MR. BECKER: I am Gordon Becker, and I have a question for Ambassador Vallarta. Part XIII of the Convention in Article 256 says that all states and competent international organizations have the right, in conformity with the provisions of Part XI, to conduct marine scientific research in the Area, that is, in the deep seabed area. When one refers to the provisions of Part XI, relating to marine scientific research, we start with Article 143, which has a delightful first paragraph that marine scientific research in the Area shall be carried out exclusively for peaceful purposes and for the benefit of mankind as a whole in accordance with Part XIII. It then goes on with additional paragraphs, with which I am sure you are familiar, exhorting the Authority to carry out scientific research and to promote and encourage research. It goes on to say that states parties may carry out scientific research in the Area and has other related provisions. My question, Mr. Ambassador, is as to the extent that the provisions I have mentioned vest in the Authority power and control over marine scientific research in the Area. Do private organizations need to get the approval of the Authority and consent of the Authority for research? Do states need the Authority's consent? Do competent international organizations need consent?

AMBASSADOR VALLARTA: In my opinion, yes; if the International Authority establishes in the future certain regulations, it will be necessary to act according to those regulations. According to the Convention, there is freedom of marine scientific research in the International Seabed Area, subject to the regulations of the Authority.

MR. WULF: I was just going to agree with the latter part of Ambassador Vallarta's answer. Article 87—the High Seas article—specifically lists freedom of scientific research as one of the high seas freedoms. Moreover, when you look at the mandate given to the International Seabed Authority, it is limited to activities in the Area. This is defined in Article 1 as all activities of the exploration for and the exploitation of the resources of the Area. Clearly, scientific research under any reasonable interpretation is not exploration, so my answer would be clearly and unequivocally no. The Authority would not have any jurisdiction over scientific research conducted in the Area; no consent or permission would be required from the International Seabed Authority to conduct research in that area, and any regulation it may seek to promulgate to control science would be outside the scope of its permissible activities.

PROFESSOR WALSH: That was the nature of the comment I made in my talk about the fifteen-year Review Conference. There is a concern on the part of the scientific community that at this point, when mining activities have gone on for
some time, some sort of restrictive scientific regime for the Area might be established at that time.

MR. BECKER: I am suggesting that the provisions of the article from which I read, the provisions of Part XI, can be interpreted as giving the Authority the same type of powers that coastal states now have. I respect your views on the Review Conference, but maybe the problem you fear is here.

MR. WULF: I just do not think the legislative history—and I think it is fairly clearly established in the records of the Conference—would support a proposition that the Authority has that type of control based on Article 143. It just cannot be supported, particularly in light of Article 87. But I agree that we ought to worry about that, but I do not think it is one of those worries that should be in the forefront, if you will, of our concerns.

MR. LEVERING: I am Sam Levering, Chairman for a good many years of the Environmental Subcommittee of the Public Advisory Committee on the Law of the Sea. I want to comment on the environmental protection of the oceans. I think that for many people, the danger seems remote because the sea seems so vast, and yet, as pollutants enter the ocean, there is no place for them to go. In a lake, if pollution stops coming in, then fresh water comes in and eventually there is no problem. In the ocean, however, it simply accumulates. So the danger probably is not now, but somewhere down the road. It could become quite acute to living organisms and to the production of oxygen we breathe. It is obvious that pollution cannot be dealt with by one nation alone. Ocean water does not stay still. It is off the coast of Africa one week and the Caribbean later, and around Norway later on. It does require cooperation among nations.

From our standpoint, the Law of the Sea Treaty, the Convention, is a very important step forward. For the first time the signatories of the Treaty pledge themselves to reduce or eliminate (although I think that would never be done) pollution, not only from ships, which is handled partially by the International Maritime Organization, but also from land-based sources, which produce well over two-thirds of the pollution entering the ocean.

