the materials needed from the Earth, a spaceship might pull up to an asteroid and begin mining it for materials that are not present on the surface of the Moon. This is only one of the possibilities being investigated.

The U.S. space program is really very young and in only 20 years, a lot has been done. The size of systems like SPS requires that we work a major change in the scale of structures. Also, if humans are to go to the Moon and use its resources, they have to learn entirely new scientific processes and techniques. It is quite probable that, because of the tremendous amount of research effort needed, the learning process while conducted by individual nations at first, would later be pursued by groups of nations.

REMARKS BY STEPHEN R. BOND*

My intention is to review the negotiating history of the Agreement Governing the Activities of States in the Moon and Other Celestial Bodies, the Moon Treaty, focusing especially on matters relating to what have become the most controversial aspects of the Treaty, those relating to the exploitation of natural resources found on the moon and other celestial bodies.

Such a review serves two important purposes. First, the negotiating history of any treaty is obviously relevant to complete understanding of the treaty, and arguments either pro or con the treaty can be better analyzed and judged with knowledge of how the treaty text came to be what it is. As a legal matter, the preparatory work of a treaty and the circumstances of its conclusion are, of course, recognized by the Vienna Convention on the Law of Treaties to be a supplementary means of interpretation to be resorted to where the meaning of provisions is ambiguous or obscure.

Second, the negotiation of the Moon Treaty has to a certain extent itself become controversial. Accusations have been leveled that the Treaty was "drafted by lawyers behind closed doors," that the Treaty constitutes a successful effort by the Soviet Union, supported by its developing country lackeys, to gain advantages over the United States by keeping private enterprise out of outer space, and finally, that in June 1979 the U.S. delegation to the Outer Space Committee collapsed in the face of a Soviet-LDC onslaught, with the result that the final Treaty represents essentially a Soviet-inspired text. Hopefully, a review of the negotiating history of the Treaty will shed light on these, as well as other, matters related to the Treaty.

As an attorney talking to attorneys, I have no hesitancy in actually setting forth key texts. If I may say so as one who has followed—and sometimes been nearly drowned by—the debate on the Moon Treaty, there has been a paucity of references to actual text in the debate.

So let me start by reading to you some Treaty provisions relevant to the matter we are addressing:

1. The exploration and use of outer space, including the moon and other celestial bodies, shall be carried out for the benefit and in the

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interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind.  

2. Outer space, including the moon and other celestial bodies, shall be free for exploration and use by all states without discrimination of any kind, on a basis of equality . . . and there shall be free access to all areas of celestial bodies.  

3. Outer space, including the moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.  

4. The activities of non-governmental entities in outer space, including the moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the treaty.  

As some of you are no doubt aware, these treaty provisions are not from the Moon Treaty, but rather from the 1967 Outer Space Treaty, which the Senate of the United States approved without reservation and which has been legally binding upon the United States for the past 13 years.  

This 1967 Treaty, together with three other treaties dealing with man's activities in outer space, established the essential legal context within which the Moon Treaty was negotiated and which must constantly be borne in mind in understanding and assessing the spirit and meaning of the Moon Treaty.  

A final element of background useful to understanding the nine-year course of the Moon Treaty negotiations is the institutional context. The Moon Treaty as well as the preceding four outer space treaties were negotiated in the U.N. Outer Space Committee on the Peaceful Uses of Outer Space and its Legal Subcommittee.  

This Committee was established on an ad hoc basis in 1958, with part of its charter being to explore "the nature of legal problems which may arise in the carrying out of programs to explore outer space." One year later, the Ad Hoc Committee was transformed into a standing committee of the United Nations. The Committee initially consisted of representatives from 24 countries and over the years it has grown to over 47 members, reflecting the U.N. membership as a whole, having African, Asian, Latin American, Western European, Mid-East, Soviet, Third World countries, and countries in every state of development. The Committee established two subcommittees, a Legal Subcommittee and a Scientific and Technical Subcommittee. Each subcommittee at the conclusion of its session prepares a report to the parent Committee on the Peaceful Uses of Outer Space to be considered during a two- or three-week session. Similarly, the parent Committee at the end of its session issues a report for discussion in the General Assembly's Special Political Committee.  

