity of such operations to its shores.

The interests of an international regime in authorizing and regulating these operations may well be inconsistent with those of the United States whose coastal areas could be endangered by inadequate standards for operations or lack of enforcement of adequate standards. For example, an international regime may be primarily interested in obtaining the maximum return on operations and therefore would authorize operations without careful concern for the aesthetic and conservation interests of the United States and other coastal nations.

Aside from pollution problems, how would interference with fishing, navigation, cable-laying and other uses of the sea be properly controlled? Is it reasonabel to assume that other countries in regard to their nationals or some agency under an international regime will have the capability or concern to supervise adequately petroleum activities on the continental shelf off our shores beyond our narrow shelf jurisdiction? What is to prevent foreign intelligence activities being conducted close to our shores in connection with petroleum operations or associated with the activities of an international regime?

(*d*) The prospect of establishing a line of demarcation between the 200 and 550-meter isobath would undoubtedly inhibit the seaward exploration and exploitation now occurring on the U.S. and other continental shelves. If such line were established landward of where exploitation is occurring, this would of course immediately place in jeopardy the large investments being made to explore and exploit the area beyond the boundary and the lease agreements underlying these activities.

(*e*) A narrow shelf would deprive the U.S. Treasury of anticipated revenues from minerals in the American continent beyond water depths of a boundary set between the 200 and 550-meter isobath. Based on experience from operations

in the small percentage of the continental margin explored to date, the value at the wellhead of the petroleum which will probably be produced from the areas at stake can be estimated in tens of billions of dollars. Of this, a large portion will accrue to the Federal Treasury in taxes, bonuses and royalties.

Up to the end of 1968 the U.S. Treasury had received about $4 billion from offshore petroleum bonuses on lease sales and royalties on production. These revenues do not include taxes such as general income taxes. In a single 12-month period ending in June 1968, it received $1.7 billion from its submerged lands, an amount greater than the total which the Federal Government has received from its onshore petroleum leases in the entire 48-year period since the enactment of the 1920 Mineral Leasing Act. Revenues of this magnitude and more are likely from the area lying between a narrow and wide shelf. The position of NPC is that, manifestly, it is to the interest of the U.S. Treasury to maintain the maximum geographical extent of U.S. jurisdiction over the mineral resources of the submerged portion of the continent.

INTERMEDIATE ZONE

The NPC carefully considered various concepts and recommendations for the establishment of an "intermediate zone" of the type that had been put forward at the date of publication of its report and rejected them.

The principal proposal of that nature was the one advanced by the Marine Science Commission that would fix the seaward limit of a coastal state's continental shelf at the 200-meter isobath or 50 miles from the outer limit of its territorial sea, whichever would give the coastal state the greater area. An intermediate zone would be established beyond the continental shelf as thereby redefined, the coastal state being divested of sovereign rights in such a zone, and left with a bare authority to license mineral operations therein and make payment of a portion of the value of any production to an international authority. Any exploration and exploitation in this intermediate zone would otherwise be governed by a new international political-legal framework applicable to the deep-ocean seabed areas beyond the intermediate zone.

The NPC rejected this proposal in the first place because it would clearly divest the United States and other coastal nations of exclusive mineral rights seaward of the 200-meter isobath or 50 miles and would thus be contrary to the Continental Shelf Convention.

Moreover, adopting such proposals would deprive the United States of anticipated revenues from minerals in the American continent beyond water depths of 200 meters which would be paid to an international fund. The economic and national security interests of the United States, short or long-range, would require, for the reasons already stated, that United States exclusive jurisdiction over seabed resources to the edge of its continental margin should not be subject to limitations related to an international regime. A hybrid international zone arrangement, being neither fish nor fowl, would inhibit development of seabed resources to the detriment of not only the United States but the world community as well.

The protracted negotiations to reach agreement on an intermediate zone arrangement, if such an agreement could even be consummated, would not provide a climate for the orderly and progressive development of continental shelf mineral resources in the best interest of the United States and other coastal states and would place a continuing cloud upon the stability and continuance of present rights.

How would U.S. private industry (petroleum and hard minerals) acquire ready access to seabed resources in its dealing with the United States Government, other coastal states and an international deep-seabed regime under the foregoing alternatives?

Area of Exclusive National Jurisdiction

Under all three alternatives—a narrow shelf, a wide shelf, or the 200-meter isobath in the case of an intermediate zone arrangement—the seabed area landward of the boundary would be fully under the control of the coastal state for mineral resources exploration and exploitation given the conditions suggested in your questions. Within the area of exclusive national jurisdiction, the acquiring of access to seabed resources would continue the same conditions as exist today. The petroleum industry deals with the Department of the Interior for access to petroleum resources under Federal lands which include the submerged continental shelf areas. With regard to other coastal states, the industry deals with the appropriate department having responsibility for offshore leasing and concessions.

Area of the Intermediate Zone

The intermediate zone alternative described in your letter to the NPC states that under such an arrangement "limitations would be placed on the coastal nation's sovereign rights over seabed resources under the Geneva Continental Shelf Convention" without indicating the nature of such limitations. Under the present Convention, of course, there are no limitations on the coastal nation's rights other than those specifically stated in the Convention itself. An intermediate zone proposal which would divest present basic sovereign rights of coastal states would require revision of the Geneva Convention involving, so far as the U.S. is concerned, the advice and consent of the Senate to treaties.

However, if the coastal state retains the exclusive right to explore and exploit seabed resources in the intermediate zone as described, then the petroleum industry would continue to deal with the U.S. Government and other coastal states to acquire access to petroleum resources there in the same manner as it does with respect to the area landward of an intermediate zone. The nature and extent of limitations and the remaining jurisdiction of the coastal nation would largely determine the attractiveness and the ready accessibility of these resources to the U.S. petroleum industry. A minimal limitation would presumably be for coastal nations to pay a portion of their revenue realized from the intermediate zone to an international fund. On the other hand, rather extensive limitations applying to the intermediate zone were proposed by the Marine Science Commission in its report, *Our Nation and the Sea.*

The NPC disagrees with intermediate zone proposals of the type proposed by the Marine Science Commission, for the reasons previously indicated. The Council additionally points out that, during the long interim period while such proposed arrangements are being negotiated, the United States and other coastal states would be subjecting present and future lessees and operators in the intermediate zone to the hazard that the royalty rates would be increased or the terms of the contract initially made between the U.S. Government (or other coastal state) and such lessee or operator would be otherwise adversely changed.

With regard to an intermediate zone, it is not so much a question of how would U.S. private industry readily acquire access to petroleum resources there, but whether there would be sufficient stability of interest or title and incentives for the industry to invest the large capital required to explore for and exploit the petroleum resources in the deeper waters (200 to 2500 meters and more) under conditions of an intermediate zone. Certain conditions must be established for the protection of the entrepreneur to induce his dedication of risk capital to the costly search and production in these deeper waters of the far outer shelf, slope and rise. The intricacies of an intermediate zone adjacent to coastal states might severely inhibit ready access to petroleum resources in such a zone.

Area of the International Zone

How the U.S. petroleum industry acquires ready access to petroleum resources in dealing with a deep-seabed regime depends on the extent to which a new international legal-political framework applicable to the deep-sea areas will encourage rather than deter the finding, recovery, and use of deep-ocean minerals, The NPC report sets forth the policy objectives that are requisite to successful mining regulation and the prerequisites needed to attract capital and talents. These objectives and prerequisites establish the conditions as to how the U.S. petroleum industry would acquire ready access to the deep-sea mineral resources.

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.

Prerequisites:

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.

What safeguards are warranted to preclude coastal states from exercising undue jurisdiction over the superjacent water column?

The notion that jusisdiction claims over seabed mineral resources will inevitably seep upward to control the space above is often referred to as "creeping" jurisdiction. There is no legal basis to support the creeping jurisdiction theory. The 1958 Geneva Convention on the Continental Shelf expressly protects the freedom of the high seas above the shelf as well as the airspace. Thus, Article 3 of the Convention states:

"The rights of the coastal States over the continental shelf do not affect the legal status of the superjacent waters as high seas, or that of the airspace above those waters."

The basic legal protection against creeping jurisdiction is contained in Article 2 of the 1958 Geneva Convention on the High Seas which provides that:

"The high seas being open to all nations, no State may validly purport to subject any part of them to its sovereignty. Freedom of the high seas is exercised under the conditions laid down by these articles and by the other rules of international law. It comprises, inter alia, both for costal and non-coastal States:

(1) Freedom of navigation;
(2) Freedom of fishing;
(3) Freedom to lay submarine cables and pipelines;
(4) Freedom to fly over the high seas."

The problem is not a matter of creeping jurisdiction, certainly not of creeping upward from the ocean floor, but of the actions of a very few states in asserting a claim to a very wide territorial sea. Thus the issue to be resolved by international agreement is the limits of territorial waters. There does not appear to be any evidence of a single case of a state extending its rights over continential shelf seabed resources into the water column above. The evidence usually cited to support the theory of creeping jurisdiction is the claim asserted by several Latin Americans states to a territorial sea of 200 miles in apparent response to the Truman Proclamations of 1945. In this connection, Professor William T. Burke points out:

"There were two Truman Proclamations in September, 1945, one dealing with fish beyond the territorial sea (and treating them differently than oil) and one dealing with the continental shelf. The Latin American states reacted to *both* Proclamations and in so doing refused to distinguish between shelf resources and resources in the waters above as the U.S. Proclamations did. However, it is notable but seldom mentioned by believers in Craven's Law [creeping jurisdiction theory], that in a quarter-century only a small handful of states have reacted in this way and their positions are almost universally regarded as contrary to international law. Except for these instances of extravagant behavior, there appear to be no other unusually extensive territorial claims resulting, even colorably, from narrower assertions by another state of certain limited jurisdiction and control."

The recent joint report of the American Bar Association's Section of International and Comparative Law, the Section of Natural Resources, and the Standing Committee on World Order Under Law, considered the creeping jurisdiction theory and concluded:

"The argument that a broad shelf claim will encourage excessive claims of other kinds by other states is also misdirected. The Convention expressly protects the high seas status of waters above the shelf. Those coastal states which have made or intend to make further claims to the superjacent waters or to exclusive fishery rights are not likely to retract their present claims or refrain from future ones merely because the U.S. opts for a narrow shelf."

While the NPC is of the opinion that international freedoms of the seas and the floor thereunder are protected under customary international law and under the treaties referred to above, if any serious doubt remains, a protocol to the Geneva Convention could be proposed that would expressly assure the maintenance of such freedoms.

What is the opinion of private industry as to the most desirable timing of a U.S. Government decision on the outer continental shelf boundary and the deep seabed regime issues?

The view has been expressed that the location of the outer continental shelf boundary depends upon the nature of the deep seabed regime to the extent that one issue should not be decided without reference to the other. The NPC does not subscribe to this view.

The objectives for formulating an international regime would be the same regardless of the area to be subject to the regime. What is important is a decision to delineate this area which, of course, would be decided by resolving the question of the seaward boundary of exclusive national jurisdiction.

The NPC's position on these two issues is unequivocal. In its 1969 report the NPC urges the U.S. Government to assert promptly and forthrightly its exclusive mineral jurisdiction over the mineral resources of the entire submerged portion of the continent off its shores, while recognizing similar rights of other coastal nations. Not to do so—in light of our present and future needs—is risking our vital national interests and security and that of our allies as well.

Regarding the timing of a decision on the deep seabed regime, the Council stated that because of the exceedingly incomplete information now available concerning the deep-ocean areas, it would certainly be premature for the United States to commit itself irrevocably to any international regime to govern exploration and exploitation of these areas. Our Nation should, nevertheless, be prepared to provide leadership and cooperation to the international community looking toward optimum arrangements for development of deep-ocean mineral resources "for the benefit of and in the interest of all mankind."

While as indicated in its report, the NPC believes efforts to develop an international regime to be premature, nevertheless, in the light of recent General Assembly action looking toward such development, there is no question but that we would be willing to provide our views regarding practicable and feasible arrangements for such a regime.

What impact does a lack of decision on these issues at the Federal level have on industry's willingness to develop the requisite technology for exploration beyond the 200-meter isobath?