Now in the Convention it becomes a constitutional requirement, a legal obligation assumed. This is very different from a conference such as Stockholm where rhetoric, aspirations, and hortatory statements were expressed. UNCLOS III creates an obligation—a legal obligation—to drastically reduce such pollution. It would require implementation, but the obligation is there, and, with proper followup, I think that there could be very real progress made. So we see the Law of the Sea Treaty as a really important step forward towards reducing pollution of the ocean and protecting the ocean environment.

Thank you.

AMBASSADOR KOH: I would like to ask a question to each of the three panelists. To Jose Vallarta—I would like to ask a question concerning the dumping of nuclear wastes. If I am not incorrect, Jose, the Convention does not deal explicitly
with this question. The question I want to ask you is, is there any Convention which has been concluded, either under the auspices of the International Maritime Organization or the International Atomic Energy Agency, dealing with the dumping of radioactive wastes in the seabed?

The question I want to ask Don Walsh arises from his very inspiring remarks about how the marine scientific community in the five highly advanced countries could help the developing countries. I think there is a great need for the developing countries to develop a scientific capacity to know what kind of living resources exist in their own Exclusive Economic Zones, what kind of nonliving resources exist in their continental shelf, how best to conserve and manage the living resources. My question to you is, will the marine scientific community in the United States lobby its political leaders in Washington for a program to assist the developing countries in developing this capacity?

And my question to Norman Wulf, Mr. Chairman, is directed to him with the new hat that he now wears as Deputy General Counsel of the Arms Control and Disarmament Agency. When one reads the Convention, one comes recurrently across the phrase "reserved exclusively for peaceful purposes." There are, of course, very different meanings which one can give to this phrase. I would be very grateful if Norman could tell me how he interprets that phrase in the Convention.

AMBASSADOR VALLARTA: Concerning the question addressed to me, as far as I remember, the London Dumping Convention includes nuclear wastes in one of the Annexes.

MR. WULF: If I might just go out of turn for a second to supplement somewhat Ambassador Vallarta's answer, I did, in my prior role, work somewhat on the question of disposal of radioactive wastes in the ocean, and I think that there are really two issues that come to mind. One is the dumping onto the seafloor itself, and one is the more exotic notion that is being examined (no decisions have been made by any of the governments involved) about emplacement of radioactive wastes in the seabed. There are differing views as to whether the London Dumping Convention reaches the second type of disposal, although it is quite clear that it does reach and deal with the first type of just plain dumping onto the seafloor. The International Atomic Energy Agency (IAEA) has developed standards. Annex One of the London Dumping Convention prohibits dumping high-level radioactive wastes. Annex Two says you can dump low-level wastes subject to regulations by the flag state. The IAEA was tasked with the job of developing the standard by the London Ocean Dumping Conference, and it has developed a standard which is presently being respected, as far as I am aware, by all the signatories to the London Ocean Dumping Convention. The only dumping I am aware of at the present time involves some dumping by Western European countries, the OECD countries, in the North Atlantic, of low-level radioactive wastes. This dumping activity onto the seafloor meets the conditions set forth in the London Ocean Dumping Convention as supplemented by IAEA regulations.

PROFESSOR WALSH: Also, the U.S. Ocean Dumping Act is undergoing
reauthorization hearings in Congress. I believe that both the House and the Senate bills call for a moratorium of two years on radioactive waste dumping while the situation is studied a little more. As you know, the U.S. Navy has asked various expert communities to comment on the possibility of disposing of retired nuclear submarines by sinking them in the ocean after the reactor cores have been removed. The radioactive part would just be the residual part of the reactor vessel and associated equipment. This was not a declaration of intent; it simply asked the various communities concerned to advise them on this. The alternative is land burial of the fifty- to one-hundred-ton section of the submarine that is radioactive.

Now, to answer your question about cooperation with developing coastal states. This is something that has been of great interest to me for a long time. In the last seven years I have visited over fifty developing coastal states throughout the world. I am greatly impressed by their need for information and assistance. There is a substantive difference between reading about it thousands of miles from the problem and sitting on the edge of a rice paddy somewhere with a man who may have been trained at Cambridge but now is reduced to using decrepit high school-level equipment. His newest scientific books are perhaps fifteen years old; he gets none of the "gray literature" that we print by the ton in the developed countries. By the way, "gray literature" is my term for government research reports, technical reviews, etc. These publications fall between scientific journals and hard-backed books. Although very valuable, they do not have the marketing behind them that scientific journals and books have. But there is an enormous amount of real time information here that we could make available to people so they could stay current.

