LEGISLATIVE HISTORY PROJECT
ON THE UN PRINCIPLES OF REMOTE SENSING
NATIONAL REMOTE SENSING AND SPACE LAW CENTER
UNIVERSITY OF MISSISSIPPI SCHOOL OF LAW

S. NEIL HOSENBALL
INTERVIEWED BY CAROL L. BUTLER AND JOANNE IRENE GABRYNOWICZ
PORT ARANSAS, TEXAS – 7 FEBRUARY 2002

BUTLER: Today is February 7th, 2002. This oral history with Neil Hosenball is being conducted for the Legislative History Project on the United Nations Principles of Remote Sensing[1] for the National Remote Sensing and Space Law Center at the University of Mississippi School of Law. The oral history is being conducted at Mr. Hosenball's home in Port Aransas, Texas. Carol Butler and Joanne Gabrynowicz, Director of the National Remote Sensing and Space Law Center, are the interviewers.

Thank you very much for talking with us today and allowing us to come and visit with you.

HOSENBALL: Thank you. You're more than welcome.

BUTLER: To begin with, if you could tell us about how you first became involved with the United Nations *Principles on Remote Sensing*. Was this when the working group was first formed in 1971 within COPOUS [United Nations Committee on the Peaceful Uses of Outer Space]?

[1] U.N. Principles Relating to Remote Sensing of the Earth from Space G.A. Res. 41/65, 42 U.N. GAOR Annex (95th plen. mtg.) at 2 U.N. Doc. A/RES/41/65 (1987).

HOSENBALL: My first visit to COPUOS was either in 1969 or 1970. I think it was '69, but I'm not sure. So I think the Argentine paper was submitted in '70. I'm not sure it became probably an agenda item at that time.

GABRYNOWICZ: Could you state the significance of the Argentine paper? What does that mean?

HOSENBALL: Nothing at that point. It was Professor [Aldo Armando] Cocca [who] threw lots of papers in all the time, and this was something he had submitted at the meeting, I think in '69 or '70, I'm not sure which. So it was a paper that was submitted, and that's about all. It did go on the agenda either '70 or '71, I'm not sure which year. That was [the] first information I received on remote sensing. Now, remote sensing was important to NASA [National Aeronautics and Space Administration], and that's why we had a representative on the Legal Subcommittee as well as the Scientific and Technical Subcommittee [of COPUOS].

GABRYNOWICZ: What was your title at this time?

HOSENBALL: At that time I was [NASA] Deputy General Counsel. What had happened was Paul Dembling, who was Deputy General Counsel, became [NASA] General Counsel, and I was moved up from Assistant General Counsel for Procurement, of all things, to Deputy General Counsel. Paul Dembling had attended [the] Legal Subcommittee and the full Committee [COPUOS] meetings and actually had spent a lot of time with Ambassador

[Arthur J.] Goldberg in the negotiation of the '67 treaty. When he became General Counsel and I moved up to deputy, it was agreed that I'd take his place and attend whatever U.N. [United Nations] meetings that we had a particular interest in.

Based on the agenda at that time, there were two items…that we did have an interest in…the *Liability Convention*[2] and the *Registration Convention*.[3] …The *Liability Convention* was what we spent most time on for several years. The agenda was pretty heavy. You had the *Liability Convention*. You had the *Registration Convention*. You had "definition" or "delimitation," which was on, and then…was added remote sensing and broadcast satellites. So you had five agenda items that started just around '70, '71.

GABRYNOWICZ: Let's focus now on the *U.N. Principles on Remote Sensing*. How did you first get started? What did you first have to address?

HOSENBALL: Nothing really happened for several years. Actually, the effort was primarily in the Scientific and Technical Subcommittee. I think that was deliberately done because there was an education process. You had the Argentine paper, but what was "remote sensing"? So we had a representative to the Scientific and Technical Subcommittee, and he was extremely active…there trying to develop, with the help of…a technical expert, Professor Perek [of]…the Outer Space Division of the [U.N.] Secretariat. He would attend those meetings and also then attend ours. So…as to what was going on at the Scientific and Technical Committee, we got feedback at least.

[2] Convention on International Liability for Damage Caused by Space Objects, March 29, 1972, 24 U.S.T 2389, T.I.A.S. 7762, 961 U.N.T.S. 187 (effective Oct. 9, 1973).

In fact, while I didn't participate in [the Scientific and Technical Committee], the meetings were held in New York…Herb Reis, who was legal advisor at the U.N. mission in New York, attended the Scientific and Technical meetings as the lawyer for the United States…. So we didn't get really active until I think…the Scientific and Technical Subcommittee issued a report, and I don't remember when. I think that may have been in '73, to the best of my recollection. In that report there was a section or a chapter or something about legal implications of remote sensing. I think it was very general. I don't know whether you've seen that Scientific and Technical report or not, but that chapter would seem to be fairly general, based on my memory.

So nothing really happened in remote sensing. Our concentration initially was on the '72 *Liability Convention*, and after that was finished, the *Registration Convention* ran into '74. …When papers came in, both on DBS [Direct Broadcast Satellites] and remote sensing, working papers, if you will. Based on my recollection again, I think on remote sensing there was a Soviet-French proposal, there was a Brazilian or less-developed countries' proposal, and we [the United States] had submitted not really a working paper it was really some thoughts. It wasn't paragraphs but basically it was [not] in the form that you would adopt for either a treaty or principles.

So really in '75 is when we got the two [the *Liability* and *Registration Conventions*] out of the way. There wasn't too much going [on] with definition or delimitation [of space]. That had been going on since for years and years. So you had a working group established…in the Legal Subcommittee for remote sensing, and you had a working group

[3] Convention on Registration of Objects Launched Into Outer Space, January 14, 1975 28 U.S.T. 695, T.I.A.S. 8480, 1023 U.N.T.S. 15 (effective Sept. 15, 1976).

established in the Legal Subcommittee on DBS as well, and that's really…when serious discussion started on remote sensing.

GABRYNOWICZ: What were the first serious discussions that you remember?

HOSENBALL: Well, the serious discussions basically boiled down to [prior] consent and sovereignty. Those were basic issues that came up very quickly…. The Soviets and French submitt[ed] a paper which said basically that—I think you may even know better than I do, but if I remember right—no objection to sensing from space but you had to get prior consent from a sensed state before you can make it available to a third state, which…meant that the Soviets and the French would keep all the data. Whether they announced which states they had sensed, was a question. If they didn't announce which state had been sensed, nobody would know that fact and therefore they wouldn't give it to the sensed state. They wouldn't give it to any third state. So they got the benefit of being able to sense, but had no obligation, basically, to distribute any data. But [prior] consent was required…if they were going to make any material available to a third state, they had to get the consent of the sensed state.

Our argument against that…was, look…remote sensing [doesn't respect national] borders. How do you pull out just data about one state, especially when you have small states? The developing countries didn't want you to either sense or distribute the data to anyone. They didn't want you to sense without their prior consent. If you were going to sense them, you had to get their prior consent. They might give you the prior consent on sensing, but again, you would have to get their prior consent before you can make that data available to a third state.

The U.S. position was obviously free flow of information across national borders. That was a major issue even at that time. It was in direct broadcast, the direct broadcast issue. We had heard or at least been told that it was a very important principle, because there were some states that were even objecting sending data cross border on the ground. The French, for instance, objected to any credit…information going across border by telephone or telex or whatever means. So that was being raised in UNESCO [United Nations Educational, Scientific, and Cultural Organization] in Paris. So the whole basis of the U.S. position was free flow of information over national borders, and we were not going to give up on that without a real fight. If necessary, if it ever came down to that, would not have agreed to any principles, if that was the end result.

…So that was basically the three positions, U.S. free flow of information and prior consent [on acquisition or dissemination of data] going all the way [from] the LDCs [less-developed countries] [position,] with the Russians and French being a modification of that.

GABRYNOWICZ: Why don't we take this issue by issue. The one you've just raised is prior consent, and there's two kinds of prior consent. One is the prior consent to sense.

HOSENBALL: Right.

GABRYNOWICZ: The other was the prior consent to distribute.

HOSENBALL: Right.

GABRYNOWICZ: Let's just talk about the prior consent to sense, for a second. Within COPUOS were there groups of nations that took similar positions; in other words, were there factions that could be identified?

HOSENBALL: Oh, yes.

GABRYNOWICZ: What factions?

HOSENBALL: You had the Soviet Bloc. I forget who was on there, but there were four or five Soviet Bloc countries, and so they went with…the Russians. In fact, on occasions they'd make a statement that I'm sure Boris prepared, Boris Maiorsky prepared for them or somebody prepared for them.