The U.S. petroleum industry continues to develop the technology for both deep-water exploration and exploitation regardless of the lack of a decision by the Federal Government concerning the outer limits of national jurisdiction and the nature of a deep seabed regime. In 1968, leases in 1800 feet (549 meters) of water were purchased from the U.S. Government. One operator has drilled in 1300 feet (396 meters) of water on the U.S. shelf, but did not secure production. Thus operations are occurring well beyond the 200-meter isobath and the requisite technology is being developed. If the Department of the Interior continues lease sales of areas at increasing water depths and the areas appear to be economically attractive, the U.S. petroleum industry will continue to invest its capital in such leases and the equipment required to realize a return on investment, all other things being equal. It cannot be assumed that all other things will continue as in the past and, therefore, a lack of a U.S. Government decision, at least on the boundary issue, may very well slow, if not halt, technological developments, as much because of governmental uncertainty as because of doubts within industry.

The NBC in its report took note of a statement made in June 1968 by a U.S. representative in proposing certain "principles" to the U.N. *Ad Hoc* Seabeds Committee. Among these principles was the following:

"3. Taking into account the Geneva Convention of 1958 on the Continental Shelf, there shall be established, as soon as practicable, an internationally agreed precise boundary for the deep ocean floor—the sea bed and subsoil beyond that over which coastal States may exercise sovereign rights for the purpose of exploration and exploitation of its natural resources.

"*Exploitation of the natural resources of the ocean floor that occurs prior to establishment of the boundary shall be understood not to prejudice its location, regardless of whether the coastal State considers the exploitation to have occurred on its 'continental shelf'.*" (Emphasis added)

The italicized statement when considered in conjunction with the proposals of some that would cut back U.S. national jurisdiction places a cloud on the title of every lease made beyond the 200-meter isobath and may well serve as a real deterrent to industry investment in deep waters and further development of equipment for deep-water exploration and exploitation. The Council concluded that the fact that the statement was made emphasizes the necessity of an early

declaration by the U.S. Government of its rights under the Geneva Convention by the U.S. intention to adhere to those rights.

The suggestion has been made that the Congress should enact legislation to compensate private enterprise for "loss of investment or expenses" occasioned by any new international framework that redefines the continental shelf so as to put the area in which it is engaged in mineral resources development beyond the shelf's outer limits. This suggestion is not attractive to the petroleum industry, and in all likelihood would not be acceptable to the U.S. Congress, as a substitute for the present provisions of the Outer Continental Shelf Lands Act, which assures security of tenure to the lessee, and assures that all royalties will go into the Federal Treasury.

In December 1969 the U.N. General Assembly adopted a resolution, the operative part of which—

"*Declares* that, pending the establishment of the * * * international regime:

"(a) States and persons, physical or juridical, are bound to refrain from all activities of exploitation of the resources of the area of the sea-bed and ocean floor, and the subsoil thereof, beyond the limits of national jurisdiction;

"(b) No claim to any part of that area or its resources shall be recognized."

This resolution along with all General Assembly resolutions is recommendatory and not obligatory and, therefore, the coastal states are not legally bound by it. Member States of the United Nations, however, may be disposed to give consideration to the resolution in determining their policies. As the United States has not declared the limits of its national jurisdiction, action such as the seabed moratorium resolution further muddies the waters for U.S. petroleum operations beyond the 200-meter isobath and reinforces the necessity of the United States deciding promptly on the extent of its national jurisdiction.

With regard to the area beyond national jurisdiction, exploration in these deeper waters of consequence is in a very initial stage. The current deep-sea drilling project of Joint Oceanographic Institutions for Deep Earth Sampling (JOIDES) has demonstrated that a high degree of exploratory drilling can be conducted in the deep ocean, particularly now that a capability for hole reentry has been developed. The problem then is not so much the development of technology for exploration but the technology for exploitation once a commercial well has been discovered.

The NPC has estimated that the technical capability to produce in water depths of 4000–6000 feet (1219–1829 meters) may be attained before 1980. Based on this estimate it would be some time after that period before one can reasonably expect the development of a technical capability to produce in the much deeper water beyond the edge of the continental margins. Therefore, a lack of decision on the international regime will have little impact regarding the development of technology for exploitation in the very deep-water areas which would be subject to that regime for some time to come.

Finally, what other factors do you consider relevant in making a decision on the breadth of the continental shelf and the type of international regime which would relate to deep seabed exploration and exploitation?

Petroleum operations conducted by a U.S. national on a foreign continental margin must be licensed by the adjacent coastal nation, and cannot be conducted free of control by any national jurisdiction. It has been suggested that this would be undesirable to the U.S. petroleum industry. The argument, which is rejected, is that (1) the petroleum industry could deal with an international regime off a given foreign coast more advantageously than with the coastal nation regime, whose laws might be unstable, and that, (2) to obtain this advantage to the petroleum industry, it should support the cession of jurisdiction over minerals in the seaward portion of the submerged American continent to that international regime.

In the first place, the question is what is in the overriding interest of the United States, not what is in the interest of the petroleum industry.

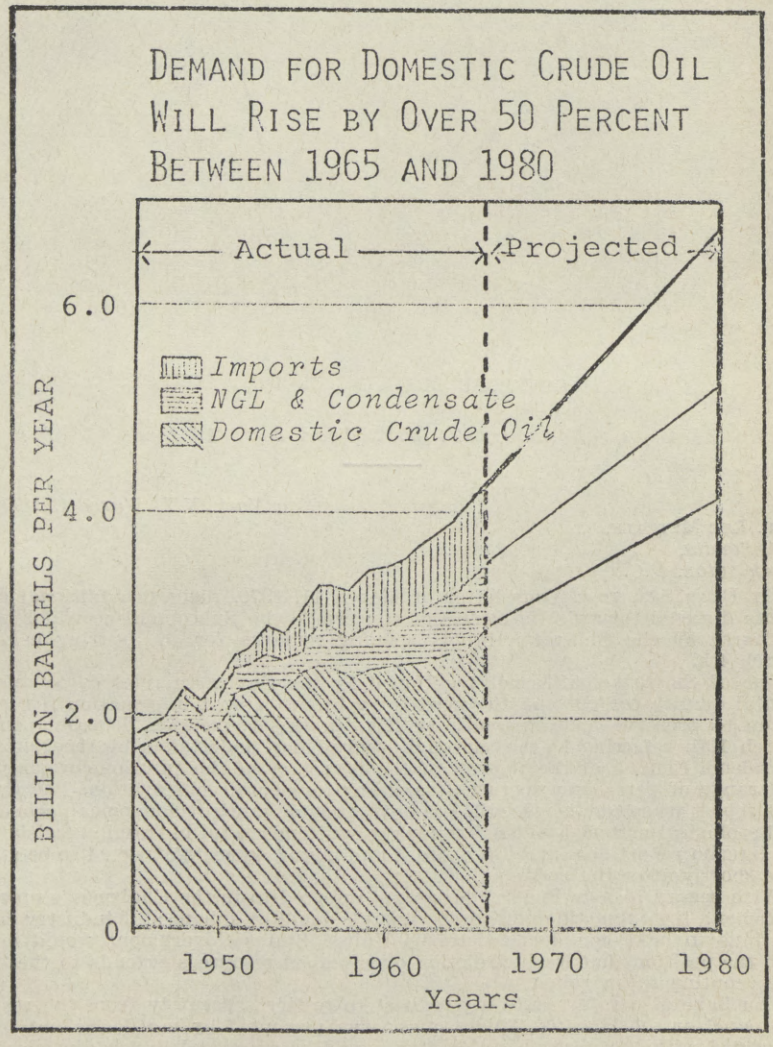
Assuming, arguendo, that an international regime might grant the industry better terms than would a foreign coastal nation, the American petroleum industry, nevertheless, emphatically refuses to endorse trading off to an international regime any U.S. interest in the American offshore mineral estate in order to obtain advantages for the industry abroad.

In the second place, the argument for such a trade is highly unrealistic, on two counts. For one thing, there is virtually no conceivable chance that any foreign nation, with good prospects for mineral resources off its coast, would renounce one iota of the rights vested in it by the Geneva Convention no matter

how magnanimous the United States was in relinguishing its own rights. For another thing, recent trends within the United Nations give little reason for hope that American nationals would fare better under a region formulated by a 126-nation forum in which the United States has one vote, than they would fare dealing with individual nations under their national laws as petroleum companies have tbeen doing for over three decades.

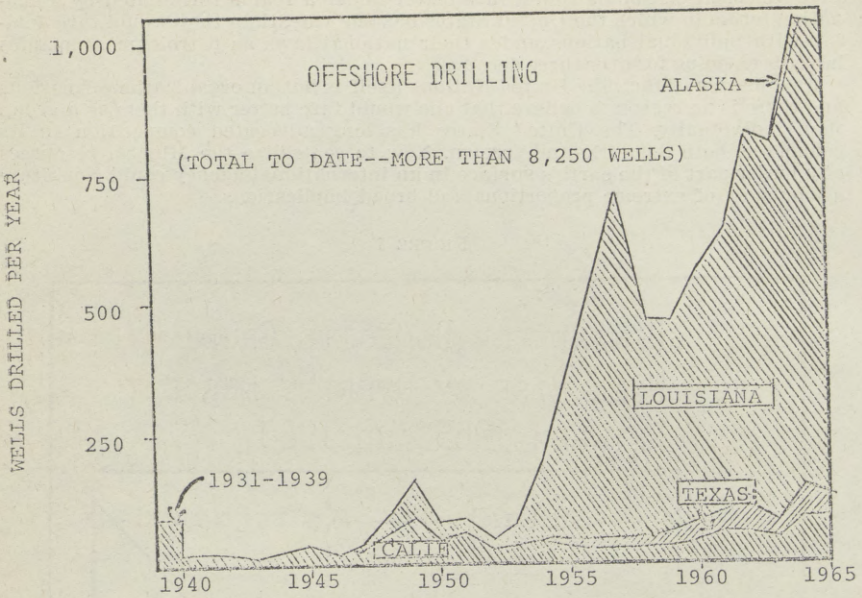
As a matter of fact, the United Nations itself is but an organization of nations and there is no reason to believe that one would fare better with them as a group than individually. The United States has long advocated competition in its commerce, both domestic and foreign. Now to centralize the Mineral resources of a major part of the earth's surface in an international agency could constitute a monopoly of extreme proportions and broad implications.

FIGURE 1



Source: Department of the Interior (1968)

FIGURE 2



ANNUAL OFFSHORE DRILLING ON U.S. CONTINENTAL SHELVES

Source: T. W. Nelson & C. A. Burk (1967)

TEXACO, INC.,
New York, N.Y., March 19, 1970.

Hon. LEE METCALF,
U.S. Senate,
Washington, D.C.

MY DEAR SENATOR: Your letter of March 11, 1970, requests additional comments directed towards the issues of concern to the Subcommittee which were set forth by the Chairman in his opening remarks for the hearing held on March 4th.

One of the principal issues mentioned by the Chairman related to environmental quality control and the need for a broad base of information for legislation to preserve environmental quality. In this connection, I wrote you on March 10th referring to the thorough study being undertaken by the National Petroleum Council at the request of the Secretary of the Interior covering the full range of petroleum operations and environmental conservation. The Council's report when published will, I believe, provide much technological, economic and ecological material which I think you will find useful in framing legislation. An interim report dealing with current and major issues is expected to be available shortly after the midyear.

With regard to new Federal programs referred to in the Chairman's opening statement, the extraction of seabed minerals could be enhanced if industry could continue to have confidence that the United States Government would maintain the position that its jurisdiction over seabed resources extends to the edge of its continental margins.

You have also referred to my request to testify separately from the rest of the panel at the hearing. This request was prompted by my desire not to be identified with the views I anticipated would be expressed by certain members of the panel—views to which I could not in good conscience subscribe. I felt that sharing the platform might imply to some a measure of agreement. If my separate appearance occasioned any difficulty to you and the staff, I regret it.

Your strong interest in the matter of jurisdiction over the natural resources of the seabed of the continental margin has made a real contribution to the clarification of issues and to the education of those who are interested in this matter.

With thanks and kindest personal regards, I am

Sincerely,

CECIL J. OLMSTEAD.

UNIVERSITY OF WASHINGTON,
Seattle, Wash., March 24, 1970.

Senator LEE METCALF,
Committee on Interior and Insular Affairs,
U.S. Senate,
Washington, D.C.

DEAR SENATOR METCALF: I am very sorry that your illness made it impossible to meet you personally. I hope that you have recovered fully and I am in complete sympathy with the view that runs through your opening remarks. Mineral operations in the sea must not be allowed to contribute irreparable damage to other users of the sea and to the marine environment generally. It is even more important to assure that the protective framework be created in advance of the need for it, and that the cost of meeting necessary standards is built into the initial planning of the industries concerned.