Generally, the delegates to the Legal Subcommittee are lawyers or diplomats. The Committee and its subcommittees work on the basis of consensus which means in effect that everyone must agree or at least not disagree with a particular proposal before it can be incorporated into a treaty or before a treaty can be adopted. The alternatives to operating by consensus would be to

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2 Id.  
3 Id. at 2413.  
4 Id. at 2415.  
decide issues by majority vote. The Committee recognized at an early stage of its history that dealing as it would be in an entirely new area of human activity, and an area where no state may claim sovereignty, the most authoritative way of proceeding would be through a common appreciation of problems and common agreement on their solution. The principle of consensus was adopted as the only acceptable procedure for obtaining workable effective resolutions. Of course, each member state, whether on the Outer Space Committee or not, can later decide if it wishes to become a party to a treaty and thus be bound by its terms. But in assessing the Moon Treaty, it must be borne in mind that no provision of that treaty was adopted over the objection of the United States. In the course of the negotiations, the United States has acceded to every provision in the treaty as have all the other members of the Outer Space Committee.

I will now turn to the negotiating history of the Moon Treaty. Everything I say here is drawn from publicly available documents, especially the summary records of the Legal Subcommittee and the Outer Space Committee and their annual reports.

We can start in 1970, when the Representative of Argentina, Dr. Aldo Cocca, pointed out that the use of the moon's natural resources had already begun and that the 1967 Outer Space Treaty did not include specific regulations for this activity. He proposed a draft agreement on the principles governing activities in the use of the natural resources of the moon and other celestial bodies.

Article 1 of this proposal provided that the natural resources of the moon and other celestial bodies shall be the common heritage of mankind. While no action was taken in the Outer Space Committee on this proposal, in 1971, the U.S.S.R. Minister of Foreign Affairs, Andrei Gromyko, requested that the 26th session of the General Assembly consider the "Preparation of an International Treaty Concerning the Moon." A Soviet draft text was submitted on June 4, 1971.

The Soviet draft treaty was initially restricted to the moon alone and gave little attention to the issue of exploiting celestial natural resources. As the Soviet delegate stated in 1974, in regard to the common heritage and exploitation issue,

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\text{The most promising solution to the problem, however, was to be found in the original text of the draft treaty that was submitted by the Soviet Union. Its basic purpose was that there should not be included in the draft moon treaty a provision concerning the regime for the use and exploitation of the moon's natural resources}.
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At the 1972 session of the Legal Subcommittee, the United States proposed a number of significant amendments to the Soviet text because it believed that a future moon treaty should represent a significant advance in space law, and it did not consider the original Soviet text such an advance. The United States proposed that the treaty deal with "other celestial bodies" in addition to the moon, as there was no sense in creating a new treaty for each planet or chunk of rock in the solar system. Second, the United States presented detailed proposals on natural resources because, as the U.S. Representative stated, it believed that a new treaty should lay down at least a minimum framework governing exploitation in the event it were to become a reality.
The U.S. Representative went on to state that:

On the broadest level of generality, it seems right to state that such resources are part of the 'common heritage of all mankind'. . . . We would need to contemplate a special treaty-drafting conference in the event of the discovery of commercially exploitable resources. At such a conference participants would need to bear in mind not only common goals of economic advancement but the need to encourage investment and efficient development as well.

With this introduction, the United States tabled a working paper which provided, inter alia, that the natural resources of the moon and other celestial bodies should be the common heritage of mankind and calling for a meeting of all states parties with a view to negotiating arrangements for an international sharing of the benefits of such utilization should utilization of celestial natural resources become a reality.

From 1972 until July of 1979, the Soviet Union vocally opposed the common heritage concept. Indeed, it was basically Soviet opposition to the concept which prevented completion of the Treaty in the mid-seventies. For example, in 1974, the Soviet delegate stated:

. . . (W)e have frequently had occasion to explain in some detail that at the present stage of space activity we cannot agree with the proposal that the concept of 'the common heritage of mankind' should be immediately applicable to the Moon and other celestial bodies and their natural resources.

First, we are genuinely convinced that such a proposal is premature in the absence of the necessary objective foundations and factual material for it. Secondly, we have referred to the juridical and political vagueness and lack of specificity in the concept which has been put forward. . . .