Then you had the so called *Group of 77*, we didn't have 77 there…when I first started, there were only twenty-four members, so it was a relatively small group. I don't know what it is now. When I left there was 53. I assume they may have added China or somebody else to [the Legal Subcommittee]. They would caucus. …At the end of a meeting, occasionally you would have either the Mexican or one of the other less-developed countries–

GABRYNOWICZ: Mexico was in the *Group of 77*?

HOSENBALL: Mexico was in the *Group of 77*, basically so-called LDCs, less-developed countries. But they considered themselves an LDC.

GABRYNOWICZ: So that's the Soviet Bloc and the *Group of 77*. What other factions?

HOSENBALL: …The western [industrialized] group, which at least for remote sensing included Canada, as well as all of Europe, except for the French…didn't fully agree with us, and so they were somewhere in between. That basically was it. The French were pretty much again typically French, almost by themselves, because they were basically aligned with the Soviets on some things, but not on other things…that were being discussed in the *Principles*.

GABRYNOWICZ: Then let's take this group by group. What was the position of the Soviet Bloc regarding consent to sense?

HOSENBALL: They would rely on the *Outer Space Treaty*[4] that they had the right to carry out activities in space [just] as we relied on the *Outer Space Treaty* and the fact that it had been going on since the Soviets first launched Sputnik in '57. All sorts of [sensing] activities had taken place by '75, certainly, and before then. So their position was pretty much our position as far as the right to sense from space was concerned.

GABRYNOWICZ: Okay. How about the *Group of 77* or the lesser-developed countries, what was their position regarding the right to sense?

[4] Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, Jan. 27, 1967, 18 U.S.T. 2410, T.I.A.S. 6347, 610 U.N.T.S. 205 (effective Oct. 10,1967).

HOSENBALL: Initially, "you cannot sense without our consent." They kept that position for quite a while. Basically I think it was more or less a bargaining chip for them, that if they couldn't get that, they can bargain that position for something where they would have some sort of priority in getting data or restricting the data to third parties without their consent. Basically they moved to that position, "don't distribute it to third parties without our consent." Ultimately I think they pushed, they moved to a priority kind of a thing, and I'd have to look at the current *Principles* to see where they finally ended up.

GABRYNOWICZ: To your recollection, did there come a time when the *Group of 77* accepted the right to sense without prior permission?

HOSENBALL: Oh, yes, I think so. Yes. …As I [said]…it was a bargaining chip more than anything else. Yes, I think they knew that the Soviets and the U.S. were doing it, would continue to do it and how could they stop them to begin with, stop us, stop that happening to begin with. Plus…the European Space Agency [ESA] was in existence, which was mostly Western Europe. There were all sorts of agreements even then. *Landsat* was launched, what, about '72, and there were…bilateral agreements with [multiple] countries, so the data was already pouring down. So even a less-developed country…fact, [had a] receiving station. I don't remember who offhand, but there were several. I think Brazil may have had one and Argentina may have had one. …I don't think Mexico did, but some European countries certainly had it and some in Africa…. So I think that was a bargaining chip, their hard position to begin with.

GABRYNOWICZ: So we've covered then the Soviet Bloc, the *Group of 77* and the Western Group. Let's move to the next issue, which is the consent to distribute data to a third party. What was the Soviet position on that?

HOSENBALL: The Soviet position was basically that—initially, at least—you would get the consent of the sensed state to distribute data to third parties. Our position was no prior consent on data distribution, free flow of information across national borders. Every time I'd use that, throw that at the Soviets, I'd get a laugh from the head of delegation, Ambassador Piradov, saying, "You know that's against our religion."

…But, yes, basically, our position, was pretty strong.

BUTLER: The French held that same [position], at least initially—

HOSENBALL: Yes, they held the same [position]. The problem, the U.S. delegation was fairly stable during this period, and the Soviet delegation was totally stable during that period, but there were changes in the other groups, in the *Group of 77*. Mexico was fairly quiet for a while, until they got someone there that had a position and was very vocal about it and very strong about it. The same thing would be true for other delegations. A lot of the delegations were single-[person] delegations, and particularly the Africans and Mideasterners used their local people in Geneva to attend the sessions. They didn't attend it regularly, but they'd show up occasionally. So their interest was there or not, depending on their personal feelings about it. If they thought it was interesting and there was something there important, they did attend and were vocal about it.

But basically you had the Western Europeans, again, attending regularly with little turnover, even though they may have had only one person. Usually it was a professor [or diplomat]…. Belgium in particular had Professor Vrankin, whose name I still remember, who was extremely capable and acted as some sort of a compromiser in working group meetings. The Austrian was a young professor…who was very active. We had a young professor from Sweden, who was very active, and also a foreign service officer from England from Great Britain, who was very active, and, as I said, [the] French…had had a woman attending, who…may have spoken from prepared statements, but not very active until there was that change [I mentioned previously]. And he was very vocal.

[As a] matter of fact…in a working group, he'd always insist that [the session] be conducted in French, and there was no way I was going negotiate on anything in French. My French isn't very good to begin with, and while we had people in the delegation whose French was fairly good, everybody spoke English. But he would do it every time we'd meet. Finally, it was the Russians that finally stopped it, not me. I objected, of course, and we went on to English, but he kept doing it all the time. The Russians finally said, "Well, if you're going to have it in French," and he spoke excellent French, "we want a Russian interpreter." Then, of course, everybody else piped up, and the U.N. wasn't about to pay [for interpreters], particular since most of these working groups took place at night, and so that ended. It became funny, he [always] did it, and I'd always object, and we'd always end up in English.

But it did depend, a lot depended, on the individual that represented their particular country and how active they'd be and how they would push their positions. There were at times whe[n] someone [from a] developing country, in the *Group of 77*, took a position that we thought was hurtful and didn't make any sense and we would ask the State Department to

make a demarche through diplomatic channels and try and do something that way. That happened occasionally, not too often, but often enough that that avenue was available if somebody looked like they were going off into left field and it wasn't in their country's best interest. We may have had a bilateral agreement, for example, that we knew about, and here you had somebody that was objecting to, say, either sensing…or [distribution], and so you'd do that. So a lot depended on individuals.

GABRYNOWICZ: Let me bring you back to the consent for third-party distribution. Originally the Soviet Bloc took the position that you would need consent to distribute to a third party. Did there come a time when they changed their position and, if so, what did they change it to?

HOSENBALL: Well, obviously there came a time where they did change their position, and they changed it basically to…[not] need[ing] consent of the sensed state to distribute data to third states.

GABRYNOWICZ: How about the *Group of 77*, did there come a time when they changed their position?

HOSENBALL: Ultimately they did. They had a legitimate concern. They really had a legitimate concern. Their concern was that the sensing states and third states would get information about their national resources and use it to their advantage and to the disadvantage of the sensed state, and that is, I consider[ed], a legitimate concern. So if you

look at the current *Principles* and even in the early drafts…[how] this language continuously repeated, sovereignty over natural resources and wealth, recognizing the interest of [LDC] countries. I was surprised how many times it was repeated in the *Principles* as they were [finally] enacted.

That was their concern, and the trade-off, what you ended up with, they gave up on the sensing issues when you gave them strong language that recognized their interests. That was basically the trade-off that ultimately had to be made. They would use the consent issue to basically force that kind of language.

You really logically couldn't raise a strong objection to some of that language. Everybody recognizes that you have sovereignty over your own natural resources. We do. So it's not something that you can really argue against. But that was the kind of trading, and so we may have held off and argued that it went too far—it wasn't necessary, it was generally recognized, all this sort of stuff. Why do you need sovereignty over natural resources? Everybody knows that you have sovereignty over your natural resources. Why do you have it in here? Why is it necessary? Why do you need this language, because it's in the *Principles Treaty*?[5] Why do you need it repeated? But ultimately you ended up with that trade-off, the right to sense and right to distribute data with all this other language thrown in, plus some other provisions in the *Principles* that they wanted and were very strong about, [though] we probably would have been happier without them.

[5] Also commonly known as the Outer Space Treaty. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, Jan. 27, 1967, 18 U.S.T. 2410, T.I.A.S. 6347, 610 U.N.T.S. 205 (effective Oct. 10,1967).

GABRYNOWICZ: So regarding the two consent issues, the ultimate disposition of them would be what, according to you?

HOSENBALL: According to me?

GABRYNOWICZ: Yes.

HOSENBALL: The ultimate disposition was that we had the right to sense from space and we had a right to distribute the data without any prior consent, or priority for that matter, prior consent to distribute to third states or to distribute to any state, frankly.

