

COMSAT HISTORY PROJECT

Interview with Joseph V. Charyk

Vol. II

Interview conducted by Nina Gilden Seavey

Fourth Interview with Dr. Joseph Charyk
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NG: All right, the way I think I'd like to start out today is to take a look at the competitive businesses and to start not just with naming the businesses and having you comment on them, but to start out and to take a look at what got COMSAT into this new competitive mode. In 1970, in the Annual report, you made a fairly strong statement about there needing to be a new era, essentially, at COMSAT--that you saw 1970 as a turning point for the Company, and that it was moving into a new decade and was going to move into new priorities. I guess what I wanted to start out with was to take a look at what the genesis of that decision was. What was it about COMSAT at that time that led management to believe that this new direction should be taken or had to be taken?

JC: Well, actually, the genesis goes...well, before that, I think I have mentioned previously that after the capability and suitability of geosynchronous satellites to provide communications service had been established through the international link, it was sort of obvious to us that there were great opportunities for the application of communications satellites to the domestic scene. That was obviously an

enormous market. We felt that as the prime entity that had been set up to be responsible for the development in satellite communications, that it was very logical that we should have a role in pioneering new applications of satellites--not being constrained to international. But that set in motion, a whole series of debates and arguments as to whether, in fact, our charter through the '62 [Communications Satellite] Act, was limited to international, or whether it permitted other possibilities. So, I think it's fair to say, that almost from the beginning--or the demonstration--of the suitability of geosynchronous satellite communications, that we had tried in one way or another, to enter the domestic scene. But, there was considerable opposition to that. So, in a sense, you could say the competition really began way back in about 1964 [as] people [were] striving to get authorization to enter the communications satellite business for domestic applications.

NG: So, now you're talking maybe about the ABC proposal....

JC: I'm talking about ABC, which I think goes back to 1964....

NG: '64, right.

JC:I'm going back to AT&T insisting that we didn't have a monopoly--all the other carriers insisting we did not have a

monopoly. So, there is this competitive thrust, but more in the debating area, trying to seek--either from the Congress or the FCC--the appropriate green light to go ahead. But, most important, a light to demonstrate that COMSAT did not have exclusivity in domestic. All that finally came to a head through, first of all, the Rostow Committee, which had been established by Lyndon Johnson, but then the change of Administration--Nixon entering the scene--the combination of Peter Flanagan and Tom Whitehead [at the White House] and Dean Birch as Chairman of the FCC, trying to determine what the policy should be. Out of all that came the policy of basically an open skies....

NG: Open skies, right.

JC:with the exception of COMSAT, which was not permitted in the open skies.

NG: Now, when you say that there was debate, are you talking about debate from outside sources or was there actual debate inside COMSAT about whether or not that was a part of a mandate of the company?

JC: I think there was very little debate within COMSAT as to the desirability and importance of COMSAT broadening. But,

when you got the details of what would we specifically do and how would we do it if we got authorization, there there was debate.

NG: Okay, so there you're talking about specifics, then....

JC: Specifics, but certainly no disagreement with COMSAT--that it was important to broaden our horizon, to look at satellite applications other than the international. It was important to the future of the company and the growth of the company that we bring our capabilities and our experience in satellite technology to the whole spectrum of applications, which included not only domestic, but aeronautical, maritime, and general mobile communications. So, I think everyone within the corporation was dedicated to trying to seek broader applications of satellite technology. But, when you got into the specifics of what should we actually do in the domestic area, then yes, we had differences.

NG: Well, let's talk about the Board's reaction now, because AT&T is still heavily represented on the Board. Now they wouldn't necessarily have taken the line that COMSAT should be....well, obviously, as you say, they did not take that line. How did that work in the Board?

JC: Well, the carrier Directors would abstain from participating in discussions on precisely how we should go into the domestic area, for example. On the other hand, I don't think that there was any disagreement among the members of the Board, that COMSAT should make every effort to broaden its horizons. However, I think there was a concern within the Board that....after all, AT&T was our biggest customer in international....

NG: Right.

JC:and whatever we would do in the domestic area, we ought to do very delicately, because you had the very unusual problem of potentially having an argument with your primary customer. So, you didn't want to throw the baby out with the bathwater. So, we had to tread carefully in our dealings with AT&T in regard to the domestic area, so that we wouldn't introduce insolvable problems in our international relationship with AT&T. So, although AT&T had made it very clear that they did not consider that we had a monopoly in domestic, I think that they were indicating some flexibility in how COMSAT might get into the domestic area.