You will recall that the Stratton Commission devoted much attention to this problem, and stressed two areas in which federal activity could be of paramount importance. First, there are vast gaps in our knowledge of the ecology of estuarine and inshore waters that must be filled before a sensible framework can be created that will stimulate economic development of marine resources while providing adequate protection for other commercial and recreational users. Congressional support for the coastal zone laboratory concept and expanded funding of the Sea Grant program would both represent major steps in the right direction. On the other hand, it should be stressed that there are no easy short cuts in acquiring the essential knowledge of saltwater ecology. The present state of marine mining suggests that we have a considerable amount of time before really extensive seabed activity poses a threat to the environment, but we must use that time wisely, and we must begin immediately.

Because we still are far from certain of the extent, location and technology of future mineral production from the sea, it would not seem desirable to attempt to define regulatory measures with any degree of precision at this time. What is needed is a cooperative federal-state effort that is strong enough to deal with current problems and flexible enough to adapt to the inevitable changes in technology that will occur over time.

As indicated in my prepared statement, I see no reason to regard minerals from the sea being somehow better than those taken from conventional sources. Consequently there would be no apparent reason to accelerate the pace of marine mining except on a fully cost-competitive basis. Short-run subsidies, under any guise, have a habit of becoming permanent. There is, however, urgent need for active programs in basic research and fundamental technology that simply will not be met without federal government support. The development of the capacity to explore and work efficiently in the sea, the delineation of the most promising areas for "fine-grid" analysis, and improvement in knowledge of air-sea interaction and its relation to sea state and weather forecasting are good examples. All are critically important in lowering future costs of mineral recovery from the sea-floor; yet none are likely to be undertaken by any single firm or industry, since the benefits will extend over the whole spectrum of marine activities.

In short, both basic research and exploration and applied work of *general* applicability would appear to be areas in which public investment would ultimately yield substantial rewards to the nation as a whole by expanding and accelerating opportunities for profitable private investment in actual marine mining operations.

I hope that these remarks, together with the prepared statement, will be useful to the Subcommittee. It was a privilege to have this opportunity to present my views.

Sincerely yours,

JAMES A. CRUTCHFIELD,
Professor.

(Whereupon, at 12 o'clock noon, the subcommittee recessed, subject to call of the Chair.)

APPENDIX

(Under authority previously granted, the following communications were ordered printed:)

[From 18 International and Comparative Law Quarterly (1969)]

The Limits of Continental Shelf Jurisdiction: Some Possible Implications of the North Sea Case Judgment

(By R. Y. Jennings*)

In the *North Sea Case* the Court was primarily concerned with a question of the delimitation of boundaries on a single area of shallow sea extending between neighbouring States.[1] But in fact all three parties in their arguments before the Court had raised quite general and fundamental questions of the character and limits of continental shelf jurisdiction and the Court, accordingly, had some important observations to make on these questions of general principle. It is these questions that are the subject-matter of this article. They are of some topical importance because the present discussion in the United Nations of proposals for a new legal régime for deep sea resources outside national jurisdiction obviously requires, at some stage, a more precise definition of the outer limits of areas of national jurisdiction. It must be emphasised, however, that this article is concerned solely with canvassing this question of outer limits of national jurisdiction in the light of existing international law; it is in no way concerned with proposals that have been made or could be made *de lege ferenda* for a newly defined boundary, or boundaries, to the régime of national jurisdiction.

A primary proposition that emerges from the decision is elementary, but nonetheless important: that there has developed from the practice of States a body of customary international law, which is independent of the Geneva Convention of 1958 on the Continental Shelf. This proposition is made the more significant by the disappointingly small number of States, only 40, which have now become parties to the Convention. Moreover, it should be oversanguine to expect the position to improve in the foreseeable future. It is the fact that only 18 out of the 42 members of the UN Sea-bed Committee have become parties to the Convention.[2]

Accordingly, on the question of the outer limits of national jurisdiction, as on other basic questions, it is necessary to consult this body of customary law as well as the provisions of the Geneva Convention. And indeed, that body of custom, or at least the principles which are its basis, are highly relevant to the proper interpretation of the Convention itself: for in so far as the Convention may be declaratory of general law, the direct relationship between the two is obvious; and in so far as the conventional régime may be particular to parties, it has still to operate within the framework set by the general law.

Take, for instance, the question of the meaning of Article I of the Geneva Convention, which defines the term "continental shelf"[3]: it is there expressly

*Q.C., Whewell Professor of International Law in the University of Cambridge.

[1] [1969] *I.C.J. Reports* 3. On the decision in general, see Current Legal Developments (1969) 18. I.C.L.Q. at p. 489.

[2] On June 20, 1969, 40 States had become parties to the Convention. Of the 42 members of the Committee on the Peaceful Uses of the Sea-Bed and Ocean Floor beyond the Limits of National Jurisdiction, only 18 have become parties to the Convention: they are: Australia, Bulgaria, Czechoslovakia, France, Kenya, Madagascar, Malaysia, Malta, Mexico, Poland, Roumania, Sierra Leone, Thailand, Trinidad and Tobago, U.S.S.R., United Kingdom, United States, Yugoslavia.

[3] "*Article 1:* For the purpose of these Articles, the term 'Continental Shelf' is used as referring (a) to the sea-bed 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 superajacent waters admits of the exploitation of the natural resources of the said area; (b) to the sea-bed and subsoil of similar submarine areas adjacent to the coasts of islands."

stated that the intention was to furnish a definition "for the purpose of these articles," and presumably, therefore, not necessarily one of general validity; a qualification which has too often been left out of the calculation. On the other hand, even if this definition of continental shelf is intended only for the purposes of the Convention, the intention could not have been other than that there should also be a close correspondence between the product of the definition and the "continental shelf" jurisdiction sanctioned by customary law. For it could not have been intended that either the limits, or indeed the essential character of the rights recognised in the Convention, could have exceeded what is sanctioned by general customary law, for any greater claim would have had no validity against non-parties to the Convention, and since the rights of the coastal State impinge on the high seas it is one of those matters which "has always an international aspect." [4]

It was perhaps inevitable that much of the discussion about the outer limits of continental shelf jurisdiction should tend to fasten primarily upon the words of Article 1, such is the attraction of an authentic form of words. Yet there is an element of illogicality in reading a definition introduced by the words "for the purpose of these Articles" as if it were nevertheless an attempt at a definition of ecumenical validity; and the true position is more probably that the principles of the general law will be found to illuminate the Convention definition rather than the other way round.

For instance, it is thanks to the development of firm general principles of customary law that the notion which used sometimes to be read into the words of Article 1, that the effect of the "exploitability" clause is that the oceans of the world might eventually become national lakes divided by median lines, is now one that, if mentioned at all, is mentioned only to be summarily dismissed. The reason is the principle which has found expression in the Report of the Ad Hoc Committee that there exists "an area of the sea-bed and the ocean floor underlying the high seas beyond the limits of national jurisdiction." [5] This is a principle which stands on its own feet and is not merely a deduction from a proper interpretation of Article 1 of the Convention, even though it can indeed be so deduced.

THE PRINCIPLE OF APPURTENANCE

Assuming then that there is in general law—and leaving aside the consideration of the Convention for the moment, though we shall return to it—a seaward limit to national jurisdiction over sea-bed and subsoil, it is sensible, if one wishes to find out where this limit is, to ask first what is the underlying principle in which national jurisdiction over an area of sea-bed and subsoil finds its justification: for the discussion of limits is after all only an aspect of the identification of the legal concept as a whole.

In seeking the basic principle on which this concept of an area of national jurisdiction over sea-bed and subsoil rests, the Court in its judgment returns to President Truman's historic Proclamation of September 28, 1945, which, said the Court, has a "special status" as "the starting point of the positive law on the subject," in its enunciation of the doctrine that a coastal State has "an original, natural and exclusive (in short, a vested) right to the continental shelf off its shores." [6] It may be instructive, therefore, to look again at the reasons which that Proclamation recites as underpinning that principle:

> 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 sea-bed of the continental shelf by the contiguous nation is reasonable and just—
>
> since the effectiveness of the measures to utilise our 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 contiguous nation and thus naturally appurtenant to it,

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[4] [1951] *I.C.J. Reports* 131.

[5] See General Assembly. Official Records 23rd Session. *Report of the Ad Hoc Committee To Study the Peaceful Uses of the Sea-bed and the Ocean Floor Beyond the Limits of National Jurisdiction* (1968) para. 86:

> 86. As was implied in the terms of resolution 2340 (XXII) the *Ad Hoc* Committee recognized the existence of an area of the sea-bed and the ocean floor underlying the high seas beyond the limits of national jurisdiction.

[6] [1969] *I.C.J. Reports* 32–33.

since these resources frequently form a seaward extension of a pool or deposit lying within the territory, and

since self-protection compels the coastal nation to keep close watch over the activities off its shores which are of the nature necessary for the utilisation of these resources. . . .

All these reasons are aspects of a relationship of fact between the mainland and the resources of the submerged areas subjected therefore to the exclusive jurisdiction and control of the coastal State. For it is this relationship of fact which justifies the operative part of the Proclamation that the Government of the United States:

> . . . regards the natural resources of the subsoil and sea-bed 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.

It is this same idea of a relationship of fact that is now authoritatively restated and relied upon by the International Court when it said 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 sea-bed and exploiting its natural resources. In short, there is here an inherent right.

And the court described this as "the most fundamental of all rules of law relating to the continental shelf." [7]

Moreover—and this is most important—the Court finds this principle "enshrined," not indeed in Article 1 of the Convention, but in Article 2, "though quite independent of it," which Article declares that the rights of the coastal States "do not depend on occupation, effective or notional, or on any express proclamation" [8] Thus, as Article 2 makes very clear, the continental shelf jurisdiction is not only an appurtenance of the coastal State but an inalienable appurtenance, which belongs simply by reason of the State's sovereignty over its land territory, being indeed an extension of it.

Thus, these two characteristics—appurtenance and the lack of need for any act of acquisition—go together and depend upon each other; one is merely looking at different facets of the same thing. So it is Article 2, rather than Article 1, to which one must look for the primary basic principle of general, customary law.

APPURTENANCE REFERS TO PHYSICAL FACT

To return now to the more particular question of limits: clearly this idea of appurtenance or prolongation contains within itself the germ of an answer to this question. There must be places that are beyond what can be said to be a prolongation of the land domain. Is it possible then to deduce any answer to the limits question from these general principles?

We shall not expect, of course, to find a rule that would enable a line to be drawn on a chart. Such a rule would doubtless be convenient and many eventually be necessary. It would no doubt be possible to measure continental shelf jurisdiction by a set of arbitrary parameters should such parameters be agreed between States. But the fact is that hitherto no such agreement has been forthcoming.

Meantime, therefore, the quality of appurtenance or prolongation can only be identified by reference to physical fact, making geomorphological or perhaps geological considerations paramount. The Court in its judgment confirms this in no uncertain voice. The continental shelf, we are told, "constitutes a *natural* prolongation of its land territory into and under the sea" (emphasis supplied). And again:

> The institution of the continental shelf has arisen out of the recognition of a physical fact; and the link between this fact and the law, without which that institution would never have existed, remains an important element for the application of its legal regime. The continental shelf is, by definition, an area physically extending the territory of most coastal States into a species of platform which has attracted the attention first of geographers and hydrographers and then of jurists.[9]

And again:

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[7] *Ibid.*, p. 22.
[8] *Loc. cit.*
[9] *Ibid.* p. 51.

> The appurtenance of the shelf to the countries in front of whose coastlines it lies, is therefore a fact, and it can be useful to consider the geology of that shelf in order to find out whether the direction taken by certain configurational features should influence delimitation because, in certain localities, they point-up the whole notion of appurtenance of the continental shelf to the State whose territory it does in fact prolong.[10]

Thus in these and indeed some other passages of the judgment the reader is left in no doubt of the importance attached by the Court to physical identity between land and continental shelf in terms apparently at least in part of geology.