Thus, the concept of common heritage, and of the international conference to negotiate arrangements regarding celestial natural resources—two concepts that are probably the focus of those criticisms leveled against the treaty—were put forward by the United States in 1972 and were contained in the publicly available report of the Legal Subcommittee. It is appropriate to note here, because it is relevant to the acceptance by the United States of the final Treaty text in July of 1979, that I am not aware of a single criticism either from any private citizen or corporate entity or other state apart from the Soviet Union of these two concepts in the Moon Treaty during the seven-year period of its negotiation.

The common heritage concept and that of an international conference was supported by most of the Legal Subcommittee, although various formulations of these notions were put forward during course of negotiations.

For example, in 1973 India proposed a text which provided that:

Exploitation of the resources of the moon and other celestial bodies and their subsoil shall not be done except in accordance with the international regime to be established. For this purpose, the depositary Governments shall convene a conference of all States parties at the request of one third of such states.
In response to this text and similar sentiments, in April 1973, the U.S. Representative to the Legal Subcommittee stated:

As I have at this session repeatedly, although I hope politely, made clear, the United States is not prepared to accept an express or implied prohibition on the exploitation of possible natural resources before the international conference meets and agrees on appropriate machinery and procedures and a treaty containing them takes effect. In our view, the Moon agreement cannot reasonably seek to require that exploitation must await the establishment of the treaty-based regime.

The United States firmly maintained this position and no "moratorium" provision appears in the final text of the Treaty.

In 1973, the United States also put forward two other significant initiatives one of which has become subject to criticism. Specifically it was in 1973 that the United States tabled the following language:

The main purpose of the international regime to be established shall be to ensure the orderly and safe development and rational management of the natural resources of the Moon and other celestial bodies, to expand opportunities in the use thereof, and to determine an equitable sharing by all state parties in the benefits derived therefrom, taking into consideration the particular interests and needs of the developing countries.

This text has been essentially unchanged in the final text of the treaty although there is now special consideration given not only to developing countries but also to those states which are directly contributing to the exploration of the moon.

In 1973, the United States also amended a provision in the original Soviet text which had said that neither the surface nor subsurface of the moon could be claimed as property. The U.S. amendment which is incorporated into the final text of the treaty is that neither the surface nor subsurface of the moon or other celestial bodies or any area thereof or any natural resources shall become the property of any state. 7

By inserting the term "in place," the United States made it clear that this would not prevent ownership to be exercised by states or private entities over those natural resources which have been removed from their place on or below the surface of the moon or other celestial body. Now the developing countries were quite disturbed by this term, "in place," because some of them considered the 1967 Outer Space Treaty with its banning of sovereignty over the moon in effect also banned ownership of the natural resources extracted from the celestial bodies. However the United States prevailed in this, and the treaty text does make clear that the banning of ownership over natural resources applies only to those natural resources in place. That was the diplomatic language, but in the corridors, they were saying, "Who died and left the moon to mankind?"

By the end of the 1973 session, the exploitation provisions were largely in the form in which they are found in the final text. The U.S. efforts in this area from 1973 onward were largely devoted to ensuring that undue restrictions on

Supra, Note 1. Art. II, para. 2: "The moon is not subject to national appropriation by any claim of sovereignty, by means of use or occupation, or by any other means." Art II, para. 3: "Neither the surface nor the subsurface of the moon, nor any part thereof or natural resources in place shall become property of any state. . . ."
exploitation were kept out of the treaty and that undertakings furthering the use of the moon were incorporated. In 1974, a proposal by Egypt, India and Nigeria to vest in the United Nations property rights to the moon samples was rejected. In 1975, the idea was proposed that the international regime to be negotiated must give special considerations to the space powers. This concept is found in the final text. In 1976, Italy proposed that:

The natural resources of the moon cannot be transferred on to the earth by any country for its own exclusive economic profit; those resources shall be transferred on to the earth only under the provisions of an international regime as specified by the following article which provides for the common heritage of mankind.