GABRYNOWICZ: If it's okay with you, there's a couple of issues that I'd like to kind of address in a systematic way. Is that okay for you now, or would you rather do narrative style at this point?

HOSENBALL: Either way you want to go. It might be worthwhile to let me tell you about the Russian delegation before you get into it, because it may play a role.

GABRYNOWICZ: Okay.

HOSENBALL: The Russian delegation consisted of Ambassador Piradov, Yuri Kolosov, Boris Maiorski. Verashetin would show up every once in a while. I don't think there's anybody else that I've left off. …No. I got the Kolosov and Verashetin and Boris. Now, Ambassador

Piradov was Gromyko's son-in-law, who was then [the USSR] foreign minister. There was a Madame Vasalavskya. That was the one that I didn't [include]—she was General Zukov's granddaughter. That gave the Russian delegation a direct entrée to the foreign minister. You could see it…demonstrated, that they used it. The *DBS Principles* were introduced to the General Assembly by Gromyko. Several of the papers on remote sensing, drafts, were introduced through the General Assembly or First Committee. [The Soviet Moon Treaty was also introduced in the General Assembly.] So [its] very important that they had more direct access [to high levels of the USSR] without going through channels; to get answers quickly; and to get their positions pressed in other forum, if need be. So it was a very strong delegation from the point of view of a negotiating position. That wasn't true for any other delegation there. We would have to go through channels, go through IO –

GABRYNOWICZ: IO being?

HOSENBALL:—[The] International Organizations [until in the U.S. State Department] to get anywhere [instructions were needed]. But having access to your foreign minister, to raise something in either the First Committee or the General Assembly was fairly powerful.

Now, why don't you proceed any way you like.

BUTLER: Actually, if we could, while we're on that topic, I might ask what—you said that the United States delegation didn't have this direct line that the Soviet delegation did. What direction and contact did the United States delegation have through the government? Did you get any direct instructions from them on how to proceed on matters?

HOSENBALL: The process was this: The representatives, the [U.S.] delegation consisted of a legal advisor from the Department of State; someone from NASA; when DBS was on the agenda someone from FCC; and, a member and a delegate from the Department of Defense [DOD]. Those were the four really interested agencies, as far as remote sensing was concerned, and you had the DBS separate because of FCC, even though, of course, DOD and [NASA] also had some interest.

We would meet prior to a meeting and prepare our own instructions. We'd develop a paper, which we would then circulate within our [respective] agencies. Now, in my case, in remote sensing, I would circulate it to our international affairs people who were involved with the Scientific and Technical Committee and also had an interest generally, and to the Office of Applications which was running *Landsat* and get input. That was where I circulated. I suspect that DOD circulated it to whatever agencies had an interest, and obviously there were some agencies in DOD that had an interest. Of course it was circulated within State, not only International Organizations, but probably Policy Plans and a whole group of others. They had an assistant secretary for Science, Oceans, and Environment, and so they would [receive] it.

After we [had] concurrences, [the instructions] were formally issued to us. They were sent over by secure line to wait for us in Geneva, or if we were in New York, they would go up to the Mission on a secure line, and that was the way [we received] our instructions—so we basically wrote our own instructions, and they were circulated to see if there were any changes. There were [changes made] occasion[ally]. People would raise

questions, and we'd have to answer the questions, and we'd do that. That's the way we received our instructions.

Now, if something came up that was contrary to our instructions, we had to go back, and we would send a cable back asking for [further or changed] instructions [if such an] issue came up. That cable would then be circulated the same way our original instructions were, and we would get word back on what the U.S. position should be. There were occasions, not necessarily on remote sensing, but on some of the other things while I was there. So that basically was the way it was worked. We reported back what was going on at the meetings. If there was something important, it would go back that night. We'd come back from a meeting, and it would go back to State with copies to the other agencies. If there wasn't anything important, we would do it every two, three days, but we kept reporting.

That's why I said there are documents galore, and we usually sent back the working papers, the working drafts that were submitted to working groups so people could look at them. If they wanted to change our instructions as a result, they would then cable to us. That was the system that was used, and I suspect it's the system that still [is used] today.

GABRYNOWICZ: I'm going to go back and address some specific issues. I propose that the way we address them is I'll raise the issue and then tell me whatever you want to tell me about it, and then we'll see how each one of those groups within COPOUS, what their position was. Was the question of the U.N. *Principles* applying to military satellites ever raised?

HOSENBALL: Never publicly.

GABRYNOWICZ: Do the *Principles* apply to military satellites?

HOSENBALL: No.

GABRYNOWICZ: What was the position of the U.S. on that?

HOSENBALL: [Though the question of military satellites was never publicly raised in the Legal Subcommittee by any country,] our position all the way through, that it was remote sensing of the Earth['s] environment, and its natural resources. That was the definition of remote sensing, and that's what those *Principles* [would] apply to.

Now, obviously there is remote sensing that isn't covered by these *Principles*. But it was important, both I suspect for the Russians as well as ourselves, to make sure that that's what these *Principles* apply to, and they do. …They don't mention anything else, and, as I've indicated, nothing was ever mentioned. The fact that such activities, military activities, were being carried out at that time wasn't widely known. It wasn't until fairly recently that it [received] a lot of publicity, and it was fairly recently that even the fact that…a National Reconnaissance Office existed [was classified] until even after I left. …Now it's unclassified. So there wasn't any discussion.

The position of both the Soviets and ourselves were you have the right to use space for peaceful purposes for whatever your objective might be. The U.N. Charter does provide for the right of self-defense and all those good things. So as far as we were concerned, you

could use space for remote sensing for any purpose that you wanted from space and that the *Principles* themselves just applied to this area of the environment and natural resources.

GABRYNOWICZ: What, if any, position did the *Group of 77* and developing nations have regarding the applicability of the *Principles* to military satellites?

HOSENBALL: Never was raised.

GABRYNOWICZ: So then let me ask you this: So based on the negotiations and the intent at the time, is the following sentence correct or incorrect: the U.N. *Principles* apply to domestic military systems.

HOSENBALL: They do not apply to domestic military systems.

GABRYNOWICZ: Okay, thank you.

BUTLER: While still in military satellites, you mentioned that the definition of remote sensing is one of the reasons why they did not apply to military systems, because it dealt with the environment and natural resources. When was that definition established, and was it formally established within the working group so that was the understanding?

HOSENBALL: Well, the way the Committee worked, the Subcommittee worked, is you had what you call common elements. Where you had a common element in several proposals, it

meant that at least everybody agreed. You also had developed, from earlier negotiations, brackets around certain words or even around paragraphs. So you could have brackets around a paragraph for a long time, and basically the definition was left open. There were common elements, but it was pretty much left open [until] you finished the rest, then you [had] to come to an agreement what it covers. That's pretty much the way it went.

There were, early on, a lot of bracketed paragraphs, a lot of bracketed words. The way you'd work is you'd [discuss a] common element, can we agree on that, get rid of the brackets around this part? Then you'd concentrate on the brackets around individual words. Okay?

BUTLER: Okay. Thank you.

GABRYNOWICZ: Another issue that is important is the role of private remote sensing activities and the relationship of the U.N. *Principles*, if any relationship, to private activities. So I'd like to move into that, if that's okay.

HOSENBALL: Yes.

GABRYNOWICZ: Well, why don't you just start telling us what you remember about the positions and negotiations regarding private remote sensing activities.

HOSENBALL: Again, I think basically there were proposals that it applied to nongovernmental entities, and those words were bracketed for a long time. As far as I'm

concerned, they apply—because of the *Outer Space Treaty*…principle that states are responsible for [such] activities in the '67 treaty [and] was basically repeated in the *Principles*. I think the U.S., at least, accepted that anything that we agreed to ultimately would apply to private parties.

That was something that we had to watch out for. We had to be very careful that nothing came into these *Principles* that would affect intellectual property rights of private parties, that there were things that the government could [not] control. That we had a free enterprise system and that people had the right to sell things at the prices that they thought…would be [reasonable]. So if we're establishing "reasonable terms", you better be careful of the language you use if you're committing [them]to provide something. You've got to be careful that nothing…would be provided at cost. Ultimately, I expected that there would be private enterprise entering into [providing data]. That's why I was there. I was representing NASA and this technology, and I couldn't let anything that would stop the development of that technology, to make it better, nor could I let anything in there that would prevent private industry ultimately performing this function.