These scientists simply do not have the hard currency to go to the important international meetings; they cannot subscribe to the leading journals; and they do not even belong to the professional societies in their fields. Intellectually and spiritually they are cut off. They have spent perhaps eight very hard years getting foreign-qualified, and they know what they are going back to in their homelands. I have seen this in many places, and I also realize that there are a lot of information resources that exist that are not costly to provide. For example, in gray literature, if the printing press stays on another minute in one of our big government printing plants, you could make five hundred more copies of something. Distributing it through the mails is not very costly when you compare this with other kinds of aid programs. To answer your question specifically, I think, the majority of the U.S. marine science community are internationalists. They have pretty well fallen in behind the inevitability of Part XIII. In fact, when the administration asked, a little over a year ago, if that part of the text should be opened up and looked at, most of us gave the opinion that we thought it was the best we could hope for.

One of the benefits of several years of negotiation was careful consideration of the shape of future marine cooperation in the light of the Treaty. There have always been the usual good words about cooperation, technology transfer, etc., but now this is a real and serious matter. It is something that should be lobbied for vigorously.
But, of course, all of this is in a somewhat relative context in that there is not sufficient government funding even to support our U.S. coastal research at home.

In international research (off foreign states), we are beginning to appreciate that "overhead costs" for the conduct of marine science embodied in Part XIII can be turned into a benefit if we look at it as a form of foreign aid. By providing research data and assisting in its interpretation, you are, essentially, putting the developing coastal state in the picture. In giving him a "piece of the action," he acquires an equity role so the state can assess, develop, and manage whatever resources it might have. The point is you have to do the assessment process to find out what it is you have and then how to develop it to the benefit of your nation. The developing coastal states simply do not have these kinds of skills and facilities available, but we do. This is where the abilities that we and other major marine research nations have can help on a mutually beneficial basis.

Mr. Wulf: A quick answer to Tommy Koh's question with respect to my definition, at least, of "reserved exclusively for peaceful purposes": I would define that as reserved exclusively for actions consistent with the Charter of the United Nations. I do not believe that phrase as used in the LOS Convention can be interpreted to mean no military activities. I would note certain specific military activities are precluded from the innocent passage regime in Articles 19 and 20, leaving the clear implication that they are permissible elsewhere. Articles 29-32 deal specifically with warships in the territorial sea while Articles 95, 102, and other enforcement articles deal with warships on the high seas. These articles are made expressly applicable to the economic zone by Article 58(2). So I think it is quite clear that "reserved exclusively for peaceful purposes" does not preclude military activities but does require that state actions be consistent with the Charter of the United Nations, specifically Article 2(4) of the Charter, subject, of course, to the right set forth in Article 51.

Mrs. Levering: I think that most of you know that on September 29, Senator Stevens and Representatives Breaux and Forsythe introduced a 200-mile exclusive economic zone bill. Now, as you know, that bill seems to deviate or contradict the Treaty at about five different points. Naturally I was most concerned about its abolition of the common heritage of mankind from the hard minerals seabed mining bill and its claim for the United States of high seas rights to the area beyond the limit of national jurisdiction. But it also must have implications for marine scientific research because it said that the United States was going to grant freedom of scientific research within its exclusive economic zone to other countries more or less on a reciprocal basis. The exceptions there would be in regard to national security issues. I wondered if any of the three of you had any comment in regard to the implications of this legislation for marine scientific research?

Mr. Wulf: I have just looked at the legislation now, and not knowing what the administration posture is on it, I would hesitate to comment. I would, just on the concept of reciprocity, as you have described it, inquire of Don [Walsh] whether that many countries wish to conduct research off the U.S. coast. If reciprocity
were the basis, how many foreign coastlines would be available to us for research? I think we should ask the scientist for the answer.