NG: Right. Well, let's talk about that sort of treading lightly, then. After several discussions with people who

worked for the FCC at the time or sat on the Commission or whatnot, there seemed to be a feeling that COMSAT could have "done more" in terms of sustaining a competitive edge in the domestic satellite area, but that, in essence, it ended up deferring to AT&T. Would you agree with that? Do you think that there was pressure....

JC: No, I wouldn't agree with that. I would, first of all emphasize that the FCC itself was....or gave evidence of sympathy to the argument that COMSAT, because it had the international monopoly, should have special restrictions placed on it, if, as, and when it entered the domestic arena. In other words that, although there was to be supposedly an open skies, that open skies, was not going to apply to COMSAT. It was just a question of how many restrictions were you going to load up on COMSAT. So, that's the kind of environment that we were facing with the FCC. AT the same time, we had the restriction that we had to tread somewhat carefully with AT&T, because after all, they were a primary customer internationally. So, the name of the game was to try to find a way through this thicket that would give us a reasonable position and, at the same time, permit us to go ahead, rather than get eternally bogged down in FCC proceedings. I think to further bear out that sort of the allusions to which you were referring by certain FCC members had no foundation, even when

we got to that point, they attempted to put greater restrictions on us. So, the problem was how could we get some kind of approval to do something, without getting either denied or so loaded up with restrictions, that we wouldn't be able to proceed. That was the nature of the problem that we really had.

NG: Although your legal counsel at the time, Wilmer, Cutler, and Pickering were making the argument in front of the FCC--and your General Counsel at the time, I guess it was David Acheson--was making the argument that because COMSAT had the monopoly in the international arena, that almost in a transverse relationship, they should have that same kind of special place in the domestic arena.

JC: Yes, but that didn't fly.

NG: But was that COMSAT's, I mean, was that really the view or was that an overstatement?

JC: Well actually, going back a few years, you will recall that we had pushed for getting authorization to proceed with the domestic satellite system. Recognizing that there were all these arguments, but time was of the essence. [The opinion was,] "Let's move out. It was the only vehicle with experience in satellite communications technology. [Our position was,

"Give us the authorization. We'll go ahead. Meanwhile, you can debate ad infinitum, but when, as, and if you decide how you want to handle the policy aspects, we're prepared to act in the meantime as a kind of a trustee; but at least we will have implemented a domestic satellite system; we will see what the applications are; we can see what the problems are. We can see what the market is and we'll know an awful lot more, rather than spending endless years in debates and filings with the FCC." That was our position. That was basically supported, in the last analysis, by the Rostow Commission. If you look at the Rostow report, that's about what they recommended, which is what we had been fighting for for those three or four years. Suddenly, the new Administration comes in [the Nixon Administration], chucks the Rostow report, [and] proclaims open skies. Now, the people that are in the ascendancy in the arguments before the FCC are the people that says, "Everybody should be free to go, except COMSAT. In COMSAT, we've got to worry about what kind of restrictions we want to clamp on them." So, that is how the environment changed in that timeframe. Obviously, we then had to adjust our sights to say, "Okay, if that's the name of the game, then we better get involved in an active way, with the minimum amount of restrictions, if we can do it." Now there is where, then, we begin to get some perhaps differences within the Corporation. There were some who favored a single application that says,

"Okay, we want to be one of the applicants for a system and be allowed to do anything."

NG: Right. Now who advocated that point of view, if you don't mind?

JC: I would think that the leading exponent of that would probably be John Johnson.

NG: Okay.

JC: The other school says that, "That's not too realistic if you don't have any traffic, because you can put up a beautiful system"--we felt we could do that--"but, if AT&T puts up its own system, if Western Union puts up its own system, where are the customers?" So, we said, "That's not quite that simple. We've got to have some customers."

NG: So, "we" meaning your....that's the position you advocated?

JC: That's right.

NG: Okay.

JC: I would think it was the majority position--"that we've got

to find some traffic base." We looked around for various sources of traffic. In that timeframe, there weren't very many sources. It was basically Western Union and AT&T, with perhaps GTE as a kind of minor thing. So, that led us to the idea that if AT&T--rather than putting up their own system--would be willing to use our system, that that would be a wonderful way to enter, because we would have the background--or the base, rather--of a solid amount of traffic. Hopefully, we could then build onto it, either with another system, or supplements to the AT&T system. So, we decided that that was the better part of valor, because we would immediately start out with the most traffic, and then we could see to what extent we could expand on that with other customers and other services.

NG: Now so is what you're saying, then, that in a sense that is a shorter-term view. I mean, obviously, you didn't expect the AT&T COMSTAR project to survive indefinitely?

JC: That's right.

NG: So, it was....