So, yes, we were aware of it. Certainly the LDCs were. As I said, one of their major concerns [was] somebody getting information about their natural resources and coming in to negotiate with them and having all this information which they [didn't] have. That's still possible today under the *Principles*. But it was a legitimate concern, and so you have this other language, which I've mentioned, which permeates, that you've got to do nothing to the detriment of a sensed state. So, yes, we were watching out for the private interests.

We also had a parochial thing from NASA's point of view that I wanted to make sure that we protected, and [there were] principal investigators who were going to use remote

sensing data and wanted to be the first to publish. Could we hold on to data or would we have to turn it over immediately if we were going to have open distribution? So that was another concern, and I don't think the *Principles* stopped the U.S. or anybody else from holding on to the data initially until somebody analyzes the information and then publishes a paper…. The same thing would be true for [a] private company, if they were going to analyze it and come up with information [it could sell]. The LDCs were pushing very hard for sovereignty over information as well as data. They pushed extremely hard for sovereignty over information. Not only sovereignty over natural resources and the environment, but sovereignty over any information about those natural resources. We objected to that, obviously, and would not go along with that.

So, yes, it does apply to private companies, but from my point of view, I'm not sure that it stops them from doing anything that they wanted to do in the U.S. or elsewhere. Now, you have the French, you've got the Russians doing it. I think you're going to have China doing it before too long. You don't have two space powers anymore.

GABRYNOWICZ: What was the Soviet Bloc position regarding private remote sensing activities?

HOSENBALL: That was our problem. That was a U.S. problem.

GABRYNOWICZ: Now, when in the United States we use the term "commercial," we refer to private activities. In Europe when they use the term "commercial," it can mean government activities. Was there any discussion about the meaning of "commercial"?

HOSENBALL: I don't remember any discussion, unless it came on after I left.

GABRYNOWICZ: But at the time you were there?

HOSENBALL: No, no discussion about the word "commercial." Usually it was nongovernmental entities as far as…a governmental entity, it didn't make any difference whether they carried out commercial activities or not. They were part of the government and therefore they were subject to the *Principles*. The things that they were worried about were nongovernmental entities where the government didn't have full control over the activity. So, no, I never heard "commercial" being discussed.

GABRYNOWICZ: That reminds me, what years were you involved with the *Principles*, from what year to what year? What would be the frame?

HOSENBALL: I think I was there…in '69. I became deputy…at the end of '67, and I think I was there in '69. So I'd say from 1969. The last time I went up, last time I participated was 1979 when I was drafted to go to New York [to] head the delegation to the full Committee. That was the year *Skylab* was coming down, if you remember.

GABRYNOWICZ: Yes, I do.

HOSENBALL: So I [was] drafted to go. They called the administrator and requested that I head the delegation that year, which I did. So that's the period.

Now, the other exposure I had was…on the delegation to UNISPACE [United Nations Conference on the Exploration and Peaceful Use of Outer Space]. There was a remote sensing working group.

GABRYNOWICZ: That was 1982.

HOSENBALL: 1982. That was United Nations Working Group on Remote Sensing. I sat with Tony [Anthony J.] Calio, who was going to be the scientific [member] and do all the talking, [and I was] to make sure he didn't get himself into trouble from a legal standpoint. There was nothing that was going to go into that report [of the Conference] that was inconsistent with the U.S. policy or with the work that [we] had done up to that [time]. That was the end of it.

Now, in '75 or maybe even earlier, I did have a second NASA member of the delegation, Helen Kupperman. I don't know whether her name shows up, but Helen was the assistant general counsel for…the International Affairs Office, provided legal advice. So she came with me. In '79 when I stopped going to the meetings, she attended all the meetings and would call me, if need be, and would brief me when she got back as to what was going on, which is not the same as participating, because I don't remember that much after '79 that went on. But she kept me fully informed until I left.

GABRYNOWICZ: What would you say the status of the U.N. *Principles* on Remote Sensing was in 1979 when you left the work?

HOSENBALL: The big effort, if my memory serves me, and I think I may have picked up some from the reading material you gave me, but my recollection is that in '77 we had come up with a set of *Principles* bracketed as such, but my recollection is seventeen principles at that time. That year was the biggest effort. There was a submission, and I don't remember by whom, but there was a submission by someone that laid out all the [elements] that had been discussed from '75 through '77. There were seventeen principles.

I think in '78 there was some progress made in removing some of the brackets around the paragraphs as well as the brackets around words. [In] '79 I don't think too much was done. There probably [were] discussions about it, but I don't think too much—there may have been some brackets removed, but there were seventeen principles.

Now, I notice that the *Principles* that you sent me only have fifteen. In fact, looking at those *Principles*, there are two *Principles* there that actually were one in the seventeen, as I remember. The one about sovereignty over natural resources and the one about—I don't know whether I made a note or not. Let's see. I may have. Here we go. Oh, the natural disasters one.

GABRYNOWICZ: Which *Principle* number?

HOSENBALL: That was *XI* and *X*. *X* and *XI* were one, basically. Harmful to the Earth's natural environment and notice of a natural disaster, they both really run together. My recollection is that it was one principle. Why they broke it out into two, I have no idea.

GABRYNOWICZ: Would you say that those two principles, the one that refers to the use of remote sensing for natural disasters and the other for harm to humans, would that constitute something new in remote sensing law? Was this the first time that emerged as a statement?

HOSENBALL: Well, it was the developing countries that [insisted on these provisions,] again, trade-offs. If we're going to get rid of prior consent across the board, [the LDC's] want[ed] some protection. [They] want[ed] something [in return]. So the natural disaster was the first one that came in, and you can't argue about that. As far as the U.S. was concerned, if we had learned something about a natural disaster, we would notify the country involved without question. Forget about what the Soviets might do, from the U.S. standpoint there was no problem.

The same thing with the environment, if we saw something that was done to the environment that endangered human life, we'd notify [countries] immediately. So those [provisions] came in from the developing countries.

GABRYNOWICZ: Do you remember any of the discussions at the time, what issues might have been raised and addressed regarding those two?

HOSENBALL: Not really. I think it may have come in that '77, '78 period when these seventeen principles [were set out as a working text]. They were discussed, and they were in working papers. The working papers [were] changed all the time, and where you found a common element, again, it went into a working paper.

The way the system worked, you didn't have any recordings of what went on in the working groups. Early on we had actual verbatim [reports in] the plenary session. They changed that into summary [reports]. But in working group, people would make notes. We did have a chairman. …Frankly, I don't recall who it was. But somebody did take notes. It may have been one of Secretariat people sitting in. A [pointed] working paper would come out the next day…. They were very good. It would come out…and you'd pick it up at the U.N. in your box…and [it] would form the basis for discussions the next time the working group met.

The working group met fairly frequently on remote sensing. There was [also] one…on DBS. So occasionally, particularly where you had one delegate who was interested in both remote sensing and DBS, you'd only hold a session for either DBS or remote sensing. So you didn't do it every day. It depended on the wishes of [the delegates].

…Everybody was invited to the working group. It just wasn't people appointed to a working group. It was a working group of the whole, and whoever showed up, that was the working group. It was not by appointment or by agreement. Everybody had the right to attend working group meetings and to participate, and they did. Some would come [only] one time—which create[d] a problem, because they los[t] track. But the Soviets would always be there. We would always be there. Some Western Europe countries would usually be there. You usually ha[d] Brazil, Argentina, Mexico. You had India, who attended

most…sessions. The [countries] that you would normally think of being active…were interested in space. India certainly was. The Japanese would attend. So you'd get fairly good attendance.

GABRYNOWICZ: Let me ask you this: We've addressed some specific issues—military satellites, prior consent, two kinds of prior consent, to sense and to distribute data, private activities, and then we just addressed remote sensing for humanitarian purposes. Can you remember any other issues that were particularly visible that were important that were discussed?

HOSENBALL: Yes.

GABRYNOWICZ: What would they be?

HOSENBALL: Well, access to data. Big, big issue. When would you get it? When would you get the data? So you had the issues [of] equal access, timely access, and nondiscriminatory access. Anybody who wanted the data would be able to get the data. …"Timely" is broad. What is "timely"? "Timely" is in the eye of the beholder. But that was an issue. …[The LDC's in particular] wanted to make sure…when [data] would be available.

GABRYNOWICZ: Before we go away from access, so—

HOSENBALL: I'm not going away from access.

GABRYNOWICZ: Okay, go ahead.

HOSENBALL: Okay? One of the big issues was [the] priority [of] the sensed states, that they would get it first, if at all possible. …[It] was a big issue. …Certainly we didn't want to get into priority issues and what happens if you don't give them priority.