It will be useful at this point to recall that the Court was led into these considerations by the argument which had been put before it and which it aptly called the notion of "absolute proximity," *viz.*, the idea that parts of a shelf would be appurtenant to a particular coastal State which are (but only if they are) closer to it than they are to any point on the coast of another State."[11]: in fact the erection of the median line device into a principle of law. This notion the Court categorically rejected. Nearness to one coast rather than to another was certainly a consideration but not a decisive one, for "local geographical configuration" might sometimes cause an area to have a closer connection with the coast to which it is not in fact closest."[12] Therefore, there is "no necessary, and certainly no complete, identity between the notions of adjacency and proximity"[13]: "submarine areas do not really appertain to the coastal State because—or not only because—they are near it,"[14] but because they are to be "deemed to be actually part of the territory over which the coastal State already has dominion—in the sense that, although covered with water, they are a prolongation or continuation of that territory, an extension of it under the sea."[15]

Thus, the rejection of the notion of "absolute proximity," and of any identity between adjacency and proximity, necessarily led the Court to rely instead upon appurtenance in a geographical or geological sense. The Court speaks both of geography and of geology and does not make it clear, and indeed did not have to make it clear, whether it attached the more importance to the one or to the other. What was made abundantly clear was that it is the physical prolongation of the land that may make a submerged area appurtenant to one State even though it may be 'near" to the coast of another. The Court might have added, indeed, that even "nearness" itself is an elusive concept: a distance measured over the surface of the sea is one thing but distance measured over the contours of the seabed may be quite another.

Indeed in suggesting that the continental shelf is a physical prolongation not merely of the land but of the coastal State's land *territory*, the Court was going further than it need have done or perhaps should have done, for the actual territoriality of the continental shelf is by no means established in practice; is avoided in the Convention; and would raise very awkward questions for federal States.

THE QUESTION OF ADJACENCY

The proximity argument before the Court raised also the meaning of "adjacency" in Article 1 of the Convention, so it will be convenient now to consider both that term of the Article and also how Article 1 as a whole fits into the scheme of the general law as it was delineated by the Court. Assuming therefore, as indeed the Court does also, that there must be at least a certain correspondence in effect between Article 1 and the general, customary international law of the continental shelf, it is now possible to broach some propositions concerning the meaning and effect of that Article.

Obviously the idea of appurtenance as physical prolongation, if it is as basic to the law as the Court holds it to be, must be accommodated somewhere within the terms of Article 1; and where else but in the phrase "adjacent to the coast," which phrase governs the whole provision because it qualifies all the submarine areas with which the Article deals? And since the Court has held that there is "no necessary and certainly no complete, identity between the notions of adjacency and proximity,"[16] the inference must be that adjacency comprehends this idea of appurtenance as a prolongation of the land domain.

No doubt mere proximity is one consideration in the calculation, but only one and certainly not decisive. There is, however, one particular passage in the judg-

[10] *Ibid.* p. 51.
[11] *Ibid.* p. 29.
[12] *Ibid.* p. 30.
[13] *Ibid.* p. 30.
[14] *Ibid.* p. 31.
[15] *Ibid.* p. 31.
[16] *Ibid.* p. 30.

ment, when the Court is discussing the meaning of "adjacency" and its relation to proximity, which needs to be looked at with some care because the thought here is particularly compressed and every word needs to be weighed. The passage is as follows:—

> . . . To take what is perhaps the most frequently employed of these terms, namely "adjacent to", it is evident that by no stretch of imagination can a point on the continental shelf situated say a hundred miles, or even much less, from a given coast, be regarded as "adjacent" to it, or to any coast at all, in the normal sense of adjacency, even if the point concerned is nearer to some one coast than any other. This would be even truer of localities where, physically, the continental shelf begins to merge with the ocean depths. . . .[16]

The context of this passage is that the Court is saying that the notion of "absolute proximity" is not implied in any of the several "rather vague and general" words found in the literature and in various instruments to describe the characteristics of the areas over which a coastal State exercises continental shelf jurisdiction. The Court then picks upon the most familiar of these terms "of a somewhat imprecise character," namely, "adjacent to," to illustrate this imprecision further. The Court is here referring to what it calls adjacency in its "normal sense," and it is clearly adjacency in the sense of nearness that the Court has particularly in mind in this passage; moreover, the Court is not talking about the continental shelf as a physical entity but is talking about a "point" on the continental shelf. Nor was this a mere intellectual exercise. The continental shelf is indeed an entity—Article 1 of the Convention speaks of "submarine *areas* adjacent," etc.—but the delimitation of boundaries between neighbouring States may require consideration of points in that area. But a point that is a hundred miles "or even much less" from a coast and therefore not "adjacent" to it in the "normal sense" of the word adjacency, may nevertheless be part of a continental shelf which as a whole is adjacent to a State in the sense of being a prolongation of the land and therefore appurtenant to it. This must be so. For was not the Court in the very case before it dealing with an admitted continuous shelf, an infinite number of points of which were a hundred miles or much more from any coast at all? Furthermore, Article 6 of the 1958 Convention assumes that the "same" continental shelf may be "adjacent" to the territories of two or more States whose coasts are opposite each other, though clearly a "point" on that shelf may be adjacent in the "normal sense" to only one or even to none of those States.

The final sentence of the cited message is presumably saying that of course it is in any case not merely a question of distance; that configuration is an element *semble* even to adjacency in its normal sense. And this is certainly consistent with the Court's view of the effect of appurtenance or the lack of it.

THE CONTINENTAL SHELF, SLOPE AND RISE

Assuming now that the idea of a prolongation of the land domain is the legal foundation of the submerged areas of national jurisdiction whether it is expressed in term of general international law or of Articles 1 and 2 of the Geneva Convention; and that this concept relates to geographical and geological fact: how far is it possible, with this legal apparatus, to define, or at any rate usefully describe, the extent and boundaries of that area? Is it possible to express these ideas of appurtenance or prolongation in terms of the geomorphological categories of continental shelf, borderland, slope and rise? Clearly the continental shelf in the strict sense, or the continental borderland, are subject to national jurisdiction; and the abyssal plain is just as certainly beyond national jurisdiction. But what is the position of the intermediate zones: the continental slope and the continental rise?[17]

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[17] Useful definitions of terms will be found in the *Report on Marine Science and Technology*, a report presented to the United Kingdom Parliament in April 1969 and published as Cmnd. 3992. Annex D, on p. 51, as follows:

> Any discussion of the seabed is likely to contain references not only to the term Continental Shelf but also to the terms Continental Slope and Continental Rise. These terms are defined with reference to their geomorphology or topography (see attached diagram). The Shelf is normally inclined at an angle of about 1/10°. Where there is an increase in gradient above 1½°, the Slope is said to have begun. Where it subsequently falls below 1½°, from the average of between 3° and 6°, the Rise is said to have begun. The Rise continues down to the deep ocean floor or Abyssal Plain. The widths and depths of all three features are very variable. Generally the Shelf extends to a depth between 130 and 200 metres, but, exceptionally, to between 50 and 500 metres. The foot of the Slope may vary from 1,500 to 4,000 metres in depth and the Rise generally continues down to between 4,000 and 5,000 metres. The Continental Shelf Slope and Rise are collectively known as the Continental Margin.

An instructive *Diagrammatic Profile of the Continental Margin* is also to be found on the final page of the same Report.

It might be asked whether any question arises anyway in relation to the slope or the rise; for it might reasonably be supposed that continental shelf jurisdiction applies only to the continental shelf strictly so called: a term which has a reasonably definite geographical connotation, or at any rate at least as definite as any of the other parts of the sea-bed. Moreover, there can be no doubt that in the early period of the formation of this law it was the shelf proper that was principally in mind.

Furthermore, there is the fact that some of the earlier instruments define an area of national jurisdiction by reference to the 200-metre isobath; such a test features of course in Article 1 of the Geneva Convention; but it also appeared in the press release accompanying the Truman Proclamation, though there was no mention of it in the Proclamation itself and this fact may be important. The significance of this isobath is that it was regarded as roughly approximating to the depth at which the rim of the continental shelf might commonly be found.[18]

It may well be, however, that the 200-metre contour test was at least in part chosen as a solution *ad interim* just because it is clear that on any view the coastal State's rights extend at any rate thus far. This would be in line with the adoption in Article 1 of the Geneva Convention of the flexible and pragmatic test of further areas of jurisdiction in the exploitability test.[19]

However this may be, there can be no doubt today that, whether we consult practice or the Convention, the law does not confine national jurisdiction to the continental shelf in the strict sense.

Perhaps the most striking evidence of this is to be found in the plain words of Article 1 of the Geneva Convention. The words "to a depth of 200 metres," *i.e.*, the contour approximating to the rim of the shelf, are immediately followed by the words "or, beyond that limit," introducing the "exploitability" test. Whatever may be the meaning of the exploitability test—and we shall return to this—the clause cannot mean anything other than that national jurisdiction was not intended to be confined within the 200-metre contour.

But what is the purpose of the 200-metre contour clause if it is immediately followed by one of which applies to an area "beyond that limit?" One knows, of course, from the records of the International Law Commission, how it came about that the two tests were married within the same Article; but, whatever the historical explanation, it remains needful to give the 200-metre test some significance as a provision of the treaty. There must be a presumption that the 200-metre test is in itself meaningful and that the addition of the exploitability clause did not render it merely otiose. If this is so, it seems that the 200-metre clause can only, so to speak, retain its legal vigour if it means, as it surely must, that the coastal State's jurisdiction extends in any event as far as the 200-metre contour[20]; or, to put it another way, it means that the submerged areas up to that contour are *per se* "adjacent" to the coast. This interpretation would be consonant with the early adoption of the contour test (as perhaps also in the press release to the Truman Proclamation) as a solution in part and *ad interim;*

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[18] See, *e.g.*, a memorandum by Dr. John Lyman, Director, Division of Oceanography, U.S. Navy Hydrographic Office, 1956, cited in Whiteman, *Digest of International Law*, Vol. 4, p. 838:

> It must be emphasised that the only basis existing for the selection of 200 metres as the outer limit of the Shelf is the accidental one that nautical charts, by accepted international standards, are contoured only at 100, 200 and 300 metres. On these charts, the edge of the Shelf is nearer the 200-metre contour more often than it is to the others. However, the International Committee on the Nomenclature of Ocean Basins (*Deep Sea Research*, Volume I, 1953) pointed out that, although the Shelf edge is conveniently taken at 100 fathoms (183 metres) or 200 metres, instances are known where the increase in slope that forms the geomorphological criterion for the Shelf edge, takes place at more than 365 or less than 120 metres.

[19] See, *e.g.*, International Law Association, Buenos Aires Conference, 1968, Report by E. D. Brown, Rapporteur of the British Branch Committee, entitled *Report on the Legal Régime of Deep-Sea Mining*, pp. 15, 16: "*First* and foremost, it was considered highly desirable that agreement should be reached on some text which would facilitate a secure, regulated, commercial exploitation of the resources of the continental shelf out to depths which, at that time, were regarded as economically exploitable. An interim solution was better than none."

[20] Apart, that is, from the case of one area of jurisdiction being, in the language of Art. 6 of the Convention, "adjacent" to more than one State, when a problem of delimitation arises and the agreed or median line could fall within the 200-metrecontour; but this is not a true exception to the proposition suggested in the text above, for all the area within that contour is in this case within some national jurisdiction or other and the only question is which one.

for it encloses an area which must be within national jurisdiction without doubt.[21]

Thus the two tests—the 200-metre contour and the quality of exploitability—are complementary; as indeed they must be if the Article is to make sense. Thus the Article gives to the question what is appurtenant for the purposes of the Convention, the twofold answer, (i) the area up to the 200-metre contour certainly, and (ii) any area beyond if it be "exploitable," provided always that it is "adjacent." This second answer of course the question in so far as it does not define what is meant by "adjacent," but it necessarily assumes that adjacency is a quality that it not limited to the area within the 200-metre contour, *i.e.*, the "notional" shelf.

In short, the Convention, like the Court, throws the question of the outer limit back onto geography or geology or both. And both in terms of geology and in terms of geomorphology there would seem to be little room for doubt that the continental slope is just as much a part of a prolongation of the continental land mass as the continental shelf is. For it is not just a question of sea-bed but a question also of subsoil, *viz.*, of the underlying rock structure. The underlying rock structure of the shelf and the slope is identical.[22] Indeed the only difference between shelf and the slope is one of relative gradient; or, to put it another way, the difference is geomorphological, not geological.