In 1978, under Austrian initiative, a reorganization of the Treaty occurred that left the substance of the text essentially unaltered, and that even the Soviet delegate considered "not a bad basis for a compromise solution." Finally in July of 1979, the Soviets, who had been essentially isolated for the previous six years in opposing the common heritage concept, accepted the formulation of the common heritage principle as it appears in the Treaty. Specifically: "The moon and its natural resources are the common heritage of mankind, which finds its expression in the provisions of this agreement and, in particular, in paragraph 5 of this article", paragraph 5 being the call for an international conference. With this aspect resolved, other matters quickly fell into place and by July 3, 1979 the Outer Space Committee had adopted the draft Treaty by consensus.

Some criticism has been leveled at the U.S. delegation for going along with this consensus. On this point, all that can be said is that acceptance by the Soviet Union of a concept advocated seven years ago by the United States and which had received no criticism hardly constitutes grounds for a complete turnabout in the U.S. position.

On July 3, following the adoption of the Treaty, the U.S. Representative made a statement which noted that the Treaty contained no moratorium on exploitation. This statement was not contradicted.

The Treaty was referred to the Special Political Committee of the General Assembly which debated it. U.S. Ambassador Richard Petree, Deputy Representative to the U.N. Security Council, addressed the Special Political Committee in November 1979 and analyzed the provisions of the Moon Agreement. He pointed out that the meaning of the common heritage concept, "for purposes of the Moon Treaty, is to be found within the Moon Treaty itself," and that meaning is "without prejudice to its use or meaning in any other treaty." Turning to Article 11 and the international regime, Ambassador Petree said:

My Government will, when and if negotiations for such a regime are called for under Articles 11 and 18, make a good faith effort to see that such negotiations are successfully concluded. Each of the participants in a regime conference will, of course, have to evaluate any treaty that emerges from the conference in the light of its own national interests. For the United States, this would require a conclusion that the treaty is balanced and reasonable and would then, as a constitutional matter, require submission to the Senate for its advice and consent just as we

* Art. II, paras. 3, 4, 5, 7
have sought and obtained advice and consent to United States ratification of the four outer space treaties now in force.

The Ambassador specifically reaffirmed the absence of a moratorium in the Treaty and made clear that the United States considers that exploitation may take place outside the context of an international regime, either because the exploitation takes place before the regime is established or because a state does not participate in an international regime once established. These statements were not contradicted.

On November 2, 1979 the Special Political Committee adopted without a vote the resolution providing for the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies.

The General Assembly adopted the report of the Special Political Committee, also without a vote, on December 5, 1979. The Agreement was opened for signature on December 18, 1979 and the first nations to sign were Chile and France.

In sum, I believe that the negotiating history of the Treaty shows several constant themes and approaches by the Nixon, Ford and Carter Administrations and their representatives and in the Outer Space Committee. First, the United States has respected the letter and spirit of the 1967 Outer Space Treaty which most commentators conclusively believe established in international law that claims of sovereignty over outer space and celestial bodies are forever barred, that there be freedom of exploration and use of outer space and celestial bodies, and that these activities be carried out by, for the benefit and in the interest of all countries.

On the other hand the United States has continually been acutely aware of the necessity of not permitting the right to exploit celestial natural resources to be held hostage to the whim of other states. Thus the United States has successfully resisted the moratorium proposals, made clear that natural resources no longer in place could be reduced to property thus clarifying an ambiguity in the 1967 Treaty and established rights favorable to the establishment of and carrying out of mining efforts on or below the surface of the moon, such as the right to be free from interference in such activities and the obligation to use only that area on the celestial bodies actually required for that particular enterprise. In exchange for this, the United States agreed to attend the possible future conference which certainly would have been convened by the United Nations in any event once exploitation of natural resources was about to become feasible. The United States also agreed to certain principles that would form the basis of that international regime, principles which it feels are appropriate for exploitation for natural celestial bodies and the natural resources which it cannot claim sovereignty over.

If we forget this history we would not be condemned nor allowed to relive it because what was negotiable from 1972 to 1974 and what was finally accepted in 1979 will not be negotiable in the future. As for those who oppose the Moon Treaty, I think they have the burden of demonstrating that over the next 20 to 40 years the United States would have benefited from the stillbirth of this Treaty for Governing the Activities of States on Celestial Bodies.