Let's see. We've already talked about this. Access again goes to your issue of a disaster and environmental harm. Also a discussion on…the availability of data that was in international areas, off the coast, oceans that sort of thing, and that was another issue. I don't think it ever got resolved. I don't recall if it's in the *Principles* or not. That's access. Those were the issues on access that I can recall.

GABRYNOWICZ: Regarding the access issues, how were they resolved, if at all, and which ones were not resolved?

HOSENBALL: Let's see if I remember. I don't think there's any priority [provision]. I think that never even got into a working paper, or if it did [get] into a working paper,…it disappeared.

GABRYNOWICZ: So would the following sentence be correct or incorrect: Priority access for a sensed state is not covered by the U.N. *Principles*.

HOSENBALL: I think that's right. I think it isn't covered. The hazards thing we mentioned [are] covered. You do have nondiscriminatory [access] I think, in the *Principles*. I'm not sure "timely" is in there. My recollection is that it may not, and I'm not sure "equal" [access] is.

BUTLER: What is the distinction between "equal" and "nondiscriminatory"?

HOSENBALL: I'm not sure.

BUTLER: Okay.

HOSENBALL: I think it was just a repeat of the same idea. …I don't think there is any difference, but it's an emphasis, "equal" and "nondiscriminatory".

GABRYNOWICZ: If you had to summarize what, in your understanding, the U.N. *Principles* memorialize about access, how would you say that?

HOSENBALL: Well, I think the answer is the country that does the sensing under the *Principles* has agreed that all countries should have access to that data. Now, on what basis? …We had language in the *Principles* on terms…mutually agreed upon. I think initially it was mutually agreed upon, and then I think that "mutually" dropped out, which we were just as happy to have it dropped out. So basically that's it. You can get the data on agreed terms, but you're not going to get it unless you get it on agreed terms.

That…puts a restriction on countries in getting the data if you can't reach agreement. What happens in the U.S. situation, the data [is] archived and…available. The EROS [Earth Resources Observation System] Center[6] was developed, and [data] was available. I [don't] know what the Russians did. I suspect that the Russians were more interested on the agreed terms because that gave them the ability not to make [data] available, that they could keep it as they wished, but our position was we'll give you [data], we'll disseminate it. You may have to pay the cost of reproducing it or whatever, but we have no problem making it available to you. I suspect that the Soviets were [just as] more interested in getting that [restrictive] language in.

You had to have the language. We could not commit any agency or any private company, since it did apply to private [entities, to provide data if] you're not going to pay…for it. So you had to have that, but that's basically it. You had access. You want to pay for it, you get the data.

GABRYNOWICZ: In addition to access, are there other issues that you would say were important that were raised that were discussed?

HOSENBALL: Yes. Certainly there was a push, if I read it right [for a U.N. role], I think the Argentine proposal was very heavily oriented towards a U.N. role, having the U.N. develop the database, maintain the database. So there was [an issue of the] U.N. role, and I think in the *Principles* [there is] some slight role for the U.N. to play. At that time it['s role] was

[6] EROS Data Center (EDC), Sioux Falls, South Dakota, USA. Part of the Department of Interior/ United States Geological Survey.

more important because there wasn't that much familiarity [with remote sensing and] you didn't have that many bilateral agreements or regional agreements.

Our position was all along is if you want immediate access, get your Earth station. So we had our arguments. We didn't get what we wanted by way of consent without coming up with some decent arguments…. Do you want to get it right away? We'll be glad to [assist you in getting an] Earth station and you can pick up the data right away. You want technical assistance? We'll give you technical assistance. That was an issue which was easy for us. In fact, it may have been in our submissions. Again, you're may have to pay something for it….

Let's see, sovereignty, as I mentioned, was a major issue, particularly sovereignty over natural resources and sovereignty over information about natural resources. That again, we weren't going to agree to that, but again the trade-offs, we had to do something.

I mentioned the organizational [issues]. We did push very hard for [countries] to setup regional ones. That way you'd get the data with several states [participating], particularly in South America where the Brazilians and the Argentines were very much interested [in having an Earth station]. There was talk about setting up your own national one, if that's what you want. So there [were] organizational considerations and the [role of the] U.N. of course…. I talked extensively before about recognizing the interests [of sensed states] and not doing anything detrimental as a result of remote sensing…particularly in the distribution area….

We've already talked about private nongovernmental [organizations].

GABRYNOWICZ: Feel free to add anything as you go along.

HOSENBALL: Definition, the definition of "remote sensing"…and also the definition of "data", "primary data", the whole business of "analyzed information", what do we mean by "data". So there were a lot of discussions about data. We kept shoving [the definition of data] it to the Scientific and Technical Committee saying, "You tell us the kind of data."

GABRYNOWICZ: Can you remember some of the definitional issues?

HOSENBALL: Oh, yes. There were a lot. We got into a big fuss. The Soviets had introduced this business of fifty meter resolution. They would release everything above fifty meters but not below fifty meters.

GABRYNOWICZ: So they were tying access to the spatial resolution?

HOSENBALL: That's right. So we kept arguing. You had this argument on do you use a functional definition, which is what you ended up with, or you go into resolution. Then you get, what do you mean by "resolution"? There's all sorts of instruments on a remote sensing satellite. What are you talking about? Electromagnetic? Infrared? Photographic? Fifty meters didn't mean anything. Plus the fact is, I think, *Landsat* may have been down to forty by then or even lower, and we could see it going down a lot lower.

So that argument did take place, and you ended up basically with a functional definition, which made sense. But the Soviets pushed this fifty meter business. That one came through Gromyko. I think that was introduced into the either First Committee or the General Assembly.

GABRYNOWICZ: How were the definitional issues resolved? What became accepted as definitions?

HOSENBALL: Basically what you have in the *Principles* now…. It changed a little bit. I don't recall any reference to the Earth's surface in the definitions as we had [it] through '79. It was remote sensing…of the environment and the natural resources of the Earth basically. No reference to the "surface of the Earth". [When I first] looked at [it], I said, "Ye gods, what are they doing? What did they do?" But then if you read on, it says "for the purposes of." Now, remote sensing of the surfaces of the Earth for the purposes of the environment and natural resources. So I'm comfortable with that.

But we did not use the "Earth's surfaces". As I said, we pushed definition to Scientific and Technical, and, in fact, they came up with something that's in there that makes sense to me. It's in the current *Principles*.

The other big fight that went on was "should"/"shall."

GABRYNOWICZ: Tell us about that.

HOSENBALL: We wanted "should." The developing countries wanted "shall." The Soviets were on our side with the "should," and it stayed in brackets. When I left…you had "should" in brackets and "shall" in brackets everywhere. Everywhere in those seventeen. Wherever "shall" or "should" [had] appeared, it was in brackets in the *Principle*. In looking at the final *Principles*, they [are] all "shall."

GABRYNOWICZ: Can you tell us the significance of "should" and "shall"?

HOSENBALL: Sure. We thought "should"—precatory, it's something you should do, but it's within your control. Whether you do it or not, you decide. Right? "Shall" means you do it. You're directed to do it. So it's directory as opposed to the precatory. So we were on the "should" side. It really didn't bother me whether it went to "shall" or not. Ultimately I thought…when everything else was agreed to, or it was a key to getting agreement, it was going to end up as "shall" and what difference did it make as far as the U.S. was concerned. If it said "should," to us, we'd do it. …We would do it anyway. So it didn't make any difference to us, but again a bargaining [chip], it was you give up something, you get something….

GABRYNOWICZ: What's the legal significance of the word "shall" having been used in the final version?

HOSENBALL: I think you made a commitment to carry out these *Principles*, not that you should carry it out, but that you made a commitment to live by these *Principles*.

GABRYNOWICZ: There were lawyers and nonlawyers involved in the delegation. You want to tell me a little bit about the dynamics between the lawyers and the nonlawyers when issues arose? Were their formal roles for each group?

HOSENBALL: No. There were interests. When I was there, the delegations got along extremely well. The [U.S.] delegation got along extremely well. We discussed things. Herb Reis, who had done this work for a long time was an excellent lawyer you could talk to. When there was a NASA interest or DOD interest, he recognized that interest, and we'd come to an agreement. There were very, very few disagreements.

The only incident I remember, and I frankly don't know why it happened or what caused it, but when I became deputy general counsel, I did have certain commitments. All the meetings used to be in Geneva [Switzerland], and so I was far away and nobody would call me to come back from Geneva unless it was a major, major [matter]. But then [the meetings] moved to New York every other year. So when I was in New York, I'd get calls from either my boss, the general counsel before I became general counsel, or when I was general counsel, I'd get a call from the administrator asking me to come back.