The submissions made above rest strongly upon the insistence in the Court's judgment, in the *North Sea Case*, on the physical character of the prolongation of the land mass of which it speaks and on which it relies. It might be objected that the Court in this case was concerned only with a shallow sea, mostly shallower than 200 metres. Are we then reading into the judgment more than it ought to bear? In speaking of a prolongation of the land domain, had it in mind only an area which was all shelf in the strict sense? "The Court," the reader is reminded in the last paragraph of the judgment, "has examined the problems raised by the present case in its own context, which is strictly that of delimitation. Other questions relating to the general régime of the continental shelf have been examined for that purpose only. . . ."[23] But problems of delimitation are not confined to shallow seas and the Court was clearly right, in order to decide a somewhat particular question of delimitation, to examine the "general régime of the continental shelf" to discover pertinent general principles. That it did so is evidenced not only from this final passage but also from references to deeps as in its reference to "localities where, physically, the continental shelf begins to *merge with the ocean depths*"[24]; and also in the cryptic but intriguing reference to the Norwegian Trough.[25]

To summarise the argument thus far, the position is that considerations of geography and geology—to which the law itself looks for guidance—lead to the conclusion that the continental slope and subsoil are part and parcel of that "prolongation" of the continent over which the coastal State has exclusive jurisdiction. It may now be added that this *a priori* conclusion is in process of confirmation by State practice. For State assumption of exclusive jurisdiction in the granting of licenses has already extended in a number of instances to the continental slope.[26] There is nothing secret, nor could there be, about these assumptions of jurisdiction and control; yet, so far as the writer is aware, there have been no protests from other States, although this is a matter in which, were the permissible jurisdiction exceeded, *all* other States would have an interest.

There remains the continental rise. This is a different case. For if the principles governing the slope seem reasonably clear, this is not so in regard to the rise. Indeed, it appears difficult even to speculate about the rise with any assurance. The reason is simply that here geology itself speaks with an uncertain voice. Whilst the rise is formed by "continental sediments transported down

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[21] *Cf.* Herman Phleger, Legal Adviser, Department of State, in XXXII *Bulletin*, Department of State, No. 832, June 6, 1955, pp. 937–939, also cited Whiteman, *op. cit.* p. 762. After referring to the adoption of the 200-metre line in the Truman Proclamation and in the International Law Commission's Draft, he says this limitation "would seem to cover all practicable needs for the foreseeable future and to have the advantage of definitions. If future technical advances should render this formulation inadequate, it can be reconsidered in the light of intervening experience."

[22] See the diagram referred to in n. 14 above, where the rocks underlying shelf and slope are described as, "sedimentary rocks similar to those in the adjacent land mass."

[23] [1969] *I.C.J. Reports* 53.

[24] *Ibid.* p. 30.

[25] *Ibid.* p. 32.

[26] See *Report of the U.S. National Petroleum Council* (1969), pp. 100, 101.

the slope,"[27] the rock underlying the sediments may be in part related to the oceanic rock underlying the abyssal plain of the deep sea rather than the continent. In short, the position of the rise is ambiguous precisely because it is here that the two different elements of continent and deep ocean meet and may therefore be in some degree overlapping. It is an area which partakes of both elements. It appears then that the law has no clear answer to this question at present; and it is likely to be a considerable time before it arises as a practical problem.

THE PLACE OF THE EXPLOITABILITY TEST

Finally, there remains the question of the significance of the "exploitability" test in Article 1 of the Geneva Convention. It is not proposed here to pursue the question of what precisely is meant in this context by exploitation; that is a matter which has already been considered in depth.[28] But it may be useful nevertheless to consider the place of the "exploitability" clause in the context of the general principles of the continental shelf régime; for the Court's judgment, with its reliance upon the physical facts of geology and geomorphology, sheds light upon what has hitherto been a somewhat puzzling provision.

There has always been some difficulty in reconciling the pragmatic exploitability test for the extension of national jurisdiction with the provision of Article 2 that the rights of the coastal State are inherent rights which do not depend for their vesting upon any act or omission of the State or even on any promulgation. The difficulty disappears when it is remembered that Article 2 is, as the Court said, the one that "enshrines" the basic principle of the general international law, whilst Article 1 is an artifact designed for the purpose of the treaty. Thus all that was needed in Article 1 was a definition *ad interim* for areas where practical questions actually arose in practice. It may be, therefore, that the exploitability test should be regarded, not as a principle, but as a device for the purpose of regulating the application of the treaty régime between parties to it: which indeed is what the text itself says when it refers to the definition of continental shelf "for the purpose of these Articles." For certainly the physical fact of prolongation of the land, if it is to be determined in the light of geomorphological or geological configuration or structure, cannot be said to wait upon exploitability. The pragmatic exploitability test, however, at once makes good sense if it is related, not to the principles underlying the régime in general law, but to the area of application of quite particular treaty law; such as, to take an obvious example, the provisions of (2) and (3) in Article 5 of the Convention, according to which not only may safety zones be established but "may extend to a distance of 500 metres."

The conclusions would seem to be, then, that the resources of any area which is "appurtenant," in the sense of being geomorphologically or geologically a part in physical fact of the land mass, must be general international law be deemed already vested in the coastal State; but, as between States which have ratified the 1958 Geneva Convention on the Continental Shelf, a particular treaty regime applies to that part of the "appurtenant" area which "admits of exploitation"—whatever that may mean. For the test of the applicability of the treaty regime is not, of course, actual exploitation, but exploitability: a test which the advances of technology have inevitably rendered more rather than less elusive. Indeed, the remaining margin between the extent of a State's rights and obligations in general law and its rights and obligations under the Convention, if it be a party to it, must now be a matter for mainly theoretical speculations; for one who is a party cannot be disbarred by the Convention from relying upon the general law, and indeed must do so in relation to non-parties.

Thus the exploitability test, though it serves to extend the particular treaty regime to areas beyond the 200-metre contour, provides no reasonably practical and clear outer limit, within the limit laid down by general law and embodies in the Convention itself in the term "adjacency." It may well be, therefore, that the exploitability clause could now for practical purposes be regarded as *functus officio*, and the extent of continental shelf jurisdiction governed by the Convention be regarded as approximating to that sanctioned by the general law. This would seem to be a practical as well as a logical solution of the problem.

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[27] Cmnd. 3993, diagram referred to above in note.

[28] See, *e.g.*, L. F. E. Goldie, "The Exploitability Test—Interpretation and Potentialities" (1968) *Natural Resources Journal* (July) 434–477.

RESOLUTION OF THE AMERICAN MINING CONGRESS

UNDERSEA MINERAL RESOURCES

The mining industry is aware that the oceans offer a potentially large source of some minerals, and 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. To this end there should be freedom of scientific research on the seabed beyond the limits of national jurisdiction.

The ocean environment is still largely unknown. The mining industry 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.

General legal principles already govern ocean activity but certain rights need sharper definition, for example, in regard to the right to explore, the right to access, the exclusive right to mine if an ore body is found, and 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, the following action should be taken:

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 interest to the full extent permitted by the 1958 Convention on the Continental Shelf. Such clarification might be accomplished by parallel declarations by the parties to that Convention.

2. The United States and other nations having jurisdiction over adjacent continental shelves should at the earliest opportunity formulate definite working rules to encourage and regulate exploration and exploitation. The United States has a proven, workable body of mining claim laws, and unless clear reason is shown to the contrary, these tested principles should apply to the submerged lands within national jurisdiction.

3. Beyond the areas of national jurisdiction, deep ocean mining can proceed in a reasonable orderly fashion without benefit of new legal arrangements by recognizing that accepted principles of international law governing high seas activity extend to ocean mining. Eventually, more precise international arrangements and possibly new legal concepts may be needed to assure a favorable international context for extensive deep ocean mining. Even without formal treaties, reciprocity among the nations first engaged in such deep sea exploration and development in following certain common sense practices can establish a body of customary rules which other nations perforce will follow. Operating agreements among nations most interested in limited areas, conditioned on reciprocity and looking toward comparable multi-national agreements, may encourage early exploration and development of these confined areas and gain private experience useful in working out the best regime for the deep ocean floor beyond national jurisdiction.

JESUS COLLEGE,
Cambridge, January 22, 1970.

DEAR MR. LAYLIN: Thank you very much for your letter of January 14 enclosing a copy of your testimony before the Senate Committee and draft supplement. I was very interested to see this and there is much that I agree with; not least your vigorous opposition to the idea of revising the 1958 Convention. That would indeed be to risk the loss of much that was gained in 1958, and not only in relation to the continental shelf. However, you most kindly ask me to comment on the parts where you refer to matters mentioned in my recent article. This I gladly do, and I would like at the outset to thank you for your courtesy in affording me this opportunity of doing so.

Before turning to the Judgment of the World Court in the North Sea case, however, I would like to express a doubt about one phrase you use on, for example, page 6 of your original testimony, where you speak of areas "at which exploitability has been demonstrated". It seems to me, with respect, that by this phrase you are giving a twist to the meaning of Article 2 of the 1958 Convention. The test is exploitability, not exploitation. Yet demonstrated exploitability is practi-

cally the same as exploitation; and to require demonstrated exploitability in the sense of successful drilling is to make the test stricter than the terms of the Article would seem to warrant.

Turning now to the Judgment there is a great deal I would like to say. And the first question is that of relevance. Of course that case does not decide any question concerning the seaward limit of the continental shelf; by which I mean that such a question is no part of the res judicata. But in order to decide questions concerning an area of continuous shelf it had to consider the legal nature and origin of the whole concept of the continental shelf. And this consideration was an essential part of the reasoning of the Judgment. It is surely entirely permissible to ask what are the implications of this reasoning for a question, which was certainly was not before the Court, namely the seaward limit of the continental shelf? I am not saying the Court decided this question: I am saying that their reasoning has some necessary implications for the solution of this question. This I had always supposed to be the case-law method; the extraction of the essential basis of decision and its application to a different but sufficiently related question.

The essence of the Judgment is, I feel sure, that the continental shelf belongs by its very nature to the coastal state precisely because it is naturally, that is to say geographically and geologically a prolongation of the land domain. This is why it belongs tot the coastal state irrespective of occupation, proclamation, or any other act of the coastal state. This principle which the Court finds to be a principle of general law is however to be found "enshrined" in Article 2 of the Convention. I cannot for the life of me see how it can be said that this principle, stated almost ad nauseam throughout the Judgment is confined to the shallow sea situation. It must apply to the continental shelf in general terms because it is expressed as a quite general principle, and moreover as one based upon physical fact. It is therefore not only permissible but essential that one should ask what is the meaning of this great general principle in relation to the seaward limit of a continental shelf.

The next point I must emphasize is that this idea of a marine feature belonging just because it is appurtenant was not thought up by the Court in the North Sea case. It was the basis of decision in the Norwegian Fisheries case. But it is older than that. May I call your attention to an article by the late Professor Gilbert Gidel, the undoubted doyen of all maritime lawyers. in which he dealt with the juristic nature of the continental shelf before the 1958 convention (see Festgabe fur A. N. Makarov 1958, pp. 81–101). In arguing that the shelf belongs without need of any kind of occupation (and your 'demonstrated' exploitability is getting very near to that) because it is the natural prolongation of the land domain, he traces this idea as far back as Lord Stowell's decision in the Anna (5 C.Rob.Adm. 373), and to an Opinion the Law Officers on the Bermuda reefs of 1862. May I cite just one or two key passages from Gidel?

"L'attenance ne résulte pas du simple voisinage. . . .

"Mais L'attenance (*appurtenance*) diffère duvoisinage en ce que, dans l'attenance, il y a une solidarité géophysique entre le sol émergé et la configuration du sol submergé, tandis que cette solidarité geophysique qui, en ce servant ici de l'expression de la C.I.J. dans l'arrêt du 18 decembre 1951, realise 'la continuation du contenent', fait defaut dans le simple voisinage. Le plateau continental est une *'dépendence du continent' qui se manifeste par l'aspect de socle recouvert d'eau sur lequel des terres emerges parassent possés.* Il cesse a partir du moment ou se produit ou bien est censée fictivement se produire cette rupture de pente." (p. 93.)

"Le plateau continental, . . ., est physiquement une extension de la masse continentale riveraine." (p. 99.)

May I add to that one short citation from no less an authority than Charles de Visscher in his very recent book (*Problèmes de Confins en Droit International Public*, 1969) where he actually describes the decision of the Court in the *North Sea* case in the following terms:

"Plus fondamentale que la notion de proximité est la notion du prolongement naturel dudomaine terrestre sous le lit de la mer. Le titre que le droit international reconnait *ipso jure* sur certaines zones sous-marines procède non de ce qu' elles peuvent en fait etre plus proches des cotes, mais de ce qu'elles constituent veritablement le prolongement du territorie de l'Etat riverain." (p. 153.)

Having been President of the World Court both before and after the Second World War as well as being the sole President d'Honneur of the Institut de Droit International, it may be presumed that de Visscher knows how to extract the principle of decision of a judgment.