Professor Walsh: The proposed legislation says about the right to conduct marine scientific research that "any United States citizen and any citizen of a foreign nation which is designated as a reciprocating state, pursuant to Section B of this section, may conduct marine scientific research within the exclusive economic zone after submission of plans for such research under Subsection C unless the Secretary of State determines that the conduct of that research would adversely affect national security or national defense." In the submission of plans, it says, "each person who wants to conduct marine scientific research in the exclusive economic zone which is determined by this act, must inform the Secretary of State, in such form and contain such information as the Secretary deems necessary." The definition of "reciprocating state" is the next section: "For purposes of this section, the Secretary of State shall designate any foreign nation as a reciprocating state if the Secretary finds that such foreign nation recognizes the right to conduct marine scientific research in a manner compatible with that provided in this section."

To specifically answer Norman [Wulf]'s question, I really cannot think of many foreign nations who would have the capability or interest to do research in U.S. coastal areas. Those nations that do will be the larger marine research states, and we really have very few "freedom of marine science" problems with them in the first place. What happened here, in my understanding, is that this was an error in the text drafting. They tried to go after reciprocity, and I guess that reciprocity is probably very trendy right now on Capitol Hill. But what happened is they created a potential situation where reciprocity backed up on us. Now, U.S. oceanographic institutions would have to get permission from our own government to do research off our own coast. The next Congress in January, 1983, will consider this act again. In its redrafting, I would guess that this section will be dropped out.

Ambassador Vallarta: This bill shows how the opinion of governments may change. When we were negotiating the Treaty at the Law of the Sea Conference, the champion of the freedom of research was the delegation of the United States. That delegation fought strongly against some other countries—developing countries—who wanted the regime of consent. We may confirm now that very soon we will see the United States joining the club of those who insisted on the regime of consent.

Another comment that I want to make is this: according to the Convention on the Law of the Sea, states have the obligation normally to grant their consent, and there are exceptions to that—that is, when the research is related directly to resources and it implies drilling or explosives, and when it is necessary to build artificial islands or platforms to undertake the research. The idea of national security is not incorporated in those exceptions. I assume that the incorporation of the obligation to normally grant the consent covers that problem. If a state has preoccupation in the field of national security, that state is entitled to consider that
the circumstances are not normal, and, accordingly, that state may deny its consent.

PROFESSOR PARTAN: Mr. Chairman, I have one comment on the question of radioactive waste dumping.

As has been observed, the London Dumping Convention includes a prohibition of the dumping of radioactive wastes, defined there merely as high-level radioactive wastes, which are included in the black list of items not to be dumped. Low-level radioactive wastes, however, are on the gray list and may be dumped pursuant to the safeguards contained in the Dumping Convention. The line between the two is not articulated in the Convention itself. That has been supplied through work of the International Atomic Energy Agency. Today, the only acknowledged dumping of radioactive waste is carried out by European governments at a Northeast Atlantic dumping site pursuant to rules adopted through the European Nuclear Energy Agency.

There are at present, however, two forces in motion. One looks toward reducing the controls on the dumping of radioactive waste in two ways. The first is to raise the line between low-level and high-level so that more waste would be classified as low-level and therefore could be dumped subject to controls. The second is to exempt certain wastes as falling below the standard of low-level, being de minimis and freely dumpable, subject only to the general permit requirement.

In contrast to the efforts to relax London Dumping Convention controls, restrictive legislation is currently pending in the Senate: a bill adopted by the House and sent to the Senate would impose a two-year moratorium on dumping of radioactive waste by the United States. Subsequent to that period the bill would impose rigid rules requiring monitoring of any dumping of radioactive waste. The dumping bill was passed in the House and is pending in the Senate, and I have no estimate as to what will happen there.

Along the same lines, some governments believe that there should be no dumping of radioactive wastes and are prepared to raise that question at the forthcoming meeting of the London Dumping Convention in London this coming February.