One time…I went back to Washington [D.C.]…for the day and came back around six or so and went to the mission, because I figured they would be busy reporting and whatever. But they were still over in the building across the street, the U.N. Headquarters in New York. So I went to where I knew where they were meeting and sat behind the two members of the delegation that were there and just listened.

They said something which…set me off. It was…something they should [not] have said. Again, I don't remember what it was. In any event…I wasn't going to insert myself…but I did. It was something that I wasn't about to agree to, and I told the working group, no, that is not the U.S. position…in a nice way, I didn't say it was not the U.S. position, in a nice way I disassociated myself and the U.S. from what they had said, at which

point everybody got madder than hell at me, not only the delegation, but everybody else. …It just broke up the meeting.

That's the only incident that I can remember where somebody actually stepped in, and it was important. It was important apparently to NASA in some way. It may have been [the] private sector stuff. It was a little thing that they, not being [fully] familiar with [the technology, were about to agree to]. It was a [delegate] that was working on the DBS and…a junior attorney from the Legal Advisor's Office who had…been on the delegation maybe a year or two. It was just something that they were not familiar [with] that could have an impact [on NASA or other agencies], and I could not let it go through for one reason or another. [I think this incident caused me to add Helen Kupperman to the delegation.]

But that, yes, the "should"/"shall" stayed until very end, I'm sure. I don't know when it dropped, but probably at the very end.

GABRYNOWICZ: Well, then let me frame it—

HOSENBALL: There's one more…and that [is the] consultation…. Frankly, I don't like the [provision] that's in there, but.

GABRYNOWICZ: I tell you what, just one second. How are we doing on tape?

BUTLER: Actually, now is a very good time to stop and change it.

HOSENBALL: Okay. [Tape change]

GABRYNOWICZ: When we spoke before the tape change, you were about to address the issue of consultation. Please proceed.

HOSENBALL: Well…there…was a discussion on consultation and also disputes.

GABRYNOWICZ: For the record, why don't you define what "consultation" means.

HOSENBALL: "Consultation" to me meant that when asked or you can initiate it yourself, you would talk to one another…. If there was an issue, you'd ask the other party's position on that issue, and you would consult, and that's it, no resolution. That didn't oblige you to agree to anything, all it meant was that you would at least talk about it, that you would just talk about it.

We avoided and objected to a dispute resolution…procedure. That's why I say I saw the one here, and, if I remember right, it does use the word "dispute." Yes. The *Principle XV* uses the word "dispute," for peaceful settlement, but it's not a consulting provision. It's a dispute provision. It looks awfully broad to me as to what you can invoke. Any established procedure for the peaceful settlement of disputes, which can be commercial arbitration all the way to the International Court of Justice, I assume. So I'm a little surprised at State or somebody agreeing to this kind of a broad dispute resolution principle.

We basically had a consultation provision. You would agree any questions arising would result in consultation, not with going beyond that to a procedure to resolve a dispute arising out of those consultations. That, I was surprised when I saw it.

GABRYNOWICZ: Do you remember what group took what position regarding consultations?

HOSENBALL: I don't think it was that much of a dispute. It was a question of bringing in a dispute into the resolution of dispute. That's where the arguments took place and apparently, in order to reach a final agreement [the U.S. agreed to a dispute provision].

I sound critical, and I don't mean to be critical, because it was important to get these things resolved, and so you may have to give more than you're willing to give and hope that you don't end up some time along the way with a dispute. I can see that there might have been some sensitivity to get this thing done because of what happened with DBS.

GABRYNOWICZ: By that, you mean the vote rather than the consensus?

HOSENBALL: That's right.

GABRYNOWICZ: Do you want to say a little something about that so there's context?

HOSENBALL: As you know, the Committee, throughout the time I was there, worked on the principle of consensus. What that means basically is that you don't go forward with something to the next level until everybody has agreed to it, all the members of [the Legal Subcommittee]. It's not a veto kind of a thing like the Security Council, it's just that everybody works together to try and reach an agreement and accepts that as a basic principle, that you will work as long as you can until you…get a consensus, make concessions, [each]

party makes a concession…and you come together with either a treaty or a set of principles which will be generally accepted by all the members and that nobody would have reservations and…if it reached the General Assembly…nobody would vote against it, no member of the Committee, the full Committee, would vote against it. So you would have a unified presentation.

The danger of a consensus [procedure is]…it can go on and on and on until people get tired of it and say we're not getting anywhere. One of the members, I'm sure it was the Russians, took a set of principles forward to the General Assembly and there was what, 108 or whatever the number was, with some abstentions and the U.S. and some Western countries [voting no]. I think France voted for it.

GABRYNOWICZ: The DBS *Principles*?

HOSENBALL: Yes. So there's that pressure to reach a consensus, certainly on the [part of the] United States. So I don't want to be critical of what they did, because it may have ended up that this was one thing hanging out…like "shall"/"should" and one way of reaching a consensus was to agree to that. So I don't want to be critical of the ones that did it, whatever my personal view might be that it go[es] a little too far. Maybe it should have been [a] U.N. dispute resolution [procedure]….

I hate to see [a remote sensing dispute] go to commercial arbitration. You've got to remember, [arbitration] is binding on private parties, so it could very well end up [binding states or private entities.] I don't know who would represent who. That's a good question for you. If a dispute arises, would the government under the *Principles* represent its private

party or [are] the *Principles*…binding on [governments and] private parties…? [Or are resolutions adopting principles] not really binding on anyone. We haven't raised the issue of treaty versus [U.N. resolutions], but.

GABRYNOWICZ: Well, let's go there a little bit. First of all, what, if any, is the significance of the fact that the *Principles* were adopted by consensus?

HOSENBALL: That it ends up at least receiving broad support initially. Now, you know *Principles* can obviously develop into customary international law. If all countries comply with it for a long period of time, it ends up as customary international law, and it's as binding as a treaty.

If you can start off with fifty-three countries, all the members—I don't know how many there are now, but all the members of the full Committee agreeing to these *Principles*, you've got a pretty good head start on customary international law, particularly when these are the states that are carrying on the activity. It lends it greater weight. So consensus is important, if you can reach it, but you always have that pressure to reach a consensus under the U.N. system because somebody could raise it either in the First Committee, which I've been told is a political committee, and then go forward to the full assembly or directly into the assembly, if an ambassador introduces it.

GABRYNOWICZ: Now, regarding the status as binding and customary law, if a practicing remote sensing nation like the United States has adopted, as it has, parts of the U.N. *Principles* in its own domestic law twice,[7] what, if any, significance would that have?

HOSENBALL: I think it gives it greater weight. I think it gives the *Principles* much greater weight, because here is one of the practicing governments using remote sensing, even though it's now through private parties, putting it into its own national law.

GABRYNOWICZ: The Japanese negotiator for the U.N. *Principles*, I'm sorry whose name I forget, you may remember him, but he wrote a paper in which he says that Japan uses the U.N. *Principles* as their own domestic law.[8] What, if any, significance would you think that has?

HOSENBALL: It becomes national law. It adds to the customary international law argument. Someone would probably argue today that it's customary international law.

GABRYNOWICZ: How about you, do you have some things you'd like to do at this point?

BUTLER: Well, while we're talking about customary international law, you mentioned the *Principles* and the status of a treaty, if you could explain for the record the difference between principles and a treaty from a legal and political sense.

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[7] 15 U.S.C. sec. 4201-4292 (1984) replaced with 15 U.S.C. sec. 5601-5642 (1992).
[8] Kawamoto, Chiyoshi, NASDA's Activities in the Field of Remote Sensing, International Bar Association, 10th Biennial Conference of the Section on Business Law, Hong Kong, ar 5 (1991).

HOSENBALL: The difference isn't between the *Principles* and the treaty, the difference is between basically what is a U.N. resolution adopting the *Principles* versus a formal treaty which is signed by the states, parties to the treaty, and that's the distinction. Resolutions are not binding on any country. Resolutions adopted by the General Assembly, they adopt them all the time. Everyone presses that it has the status of international law, but it doesn't.

It becomes international law, as I said before, when it becomes customary international law because nations are acting consonant with the provisions of that resolution, which in this case happens to be principles, that are labeled *Principles*. Because you do have the Outer Space Treaty, which is principles, too, basically. So you've got to draw that distinction. You can't use the word "principles," you've got to use the words "General Assembly resolution" versus a treaty.

GABRYNOWICZ: Well, I tell you what, I see you have some of your notes there.

HOSENBALL: Well, I've covered it, basically, I think. We've talked about everything I had. I don't know whether I have some other stuff here.