But I have said enough I think to show that this notion of prolongation of the land domain, and of belonging therefore by virtue simply of appurtenance, was not a bright idea of mine, or even of the Court in the *North Sea* case, but is of the very stuff of which the international law of maritime rights is made.

If this is accepted—and in this matter at least I really think there is no option—the next question is where, geographically and geologically, this prolongation of the land domain ends to seaward? I have suggested in my article that it ends at the foot of the slope but that the rise seems to be ambiguous. Other views are obviously possible as indeed I indicate in my article. The NPC view, for example, is rather different. But if regard is had to geology as well as to geomorphology—and we *are* dealing with subsoil as well as seabed—it does still seem to me that the prolongation includes the slope. Again, compare the language of Gidel in talking about the pedestal or plinth (socle) on which the land mass seems to rest.

If I may say so I do find some difficulty in recognizing myself as straining to support the extreme nationalist view in this (p. 10 of your draft of further evidence). The extreme nationalist view is surely the one that relies on exploitability to carry the national frontier to the median line. And if *you* attach great importance to exploitability and at the same time say the moratorium resolution is meaningless, are you not in danger of lending great comfort to that extreme nationalist position even without having to strain?

Now a word on "adjacency". Adjacent does not mean "near"; though it can mean that among other things. It means "lying near to", "adjoining" or "bordering". This can, entirely naturally, be interpreted as comprehending the notion of prolongation; and this must be right, for on your own showing the purpose of the Convention was to codify existing law. The law of prolongation and appurtenance was by 1958 so firmly established that it is virtually impossible to avoid interpreting adjacency in this sense. Therefore it does not mean merely nearness or proximity (see Gidel, see de Visscher, see Norwegian Fisheries case, etc. etc.) as the Court is at great pains to point out in the North Sea case. For proximity was the basis of the case it rejected. This I take it to be the burden of the message of paragraph 41 where the Court is in the middle of disposing of the argument of "absolute proximity". Admittedly the thought is very compressed and could have been put more clearly. But the Court cannot be saying that a shelf which extends to more than a hundred miles from the coast cannot be adjacent in the sense of the Convention; for since adjacency grammatically governs the whole of Article 1, this would mean that a part of the North Sea was beyond any national jurisdiction. But of course the Court is not talking about the continental shelf at all in Article 41; it is talking about a point on a continental shelf, and if one is thinking of a problem of demarcation between two national jurisdictions, it is necessary to consider particular points, especially if one side is claiming jurisdiction over that point because it is nearer to it. You see, if I may suggest it with the greatest respect, it is you who are taking a passage where the Court is looking at the particular problem before and understanding it as a general principle of ecumenical value.

So, to my mind, by general law, enshrined in Article 2 of the Convention, the continental shelf belongs because it is a natural prolongation of the mainland; therefor it is limited to seaward and cannot extend beyond the reasonable meaning of physical prolongation; and the word "adjacency" in Article 1 of the Convention I believe must mean all this just because like you I believe the Convention was intended to codify existing law and practice.

Where then does "exploitability" come in? I cannot see how this can be a part of general as opposed to conventional law (and when I say the Convention was intended to codify the basic existing law I am assuming of course that parts of it are indeed new and apply only to the parties; examples abound). Exploitability as a test for an area falling in to sovereign rights is too near to some kind of occupation; a notion which doctrine and practice have completely rejected in this connexion. Moreover it does not square up with the notion of the shelf belonging because of geophysical fact without any act on the part of the state or proclamation on the part of the state. How can it then depend upon the act of some other state?

But viewed as a test for the application of the convention regime as such, the exploitability test (restrained as it is by adjacency) makes excellent sense. It does something for those with a sheer coastline; and provided a shifting frontier for a convention regime designed at a time when relatively little was known about the seabed, yet it was evident that a fixed arbitrary frontier (which would certainly have been de lege lata) was not generally acceptable.

It must have seemed merely commonsense to say that the convention should apply to areas where the depth was such that practical questions might arise. It seems to me a most extraordinary, almost cynical, understanding of the effect of the Convention to suggest that an adjacent area which is still outside this shifting threshold can, in the terms of the Convention, be so to speak sterilized from national jurisdiction by simply saying that it is internationalized. Purely within the four walls of the Convention, what is sauce for the nationalist goose is sauce for the internationalist gander; what is not yet exploitable within the terms of the Convention is still not exploitable in any other context; and if it be also adjacent, to my mind, it already belongs by reason of its geophysical connexion to the coastal State.

Mind you I do not, cannot, for one moment deny that it would be open to parties to the Convention to agree that those parts of the shelf or slope presently beyond the exploitation threshold should now be dedicated to an international regime. For that matter they could agree that parts of the shelf that have been or are being exploited should henceforth be so dedicated. Of course they could. That is *if* they could agree upon a new treaty saying so. Even so it would not bind any state refusing to agree.

But that is not what you are saying. You are saying that a state's potential rights and legitimate expectations under the Convention—and even if they are not presently vested as I believe them to be, the objection to my mind still holds—can be taken away from them not by securing their agreement to this result but by some curious procedure of assertion that I only partly understand but which seems to consist mainly in saying three times that the part of its shelf that is not at some not very clearly defined moment 'demonstrably exploitable' is nevertheless exploitable or deemed to be exploitable for the purposes of an international regime. Now you know this may seem a little different on your side of the Atlantic. But if you are trying to assess the prospects of selling this idea on *this* side, I wonder whether you would like to consider again the view from *this* side of your commendation of a narrow shelf on the ground that it would enable Americans to dig near the Spanish coast without asking Mr. Franco?

One final thought. Are you not thinking of exploitability simply in terms of drilling for oil and of permits and leases to drill for oil? But exploitability is not qualified to any particular resources in the Convention. Is it not probably the case that nodules can already be swept from the ocean floor? Are you sure this does not put exploitability a good deal further out now than you are supposing? And, if so, don't you need my notion of 'adjacency' to restrain national rights under the Convention already?

I apologize for this very rough draft—just as I typed it myself straight onto the machine. But I was afraid that, if I got it typed properly, it might be too late to be of any use to you. If I had had more time I could have also made it much shorter!

With warmest greetings. It was a very great pleasure to meet you the other day.

Yours sincerely,

ROBBIE JENNINGS.

JESUS COLLEGE,
Cambridge, January 28, 1970.

DEAR MR. LAYLIN: My little memo to you was written in a great hurry; and, looking at it again, it seems to me that the 3rd para. on p. 4, beginning 'where then does . . .', is obscure to the point of being opaque. Let me have another go at it!

The point is this. Art. *2* of the Convention, according to the Court, "enshrines" the basic principle of the general (not just treaty) law of the continental shelf; i.e., that it 'belongs' to the coastal state without the need for any activity whatsoever on the part of that state. For it belongs because of its physical relationship with that state.

But 'exploitability' imports the notion, if not of activity by the coastal state, of activity by *some* state somewhere. It is the action of technological man, that determines the threshold of exploitability from time to time.

This and Art. 2 are now in the long run reconcilable. That is why I believe that exploitability is a *purely* treaty device and has nothing to do with the general law.

This seems to me both logical and desirable: desirable because exploitability leads so easily to the extreme nationalist position, which I dislike; and because

it is also in practice just unworkable as a limit because nobody can discover what it means from time to time, so it always becomes not a limit, but a skid.

Again, I repeat, exploitability cannot be limited to drilling for oil.

Best regards, yours ever,

ROBBIE JENNINGS.

API STATEMENT OF POLICY*—JURISDICTION OVER THE NATURAL RESOURCES OF THE OCEAN FLOOR

PREAMBLE

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 U.S. 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 U.S. national 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.

For this reason, the American Petroleum Institute has been prompted to adopt the following policy.

POLICY

Exclusive jurisdiction over the natural resources of the seabed adjacent to the U.S. 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 confined 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 give 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.

EXPLANATORY COMMENTS

1. Oil and natural gas are the nation's prime energy fuels. By the turn of this century, U.S. demand for petroleum energy is expected to double. Even with the recent important developments in Alaska, the best available estimates are that domestic onshore petroleum discoveries and production will be unable to keep pace with such a growth in demand. Increasing dependence will, therefore, have to be placed on U.S. offshore petroleum areas. Although only a small fraction of the seabed under U.S. jurisdiction has been explored, experts view this area as offering one of the most promising provinces for the discovery of oil and natural gas to supply the nation's rising petroleum requirements.

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*As adopted by the Board of Directors of the American Petroleum Institute, November 10, 1969.

2. Within three to five years, it is expected that the petroleum industry will have available the technological capability to drill and produce in water depths of 1,500 feet and within ten years to depths of up to 6,000 feet. But offshore operations are extremely expensive, and costs will rise considerably as water depths increase. Offshore platform now run as high as $15 million apiece, and ocean floor drilling costs in present water depths average $450,000 per well. Offshore leases also represent a sizable outlay—oil companies have paid the federal government $1.9 billion in offshore lease bonuses since 1967. Companies risking funds of this magnitude must have the economic incentive and security of lease tenure which can best be assured by continuation of the U.S. seabed-resource jurisdiction confirmed under the terms of the 1958 Geneva Convention on the Continental Shelf.

3. On the basic question of the seaward extent of the national jurisdiction of the coastal nations, the 1958 Geneva Convention on the Continental Shelf, which has been ratified by the United States and 39 other nations, is generally acknowledged to be declaratory of the exclusive sovereign rights of the coastal nations under general principles of international law to the natural resources of the "continental shelf," which is defined in the Convention as:

> "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 superjacent waters admits of the exploitation of the natural resources of the said areas . . . ."

4. The sovereign rights of the coastal nations pertain solely to the resources of the seabed, and in no way affect the legal status of freedom of the seas overlying the ocean floor, and of the airspace above those waters.

5. Under the terms of the 1958 Geneva Convention on the Continental Shelf, these rights are exclusive in the sense that if the coastal nation 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 nation. This means that only the coastal nation or its designees may take advantage of advances in technology to explore and exploit the area covered by the Convention. Given the rapid advances that are taking place in deep water technology and the outlook for an eventual capability to explore and exploit at any depth, it also means that it is the test of adjacency, as that test is laid down in the 1958 Geneva Convention on the Continental Shelf, that will determine the outer limit of coastal nation rights under the Convention. Applying this test in the light of the preparatory works that led to the Convention, the National Petroleum Council, the Committee on Deep Sea Mineral Resources of the American Branch of the International Law Association, and the American Bar Association's Sections of Natural Resources Law and International and Comparative Law and its Standing Committee on Peace and Law through United Nations have all concluded that the area within which the coastal nation has a protected right to exercise exclusive jurisdiction and control for purposes of exploration and exploitation of seabed resources includes the entire submerged portion of the continent.

6. America's chief delegate to the 1958 Geneva Conference on the Law of the Sea, Ambassador Arthur H. Dean, supported this interpretation in presenting the Convention for the Senate's advice and consent to ratification, when he stated to the Senate Committee on Foreign Relations that the Convention was in accord with the inter-American conclusions reached at a specialized conference of the Organization of American States, held in Ciudad Trujillo in March, 1956. The twenty delegations attending that conference had unanimously agreed that the utilization of the resources of the continental shelf could not be technically limited and that the seabed and subsoil areas appertaining exclusively to the coastal state and subject to its jurisdiction and control should include:

> "The continental shelf, continental and insular terrace [which the conference report defined as the continental shelf and the continental slope 'to the greatest depths'], or other submarine areas, adjacent to the coastal state, outside the area of the territorial sea, and 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 sea-bed and subsoil . . . ."

7. The United States can ill afford to relinquish any portion of its jurisdictional rights as confirmed by the 1958 Geneva Convention on the Continental Shelf. The seabed resources confirmed to the United States by this Convention represent a vital petroleum energy potential, not only for the nation's normal future requirements, but for those that may arise in the event of a serious

international emergency. The nation's ability to avert what might have been a serious fuel shortage during the 1967 Middle East Crisis was a prime demonstration of the priceless value of adequate domestic petroleum resources, including a degree of excess productive capacity, to national security.

8. At the present time, entirely too little is known of the deep ocean environment beyond national jurisdiction and the optimum conditions for its development to the general benefit of mankind, for a definitive set of principles governing the exploitation of deep ocean mineral resources to be formulated with any degree of confidence. Primary activity for some years to come will be focused on the areas clearly within the national jurisdiction of the coastal states. Technological and economic factors will sufficiently deter intensive mineral resources exploitation of the ocean floor beyond national jurisdiction to permit the orderly collection of data on the deep ocean environment needed to develop a sound and durable set of international rules for the exploitation of these resources.

9. There is such a level of international interest in the problem that the initiation of studies of possible solutions is obviously in order, but the matter should be approached with the caution that its importance and the irrevocability of an international commitment once taken both dictate. As suggested by the National Petroleum Council, initial efforts to develop legal arrangements for deep ocean areas beyond national jurisdiction should be directed toward the formulation of standards of conduct for individual nations and persons engaging in activity pursuant to national license. A move toward the establishment of an international agency with licensing authority would seem premature, but agreement among concerned nations on appropriate standards of conduct and on the establishment of an international registry of claims along the lines proposed by the National Petroleum Council could provide a useful measure of certainty to encourage any feasible mineral exploitation of deep ocean areas beyond the limits of national jurisdiction during the interim period. The agreed standards would also provide a useful guidepost for the formulation of any long-term arrangements that may eventually be found to be desirable.

AIME Policy Statement on Outer Limit of National Sovereignty Over Seabed Resources*

Because of rapidly advancing technologic capability and increasing evidence of the existence of substantial mineral and energy resources on and within the submerged portions of continents, and in view of the vital importance of these resources to the economic health and security of the United States, potential conflicts in interpretation of the outer limit of sovereign rights of contiguous coastal states as defined in the 1958 Geneva Convention on the Continental Shelf require the expeditious establishment and statement of the U.S. position on this question.

Neither the shoreline nor any specified water depth defines any natural limit or division of resources. On the other hand, one of the most fundamental natural boundaries in the earth's crust is that which separates continents from ocean basins. Rocks of continents differ from those of ocean basins consistently and systematically, in thickness, physical properties, and chemical composition. The geologic boundary between continent and ocean basin may or may not be near the shoreline. In many places the continents have submerged margins of considerable extent, the upper surface of which is known as the continental shelf and the outer edge as the continental slope.

The continental margin can be distinguished geologically from the ocean floor. The mineral and energy resources of the margin are continental in character and can be found and exploited by onshore methods adapted to the submerged-margin environment. On the other hand, the mineral resources of the deep-ocean floor, as well as the technology of mineral exploration and exploitation in the deep-ocean environment, will probably be found to differ fundamentally from those of the continental margin. For these reasons, using the geologic boundary between continent and ocean floor as a limit of sovereign rights over seabed resources makes sense to many geoscientists and resource engineers.

It cannot be denied, however, that the geological boundary will be difficult to map and to define legally: however sharp on the scale of a library globe, it will be found gradational in detail.

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*Adopted by AIME Board of Directors, October 15, 1969.

In light of the foregoing considerations, AIME recommends that the United States maintain a definition of the outer limit of sovereign rights with respect to exploration and exploitation which is related to the realities of nature and the needs of the nation. Because accurate sub-bottom geologic and geophysical delineation is difficult and will take much time, it may be necessary to set provisional outer limits of seabed-resource sovereignty in terms of water depths which approximately reflect the map trace of the edge of the continents.

The United States position urged in this statement should in no way prejudice or constrain the United States in the question of jurisdiction over the deep-ocean floor (beyond the continental margin).

ELY AND DUNCAN,
COUNSELLORS AT LAW.
Washington, D.C., January 14, 1970.

STEWART FRENCH, Esq.,
Senate Committee on Interior and Insular Affairs,
U.S. Senate,
Washington, D.C.

DEAR STEWART: I enclose some material which I would appreciate having added to your record, following my testimony before the Special Subcommittee on the Outer Continental Shelf. It consists of a letter of inquiry from Luke W. Finlay, addressed to Dr. Garcia Amador, asking clarification of some frequently quoted remarks of Garcia Amador, during the negotiation of the Continental Shelf Convention in 1958. Dr. Garcia Amador's reply is most illuminating. I think it would be important to have this material available, in a place where we can all cite it, when necessary.

With kind personal regards,
Sincerely,

NORTHCUTT ELY.

[Enclosure]

PAN AMERICAN UNION,
Washington, D.C., March 12, 1969.

Mr. LUKE W. FINLAY,
Manager, Government Relations Department,
Standard Oil Co., New York, N.Y.

DEAR MR. FINLAY: I take pleasure in referring to your letter of February 24 concerning the doubts caused by the cited paragraph from the Summary Record of the International Law Commission (p. 135 of the ILC Yearbook, 1956, Vol. I).

In the first place, I must admit that as this paragraph stands it makes me appear as saying that the submarine areas never have an extension greater than 25 miles. This is clearly a case of an error of interpretation on the part of the précis-writer and of my own negligence in failing to review the draft summary record and make the correction.

However, this is simply an error since I could never have made a statement that presupposed an extremely restrictive position at the very time when I had taken the initiative to propose the broadest, most flexible formula yet known, i.e., the formula approved by the Inter-American Specialized Conference which had been held in the capital of the Dominican Republic scarcely two months prior to the ILC session.

I can only reiterate my statement, made when proposing the use of the expression "submarine areas", to the effect of requesting "the Commission to take a decision on the right of States to exploit the natural resources of the sea-bed in adjacent waters to whatever depth was practicable" (p. 136). It seems that it was with this unrestrictive, flexible criteria, most favorable to the coastal state's special interest in the exploitation of the resources of its adjacent submarine areas, that both the ILC and later the first Geneva Conference on the Law of the Sea approved the definition that appears in Article 1 of the Continental Shelf Convention of 1958.

Sincerely yours,

F. V. GARCÍA AMADOR.
Director, Department of Legal Affairs.

STANDARD OIL CO.,
INCORPORATED IN NEW JERSEY,
New York, N.Y., February 24, 1969.

Dr. F. V. GARCÍA AMADOR,
Washington, D.C.

DEAR DR. GARCÍA AMADOR: Some of the people favoring a narrow interpretation of the Geneva Convention on the Continental Shelf are making what I believe to be an improper use of a statement attributed to you, and I would greatly appreciate your assistance in clarifying the matter.

As you know, the Inter-American Specialized Conference on "Conservation of Natural Resources: The Continental Shelf and Marine Waters", held at Ciudad Trujillo in March of 1956, at which you served as Chairman of the Cuban Delegation, unanimously resolved to submit the following conclusion for consideration by the American states:

"To submit for consideration by the American states the following conclusions:

"1. The sea-bed and subsoil of the continental shelf, continental and insular terrace, or other submarine areas, adjacent to the coastal state, outside the area of the territorial sea, and 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 sea-bed and subsoil appertain exclusively to that state and are subject to its jurisdiction and control."

The report, attached as an appendix to the final act of the Conference, defines "continental terrace", as used in this resolution, as being "that part of the submerged land mass that forms the shelf and the slope". In turn, these two terms are defined as follows:

"(m) Scientifically, the term 'continental shelf' is understood to be that portion of the continent or island which is covered by the waters up to the point of declivity of the slope or edge of the shelf.

"(n) The limit of the shelf, the point of declivity of the slope or edge, varies according to the depth at which it occurs (from 120 to 365 m.).

"(o) Scientifically, the term 'continental slope', or inclination, refers to the slope from the edge of the shelf to the greatest depths."

The report goes on to add the following conclusions:

"I. The American states are especially interested in utilizing and conserving the existing natural resources on the American terrace (shelf and slope).

"II. As the edge of the continental shelf varies in depth, it is advisable to describe it conventionally as the submerged part of the continents or islands to depths of 200 meters (100 fathoms, more or less).

"III. The utilization of the resources of the shelf cannot be technically limited, and for this reason the exploitation of the continental terrace should be included as a possibility in the declaration of rights of the American states.

"IV. Adequate technical precautions should be taken in the laying of cables, oleoducts, and gas pipelines, in order to prevent accidents and avoid impediments to navigation and fishing.

"V. Governments should be urged to promote a better knowledge of the terrace (continental shelf and slope) and its resources."

A few weeks later the International Law Commission (ILC) of the United Nations convened for its eighth session and, after electing you as Chairman, proceeded to consider, among other things, the term to be recommended for inclusion in what eventnally became the 1958 Geneva Convention on the Continental Shelf. The proceedings of this session are set forth in Volume I of the *Yearbook of the International Law Commission, 1956*, and subsequent references will be to the pages of that volume.

At the outset of the discussion on the continental shelf, you proposed (p. 131) the inclusion of the following language in the convention:

"Article 1

"1. As used in these articles, the expression 'submarine areas' refers to the soil and subsoil of the submarine shelf, continental and insular terrace, or other submarine areas, adjacent to the coastal State outside 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.

"2. Likewise, as used in these articles, the expression 'natural resources' refers to the mineral riches of the soil and subsoil of the submarine area, as well as to the living resources which are permanently attached to the bottom.

"3. In the other articles of the draft, the expression 'submarine areas' would be substituted for the expression 'continental shelf.'"

You then referred to definitions of the continental shelf, continental slope and continental terrace, adopted by the International Committee of Scientific Experts at Monaco in 1952, which were generally similar to those used at Ciudad Trujillo.

After some discussion of the pros and cons of your proposal to substitute the term "submarine areas" for the term "continental shelf", you made remarks which are reported (at p. 136) as follows:

"6. He did not wish to press the part of his amendment introducing the concept of the continental terrace, since the adoption of the second point relating to the depth at which exploitation was practical would automatically bring that area within the general concept. He would, however, request the Commission to take a decision on the right of States to exploit the natural resources of the seabed in adjacent waters to whatever depth was practicable. With that addition, the article could be referred to the Drafting Committee."

After further discussion, your proposal for incorporation of the exploitability concept was summarized and favorably acted upon (p. 139) as follows:

"45. Mr. Padilla-Nervo pointed out that what in fact the Commission had to vote on was the Chairman's proposal to incorporate in article 1 the concept contained in the words 'or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas'."*

It seems perfectly clear to me from this record that the language actually accepted by the ILC and later incorporated into the Geneva Convention was intended to be entirely equivalent in legal effect to the language adopted at Ciudad Trujillo. However, some of those who are attempting to limit national jurisdiction of the coastal states to the 200-meter isobath seek to gain support for their position from a statement of yours which is reported at page 135 as follows:

"95. The Chairman, in reply to Mr. Scelle, pointed out that the words 'adjacent to the coastal State' in his proposal placed a very clear limitation on the submarine areas covered by the article. The adjacent areas ended at the point where the slope down to the ocean bed began, which was not more than 25 miles from the coast."

I have great trouble with this statement on two counts. In the first place, the definition of "continental terrace" utilized both a Ciudad Trujillo and at the Eighth Session of the ILC made it perfectly clear that it was your intention that the exploitability test should extend national jurisdiction not to "the point where the slope down to the ocean bed began", but to the *lower* extremity of "the slope from the edge of the continental shelf to the greatest depths." In the second place, there are parts of South America off Argentina where the continental shelf extends several hundred miles before it even reaches a depth of 200 meters, so that you could not possibly have intended to impose a 25 mile limitation on the extent of coastal nation jurisdiction over natural resources under the convention.

As I read the official text of the Geneva Convention on the Continental Shelf it fully supports the position adopted at Ciudad Trujillo and advocated by you at the Eighth Session of the ILC; namely, that coastal nation jurisdiction over the natural resources of the seabed and subsoil of adjacent areas extends over the entirety of the continental terrace to the point where the outer edge of the submerged continent meets the oceanic crust of the abyssal ocean floor and also makes provision for the special case of those nations whose coasts drop abruptly to great depths.

I am unclear in my own mind whether the statement reported at page 135 of the ILC proceedings was an incorrect transcript of what you actually said, or whether there is some other explanation of its apparent inconsistency with the basic scope of the convention for which you were pressing. Whatever the answer is, I am satisfied that it has no juridical significance in undoing the inter-American conclusions at Ciudad Trujillo, but I would be most grateful to you for any clarification that you could give me.

I apologize for the length of this letter, but as I am asking for your recollection on a matter some thirteen years in the past. I felt it only fair to give you a reasonable complete background.

Sincerely yours,

LUKE W. FINLAY.

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*This proposal was adopted by 7 votes to 5, with 3 abstentions.

DEPARTMENT OF THE TREASURY,
Washington, D.C., January 22, 1970.

HON. LEE METCALF,
U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: Secretary Kennedy has asked me to reply to your letter of January 14, concerning your Subcommittee's hearings on the seaward boundary of the Outer Continental Shelf and related issues. The Treasury Department as the agency responsible for tax and customs policy and administration has a continuing interest in the growing commercial development of the Continental Shelf and will be happy to provide whatever assistance it can in connection with your Subcommittee's consideration of Continental Shelf questions.