GABRYNOWICZ: Then if we went on to talk to the *Principles* one at a time, would that be something you'd be prepared to do?

HOSENBALL: Well, you had some other questions…in the ones that you sent to me. I don't know whether you want to cover those before you go to the *Principles*. There are a couple

there that you might want to ask. You have one here did the oil crisis in '70 provide any impetus to the negotiations on *Remote Sensing Principles*, and the answer is no. That's simple.

GABRYNOWICZ: Let's make sure we capture that. The oil crisis had no impact on the negotiations?

HOSENBALL: No, it had no impact.

BUTLER: What about how much influence did the launching initially of what was the ERTS [Earth Resources Technology Satellite] system at that time have to promote these discussions?

HOSENBALL: Well, I think it promoted the discussions. Well, basically the way I understand it is that the General Assembly established a task force on remote sensing. They established it and gave it basically to the Scientific and Technical Subcommittee to [discuss], so there obviously was some strong interest in pursuing it within the Committee on the Peaceful Uses of Outer Space. Then the Scientific and Technical Committee set up a working group within [it], and there was one set up in the Legal Subcommittee. But as I said earlier, in the early years most of the activity was in Scientific and Technical. It was an educational process.

I did mention the way the U.N. is organized, you have the General Assembly, you have the Security Council, you have this first committee, and then you have the full Committee on the Peaceful Uses of Outer Space, [and] you also have a secretariat that's

called the Outer Space Division, and they provided the staff help to the chairman of both [Sub]committees and to the full Committee. When I first got there, there was a delightful lady, Chinese lady, by the name of Miss Chen, who was the head of that division. Jasentuliyana was on—

GABRYNOWICZ: Nandasiri Jasentuliyana.

HOSENBALL: Yes. He was in that division as a lawyer. They had Mr. Perek as the expert and Miss Chen as the head of the division, and [it] had a couple of others that were basically people that would get the mechanical stuff done, reproduction and arrange for meetings and that kind of thing.

The one thing I haven't talked about [is that] the full Committee had a chairman and each of the Subcommittees had a chairman. The chairperson of the Legal Subcommittee was…from Poland, Eugene Wisner, I think it is, who was one of the most delightful people I've ever met and did a wonderful job, really, truly wonderful job of running the Legal Subcommittee. He would get people together, and he would make a little speech about this and a little speech about that and present both views and then move people towards a consensus on a particular point. Just wonderful.

His country recognized his abilities. [I believe] he…became ambassador to the U.N. and became foreign minister of Poland when Poland broke away from the Soviet influence. I don't know whether he's retired or not, but if you want to get a lot of information, he is the one, if you can ever get a hold of him to talk to.

Now, the full Committee chairman was—my goodness, who was the Austrian that I disliked so intensely? Do you remember his name?

GABRYNOWICZ: I don't know who it is you disliked, but knowing a little bit about the history of the Committee, Mr. Kurt Waldheim was then chair.

HOSENBALL: Yes. Kurt Waldheim was the chairman of the full Committee. What subsequently happened, of course, Waldheim became Secretary General and Yankovitz, Peter Yankovitz, became chairman of the full Committee. He, too, was an Austrian…. He was very helpful. Wisner was just super. He really was, just in general as a person as well as a chairman and could smooth things over very easily and very quickly. So again, to some extent in any delegation or any organization, you have personalities that you can't avoid.

Let me give you the names of the others that were in the U.S. delegation and where they were. I mentioned Herb Reis.

GABRYNOWICZ: Could you spell that, Reis?

HOSENBALL: R-e-i-s. Herb Reis.

GABRYNOWICZ: Do you remember what his title was?

HOSENBALL: He was the legal advisor to the U.S. mission in New York.

GABRYNOWICZ: Okay.

HOSENBALL: The U.S. U.N. mission in New York. Ron Stowe [from the State Department's legal advisor's office] followed him…and headed the delegation for quite a while.

GABRYNOWICZ: Could you spell his last name.

HOSENBALL: S-t-o-w-e. Ronald Stowe. From DOD we had Harry Almond, and that name may ring a bell.

GABRYNOWICZ: Oh, yes.

HOSENBALL: Now, he stayed there for a while, but was followed then by Ed Melanson.

GABRYNOWICZ: I'll ask you to spell that name as well.

HOSENBALL: M-e-l-a-n-s-o-n, I think. He was a commander and then ended up as a captain. He had attended a lot of sessions on disarmament…[at the U.N. and bilaterals with the USSR].

Connie Shafer was from the international office of the FCC. [He] was primarily there to watch us as far as DBS went. Dave Stewart was a young legal advisor that was on the delegation when I was heading the delegation…. Here's a name you should know, John

Rynlander on the ABM [Anti-Ballistic Missile] Treaty.[9] He was there one year as head of delegation…. Then I mentioned Helen Kupperman who was in my office.

Now, there was another legal advisor that headed the delegation before…I started to, and I just don't recall his name. There was…someone from the…International Organization [Office] of State Department that was with us most of the time, and he took care of anything we needed with the Chief of Mission and that sort of thing and also very helpful and also a very nice guy. So we had a good delegation, always had a decent delegation.

Ron Stowe, I think, is still around. …He got very interested in DBS and ended up learning a hell of a lot about the ITU and going to the ITU, and ended up as a lobbyist for Pacific Telephone before they were taken over by your local regional Bell here. Connie Shafer was well known and had been a delegate to [the] ITU…. So it worked pretty well, and it was a lot of fun. I enjoyed it. It was always challenging.

I got tired of diplomatic lunches and dinners and diplomatic receptions and had my fill of those. We had a lot of bilaterals with the Russians. We would go to their mission in New York in downtown Manhattan. Not too far downtown, it was uptown, more uptown. I think it was seventy, seventy-something.

GABRYNOWICZ: It's just above midtown.

HOSENBALL: Just above midtown somewhere. They had a whole building. We'd have lunch in this great big…[high] ceiling room…with a great big picture of [Vladimir Ilyich] Lenin in it, the only thing hanging on the wall, and all Russian help…. Unlike the U.S., they had all

[9] Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of

Russian help everywhere. We met and we had a bilateral in London in their embassy right in Hyde Park…. They really used us also as a sounding board on other issues than space.

The one thing that sticks in my mind in the meeting in London was the professor asking me, "Why is your president no longer talking about détente?" They were very disturbed that all of a sudden things had gotten colder than the Cold War. Here was President [Gerald R.] Ford—really talking, cold war stuff….

I finally had said, "It's election time. He is a Republican, and the Republicans are strong on national security and defense, and so it's just natural that during an election he is going to be very strong on national security and defense, and whether we'd like it or not, who are we supposedly defending against and who are you defending against?"

Talking with the delegations individually, it was remarkable [to them] that my children could come over to Geneva. They [the Russians] couldn't leave. Either husband or wife had to stay home, literally. The only exception to that was Ambassador Piradov had his wife in Paris because she ran the French edition of *Soviet Life*.

GABRYNOWICZ: I remember that. I remember that magazine.

HOSENBALL: Yes. His English wasn't very good. One luncheon in Geneva we're talking, [but] when he wants to be real fluid—he understands it extremely well, but when he wants to be fluid, he goes into Russian, and Boris…acts as an interpreter.

Mrs. Piradov was at one luncheon, and she, after the professor finishes this long [dialogue] in Russian and it's been translated, she talks to him, and she is talking to him in

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Anti-Ballistic Missile Systems.

Russian. I know when a wife scolds, and she was scolding him, really scolding him. You can get the tone and all of it. So after the meeting I asked Boris, "She was scolding him about something, wasn't she?"

Boris starts laughing and says, "Yes. Yes, she was. She was telling him, 'It's about time you learned to speak English rather than—'" So [our] relationship was actually [very good], and as I said, we always had two or three luncheons during any of the sessions and it worked out…extremely well….

My philosophy in going into all the negotiations at the U.N., whether it was the *Liability Convention*, *Registration Convention*, or *DBS*, or *Remote Sensing*, or the *Moon Treaty*,[10] which is another story, was don't do anything that will restrict technology and don't do anything from a political or private party point of view [that could restrict the advance of technology or space activities], because the world changes. It's true. All of a sudden the Soviets…break apart, and their people can now travel much more freely than they ever could, and now we've got this terrorism [threat], which changes things. That basically was the way I went in.

GABRYNOWICZ: Let me ask you a question along those lines, especially for people who, my students get younger every year.

HOSENBALL: Yes.

[10] Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, U.N. GAOR, 34th Sess. (1979), Supp. No. 20 (Doc. A 34/20) (effective July 11, 1984).