We have not, at this time, taken a position on the precise seaward limits of the Outer Continental Shelf, and, indeed, have not yet found it necessary to do so in the everyday application of the tax and customs laws. I have attached for your convenience a copy of section 505 (the Continental Shelf amendment) of the Tax Reform Act of 1969, as well as the pertinent excerpts from the Finance Committee report and the conference report. You will note that the description of what is regarded as the Outer Continental Shelf is not self-contained, since it refers to those adjacent submarine areas beyond the territorial waters of the United States "over which the United States has exclusive rights, in accordance with the international law, with respect to the exploration and exploitation of natural resources." We are in the process of formulating regulations to implement that section and will, of course, make them available to your Subcommittee when they reach completion. While identification of an exact Continental Shelf boundary is a matter with which other Government agencies are more directly concerned at the present time, we believe that the effect of alternative boundary definitions on the tax and customs laws should also be taken into account.

An explanation of Treasury's current treatment of the Outer Continental Shelf for tax and customs purposes is being prepared and will be forwarded to you as soon as possible. I understand that the Treasury Department will have an opportunity to discuss this matter more fully with your Subcommittee at a later date.

Sincerely yours,

JOHN S. NOLAN,
Deputy Assistant Secretary.

7. Continental Shelf Areas (sec. 507 of the bill and sec. 638 of the code)

Present law.—Present law is not explicit as to whether for purposes of the exploration for, or exploitation of, natural resources in the continental shelf area of a country over which the country exercises tax jurisdiction under the principles of international law, that area is considered for U.S. tax purposes as a part of the country.

General reasons for change.—The development of natural resources in the continental shelf areas of the world makes the status of these areas for tax purposes of increasing importance. This status is important, for example, in determining the source of income from mining activities conducted in continental shelf areas and in the application of the foreign tax credit with respect to this income. Accordingly, the committee believes it appropriate to clarify the status of continental shelf areas with regard to the application of the income tax provisions of the code to natural resource activity.

Explanation of provision.—The committee has added an amendment to the House bill to provide that for purposes of applying the income and employment tax provisions of the code (including those relating to the source of income from personal services) with respect to mines, oil and gas wells and other natural deposits, the term "United States" when used in a geographical sense includes the seabed and subsoil of the submarine areas adjacent to the territorial waters of the United States over which the United States has exclusive rights, in accordance with international law, with respect to the exploration and exploitation of natural resources.

The committee amendments also add a cross-reference to the provisions of the Code dealing with withholding of tax on payments to nonresident aliens which makes it clear that wages or salaries received for personal services performed on a mine or oil or gas well located or being developed on the Continental Shelf of the United States constitute income from sources within the United States.

The committee amendments also provide that the term "foreign country" (or possession) when used in a geographical sense includes the seabed and subsoil of the submarine areas adjacent to the country (or possession) over which the government of the country (or the U.S. Government in the case of a possession) has exclusive rights, in accordance with international law, with respect to the exploration and exploitation of natural resources. In the case of a foreign country, this rule applies only if the government of the country exercises, directly or indirectly, taxing jurisdiction with respect to the exploitation of the natural resources. The bill makes it clear, however, that a foreign country is not to be treated as contiguous to the United States by reason of these definitions.

4. Exploration expenditures (secs. 615 and 617 of the code)

The House bill provides that insofar as future mining exploration expenditures are concerned, the general recapture rules of present law are to apply (under which exploration expenditures previously deducted are recaptured when a mine reaches the producing stage, generally by disallowing an appropriate portion of the depletion deduction with respect to the mine). Taxpayers may continue to deduct expenditures for foreign (and oceanographic) exploration to the extent permitted under the limited provision of present law (generally up to a maximum of $400,000). The House provision applies to mining exploration expenditures made after July 22, 1969.

The Senate amendment modifies the House provision to make it applicable to exploration expenditures made after December 31, 1969.

The conference substitute (sec. 504 of the substitute and secs. 615 and 617 of the code) follows the Senate amendment.

5. Continental shelf areas (sec. 638 of the code)

The House bill does not contain a comparable provision.

The Senate amendment provides that for purposes of applying the income and employment tax provisions of the code with respect to mines, oil and gas wells, and other natural deposits, the term "United States" includes the seabed and subsoil of the submarine areas adjacent to the territorial waters of the United States over which the United States has exclusive rights under international law with respect to the exploration and exploitation of natural resources. A similar definition of the term "foreign country" also is provided.

The conference substitute (sec. 505 of the substitute and sec. 638 of the code) follows the Senate amendment.

6. Foreign tax credit with respect to certain foreign mineral income (secs. 901 and 914 of the code)

The House bill provides that a taxpayer who uses the per country limitation on the foreign tax credit and who reduces his U.S. tax on U.S. income by reason of a loss from a foreign country is to have the resulting tax benefit recaptured when income is subsequently derived from the foreign country involved. The House bill also imposes a separate foreign tax credit limitation on foreign mineral income so that excess credits from this source cannot be used to reduce U.S. tax on other foreign income. In other words, the foreign tax credit allowed on mineral income from a foreign country is limited to the amount of U.S. tax on that income. This limitation applies generally where the foreign country receives mineral royalties with respect to the property or where it has substantial mineral rights in the properties. Excess credits can be carried over under normal foreign tax credit carryover rules and credited against U.S. tax in other years on the foreign mineral income from the same country.

AMERICAN METAL CLIMAX, INC.,
New York, N.Y., March 25, 1970.

HON. LEE METCALF,
U.S. Senate,
Chairman of Subcommittee on the Outer Continental Shelf,
Washington, D.C.

DEAR SENATOR METCALF: Under date of July 3, 1968 our President, presently our Chairman of the Board, advised the Executive Vice President of the American Mining Congress of this company's recent stand with reference to the more

specific delimitation of the outer edge of the continental shelf as that feature is defined in the Continental Shelf Convention of 1958. To data, that policy has not been changed and I quote it in full with only a slight correction in terminology, viz., the substitution of "continental mass" for "territorial mass":

"Dear Allen: This is in response to your inquiries of May 24, 1968 concerning the position of our company with respect to an underseas mining regime.

"Amax considers that:

"*I*

"The present definition of the "Continental Shelf" in the 1958 Convention does not provide a satisfactory legal, economic or political atmosphere to warrant expenditure of the huge sums required to develop effective and efficient techniques for the exploration and development of fixed marine resources of the deep seas. The failure to define essential terminology such as the "200 metre" line, "exploitation" and 'islands" has introduced a confusion so extensive as to destroy, over major areas of the sea beds of the world, the basic security of tenure required to procure the financing required. The narrow restriction of national competency to a special right for exploration and exploitation, rather than the acknowledgment of full sovereignty with necessary safeguards,[1] is conducive to unnecessary international aggravations. The language of the United States Outer Continental Shelf Lands Act[2] adopts the full sovereignty approach which we deem more practical for all purposes, notwithstanding very faint case authority tending to diminish the quantum of the clear legislative declaration of principle.

"*II*

"A dual framework is necessary for the best accomplishment of the exploration and exploitation of the deep seas, viz., (i) an allocation of the subsea continental masses (to the floor of the deep sea) among the coastal and island sovereignties under a renamed and revised Convention, and (ii) an entirely autonomous international agency, created by multilateral treaty outside of the framework of the United Nations, charged with the sole duty of administering the disposition, development and conservation of the fixed marine resources of the deep sea floor. Such floor would be explicitly recognized as *res communes omnium* and therefore the property of none, whether state, international organization including the United Nations, or any individual. *The continental masses would be limited to the seabed and subsoil alone.*

"The United Nations Convention should substitute 'Continental Masses' for the misnomer 'Continental Shelf' wherever used and 'sovereignty' for the mere special right of exploration and exploitation now recognized. The continental mass would consist of the entire continental mass to the line where the Slope or Continental Rise ends on the floor of the Deeps and a like extension of island mass to the bottom of the deep sea. Continental nations would have the option, on a one-time basis within a fixed period, to elect to take 100 miles to sea as the extent of their subsea continental mass in lieu of the geologic description. The privilege would not be extended to islands. Island masses, if arising out of the geologic continental shelf rather than the ocean floor, would extend to the nearest ocean floor, e.g., The British Isles, Newfoundland.

"Areas beyond the continental masses land should be reserved for administration by the new autonomous international agency referred to above, with suitable definitions and more definite confinement to clearer bounds of competency and administration. A system somewhat like that under the United States Outer Continental Shelf Lands Act, would be appropriate except that exploitation and development expenditures should be required of a licensee for exploration in lieu of rentals and other charges until attainment of commercial production and crystallization of an exploitation concession. A reasonable royalty-free period, in lieu of the usual exemption from income taxes granted by many nations for the initial production period, should follow.

"With reference to the time frame of our proposal, we consider that the naming and revision of the present Continental Shelf Convention should be taken

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[1] E.g., the new Convention should bar: (i) the installation of military installations on the continental masses or on the deep sea beds while clearly permitting installation of surveillance or unarmed warning devices on the sovereign continental masses; (ii) interference with scientific research in the superjacent waters; (iii) interference with surface navigation or fishing by extensions of seabed installations.

[2] Especially sections 3 and 4.

up in the coming year promptly following the conclusion of the five-year period provided by the Convention. The utmost of pressure should be used to secure national ratifications within three to five years at the most. Appointment of a study committee to devise and recommend a plan or plans for creation of the Commission for The Administration of The Fixed Marine Resources of The Deep Seas should be appointed without awaiting ratification of the revised convention, with instructions to report back within five years of the time of its appointment. The Committee's plans and recommendations, including both majority and minority views, would be a required "must" for the General Assembly at the session following its submission or one year thereafter, whichever should be the later.

"The personnel of the study committee should not be appointed on the usual bloc basis, but should be especially selected to include, as at least half of its personnel, qualified technical and legal personnel selected from among personnel made available by larger and more experienced international petroleum and mining companies without regard to bloc consideration.

"In summary, we should strive for ratification of the revised Convention within the three to five years mentioned, without regard to whether the recommendations of the study committee as to an international agency should be adopted or even acted upon, so long as the title to the deep sea beds is confirmed as being *res communes omnium*. Thereafter, we should aim for creation of an autonomous commission for the administration of the deep sea beds created by separate multilateral treaties and outside the framework of the United Nations, with a view to commencing operations by 1979.

"The foregoing should allow technology to catch up with the law rather than passing it.

"Sincerely,

"IAN MACGREGOR, *President*."

The foregoing statement enunciated almost two years ago very directly answers some, though not all, of the specific questions asked in your opening statement. Regrettably, perhaps because of the uncertainty as to security as well as insufficient knowledge of the environment and the techniques that environment will eventually demand, this company has not given the subject the detailed examination required by the remaining questions any priority consideration.

It might be noted in passing that the statement of company policy contained in the last sentence of the first numbered section of its policy statement, viz., "The language of the United States Outer Continental Shelf Lands Act adopts the full sovereignty approach which we deem more practical for all purposes, * * * " has been explicitly confirmed a number of times in the recent judgment of the International Court of Justice in the North Sea Continental Shelf Cases, e.g. (paragraph 19 at page 22) :

"19. More important is the fact that the doctrine of the just and equitable share appears to be wholly at variance with 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."

Though I cannot speak officially for company policy on the matter, I believe the following statements would be held to be correct here :

The greatest incentives to marine mining would be :

a. the adoption of a certain and defined line for the outside limit of the outer continental shelf as defined in our Act on the subject ;

b. provision for an exclusive prospecting license at a nominal or moderate fee as now prevails with acquired lands permits for hard rock minerals ; and

c. adoption of a general mineral leasing system including the present court safeguard against administrative cancellation.

Whether there should be any form of government assistance to the prospector in the way of grants or loans is doubtful for the game is not a poor man's or even a moderately well fixed man's game. Both antes and raises are prohibitive in cost requiring resource to outside financial sources. We do believe that the Geological Survey should continue with its admirable work in the field with expanded funds for the purpose. Grants to qualified scientific research organizations under a guaranty of early publication of results would be productive of material of direct benefit to those intending to engage in subsea exploration.

A biological statement has been enclosed as required by your procedures.

Respectfully submitted.

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Admitted to practice: Supreme Court of the United States of America, States of New York and Wyoming, Interstate Commerce Commission, U.S. Board of Tax Appeals, U.S. District Courts, U.S. Circuit Court of Appeals (10th), U.S. Interior Department.

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6. The Mining Industry and The Continental Shelf Convention. (1969, 78 Trans. Inst. Min. & Met.—London—A10–19, A91–102, A117–124).