GABRYNOWICZ: They were infants, if they were alive, during the cold war, and they often ask questions about, "Well, the Soviet and the United States were deadly enemies. How did they create space law?" Do you want to say something, why did they create space law?

HOSENBALL: Well, first of all, they were space powers. …They were as much interested in protecting their interests as we were in protecting our interests. Now, the interests may have been different, but they were just as interested in getting an outer space treaty as we were, the way it came out, because it gave them freedom to do things like it gave us freedom to do things. There are some funny stories when it comes to liability, the *Liability Convention*, because their system of law was so different from ours. There were real problems.

But when it came to space, that's why I say it was open, not only from the Legal Subcommittee point of view, but the relationships between [NASA's] International Affairs Office and the technical side of NASA with the Russians was excellent, was excellent.

We had *Apollo-Soyuz* [*Test Project* (ASTP)]. We had the remote sensing agreement. There was an interchange that always existed, even before the breakup of the Soviet Union. During *Apollo-Soyuz* we had people going over there to their facilities. You looked for the place on the Russian map, the name of the city on the Russian map, it wasn't on a Russian map. All their space facilities were not on their official maps. My deputy administrator went over. He went to Space City [Star City, Zvezdny Gorodok, U.S.S.R.]. They flew him there from Moscow. He said they traveled at night and over the railroad tracks. You couldn't see much of anything.

…Their National Academy of Sciences, which was their civilian part of the space program and NASA had lots of interchanges and lots of bilateral discussions and visits back and forth.

BUTLER: Well, talking about the U.S. and Soviet relationship, as you said there was a lot of interaction going on and there was also a lot going on outside of the space sphere, but what impact, if any, did the 1978 *U.S.-Soviet Convention on the Transfer and Use of Data of the Remote Sensing of Earth from Outer Space* have on your negotiations?

HOSENBALL: None that I know of.

BUTLER: Were you at all involved in that convention?

HOSENBALL: Helen was, Helen Kupperman was, as an aide to the International Affairs Office. Matter of fact, I don't even know what it says.

GABRYNOWICZ: About the Russians, there's currently there's an agenda, I don't know if it's a proposed agenda item or it's made it on to the agenda, but it's a Russian idea that we revisit all the treaties and try to draft one big comprehensive space treaty.

HOSENBALL: Oh, jeez.

GABRYNOWICZ: What's your idea about that?

HOSENBALL: What are they going to do, put all of them into one, into one treaty? The *Liability Convention*, the *Registration Convention*?

One of the other issues, incidentally, that I didn't mention was notification of remote sensing launches, and we got rid of that by the *Registration Convention*. But you have…five treaties. The *Moon Treaty* hasn't been…sent to the Senate, as far as I know. I stopped it from going to the Senate when I was general counsel at NASA. The legal adviser himself called me, and I said, "Don't send it up there. Don't sign it even. Don't have it signed, because it's not going to go anywhere." It was all involved with the Law of the Sea Treaty and the rest of it, and I said, "It's not worth it. Just don't do it," and they didn't.

So you've got five treaties. You've got *Principles on DBS*, *Principles on Remote Sensing*. You're going to put all of that into one treaty? Is that what they're talking about?

GABRYNOWICZ: It hasn't evolved enough, but it is getting to the point where people are saying, well, maybe we should revisit all the treaties.

HOSENBALL: Mistake.

GABRYNOWICZ: Why?

HOSENBALL: They work pretty well. All it can do is cause problems. All it can do, all the issues that we resolved in these treaties will all rise again because you've got new people that don't have the history, the trade-offs that were made by various countries, and so you'll go

through the whole thing again on the issues. It's just the worst thing that you can do for any country. Yes, not only for us, but for the Russians, the French now, the Japanese, the Chinese, all the people that have space activities, about the worst thing in the world, because you will be going through all the issues again and you will have none of the history, and you'll end up with something that is totally different all the way through and that probably won't get signed by one or more countries because they don't like something that's in there.

GABRYNOWICZ: We're now in 2002 and space activities have taken a sharp focus on commercial and private sector activities as opposed to the civil space programs and the government activities during the cold war and immediately after the cold war. Do you think that evolution requires new treaties, new law, or do the old treaties, old law, also satisfy the new activities?

HOSENBALL: I think what we have pretty much satisfies our current activity. We've always had companies doing work for NASA. Communications satellites have been basically a private enterprise all these years. Remote sensing has been privatized. I just read the other day where the president wants to privatize the Shuttle.

I don't see any changes that have to be made, really. I think we've done the things that we had to do with private launches. We had the *Commercial Space Launch Act*[11] [give] regulatory authority to DOT [Department of Transportation]…. Nothing's gone wrong. It's worked pretty well, as far as I know.

[11] 49 U.S.C. 701.

So I really can't think of something that the private sector does that the government used to do or the private sector does that the government didn't do that would require a major revision or even a minor revision of what we have in the treaties we have today.

GABRYNOWICZ: How about property rights? One of the discussions is that the space law regime does not adequately define and/or protect property rights.

HOSENBALL: Oh, that business. National legislation can take care of it. One of the things I did was get national legislation to handle crimes aboard space vehicles. You had them aboard airplanes. So, yes, I thought we needed a law to extend [criminal jurisdiction to space vehicles]. The French don't have any problem, because if you're a French citizen, they can charge you with a crime no matter where you are under French law. It follows the person. We don't have that…[generally, though now we do have it for treason and other specific crimes.]

We had the customs problem. We were going to [retrieve and] bring back [two commercial] satellites. Yes, I had to get legislation to change that so that people didn't have the pay custom duty on a satellite return. It was just a little footnote to a tariffs that went on forever and ever. But you can do a lot of things through national law, if you're worried about it. Now, would that be recognized internationally? No. If you filed a patent in the U.S. as a result of having [made a] discover[y] on the Japanese laboratory? I don't know. I suppose you would.

GABRYNOWICZ: Well, there is a space station agreement. They do address that.

HOSENBALL: I think they do. …I recall that, yes. I was there when that agreement started, yes. So we did address some things in the space station, but can you do it in a country that isn't a party to the space station agreements? China. I don't know. I'm not a patent lawyer. But it seems to me that the initial step, at least, if there's any question, you want to have national legislation or have a patent convention. …You have a copyright [convention in existence].

GABRYNOWICZ: IIPO. International Intellectual Property Organization.

HOSENBALL: Yes, IIPO. Yes.

GABRYNOWICZ: IIPO.

HOSENBALL: IIPO.

GABRYNOWICZ: Now I'm into an area that I don't know.

HOSENBALL: Yes, I'm out of my area, too. I think they have a copyright convention, but I'm not sure they have a patent convention. I think patent laws are national, basically national…. I also had the [NASA] Patent Office under me. Patent lawyers reported to me. I [became] somewhat knowledgeable about patents, and my deputy was a patent lawyer. So [while I was] somewhat knowledgeable, but I don't remember whether there's a patent convention.

GABRYNOWICZ: There's a Berne Convention on—I don't know if it's patents or intellectual property, but there are.

HOSENBALL: Maybe they do need one on property, on intellectual property, at least. Yes, there are probably problems out there, but other than the one that you've just mentioned, I don't know anything else. Do you?

GABRYNOWICZ: No. We don't have enough tape for that.

HOSENBALL: All right. You ready to quit? It's five-thirty.

BUTLER: One more quick question for you, if I could. You mentioned the receptions and dinners and bilateral meetings. How much discussion or actual progress or work was made in these types of informal settings versus in the working group?

HOSENBALL: Quite a bit. Quite a bit. Both with those that were not necessarily agreeing with the U.S. position as well as getting support for the U.S. position [from] some of these delegations. The bilaterals were important. Sometimes it was more than just two. For example, you'd invite Western Germany and probably the Canadians and the Belgians certainly. Sometimes you'd have three or four or five delegations that would meet for a dinner. But very useful.

Some of the delegations would invite developing countries. We would invite developing countries for bilaterals, usually invite two or three for a luncheon. As I said, we didn't have too much money. When I went, I at least talked my administrator into giving me $500 bucks.

GABRYNOWICZ: Under which administrators did you serve?

HOSENBALL: I served under Mr. [James E.] Webb. Dr. [Thomas O.] Paine. Who came after Paine?

BUTLER: [James C.] Fletcher?

HOSENBALL: No.

BUTLER: Or [James M.] Beggs.

HOSENBALL: No. Frosch, Bob [Robert A.] Frosch. Fletcher, and Jim Beggs.

[End of Interview]