JC: It was in a bit, the same kind of thinking that pervaded in other instances where we said, "Here's a new business, but it's going to be hard to economically justify this business, unless

we can get some revenue up front." So, that gets back to the same kind of thinking as on the maritime, where, "How do I get some revenues up front that will permit me to survive until I can get a business established?"

NG: So, you go with the Navy.

JC: So, we went with the Navy.

NG: Right.

JC: In this case, the thinking was, "Well, the biggest source of traffic is AT&T. If somehow, we can finagle a deal with AT&T that will permit us to get started, we'll have the best system, the biggest, system around and then we'll see what happens."

NG: So, that's essentially your foot in the door, then?

JC: So, that was the foot in the door--a big foot in the door--because with AT&T having about ninety-plus percent of the traffic, that's a big foot. The question though, was AT&T had insisted that they wanted to put up their own system. Would they buy the kind of a scheme that says that they will depend upon the COMSAT system, at least in the early years? We had no

aspirations that [in the] long term, that would make sense. I'm sure AT&T didn't have any ideas that [in the] long term that made sense. But, it appeared to be potentially to our mutual advantage to get an agreement, (a) because this would immediately put COMSAT in a significant way into the domestic satellite business, and (b) it would permit AT&T to move into the domestic satellite business, with its own earth stations. Whereas, if they just came in with their own application, they had some concern, I think, that they might not get approved without a lot of restrictions, because everybody else was saying, "Well, my God, if you allow AT&T in, there's going to be no competition. After all, the name of the game is competition. Why kill off the competition going in?" So, we felt that here, if we could work out some kind of a deal with AT&T, that was going to be in our mutual interest and therefore, there was a possibility that we could work something out. Our aspiration was to get our foot in the door in a significant way and hopefully, to build on that. AT&T's motivation, I am sure, was that rather than trying to fight all the battles of trying to get authorization to go into the domestic satellite business, use COMSAT initially and that will set the stage for your own system down the road.

NG: Well, it certainly gives them all the time in the world.

JC: That's right. So, since it appeared to be something that could be to the advantage of both parties, we went into that negotiation with some optimism that maybe we could work something out.

NG: Play Monday morning quarterback a little bit and tell me whether you think that was a good strategy or a bad strategy from where you sit right now.

JC: Well, I think that we would do it again, simply because in the environment, it was hard to see what the alternatives would be.

NG: Right.

JC: In other words, the alternative of putting up your own system, with AT&T putting in their system, and Western Union putting up its system, I think we would have been in a situation where we would have spent enormous funds and we would have a piddling market; we'd have a few isolated customers. That could have been an enormous financial blow. So, I think we did the right thing. Where, from an ideal sense, we would hoped to have gone but didn't, was we did not get from the FCC the authorization to have flexibility in what else we might do. As a matter of fact....

NG: You're talking about other businesses, then?

JC: Well, other domestic applications.

NG: Right, okay.

JC: As I indicated, our strategy was that if we got the base of support from AT&T, that would provide us with the financial strength to be able to expand other applications of domestic satellites....

NG:Right.

JC:build new markets. Now, that's where we....our strategy came a cropper, when the FCC would not permit us to do that--when they simply said, "If you're going to do AT&T, that's it. You're not going to be allowed to do anything else." That was a bit of a surprise, because that didn't seem to be in the spirit of the open skies.

NG: But, as you said, that didn't necessarily apply to COMSAT.

JC: That's right. So, we were the odd man out here all the time, fighting against the full application of the open skies

policy. So when the FCC basically indicated that, "If you do AT&T, that's it," our problem was to see if there was any other way--if there was any kind of an opening--that we could expand our presence in the domestic, despite the FCC edict that that was it. So, as you know, originally we had tried simply putting in an application to put up a separate system. That was sort of the most obvious, forthright thing to do and they knocked that down. They said, "You can't do that if you do the AT&T." Then, it was clear that we had to find a half a loaf. In other words, if we couldn't have our own system, outside of the AT&T, then we needed some way in which we could have some presence, but not necessarily a full-fledged system on our own. So, we began to look around at other people who were contemplating moving into the domestic arena and seeing whether there was some way in which we could find some kind of an alliance or arrangement with these other people.

NG: What did that mean at that time?

JC: The most active party against COMSAT having any role at all was the MCI-Lockheed group. On the other hand, now that the open skies [policy] had [been] proclaimed and they were free to go, they had no financial resources with which to go.

NG: Exactly.

JC: So we said, "Well, now there's a likely target, because here are the guys who have been our greatest opponents before the FCC. They got an authorization, but they got no funds. Maybe now there is a basis for some sort of a breakthrough if we would talk with these people." So, then we talked with Bill McGowen and the Lockheed people and....

NG: Well, that's the basis for CML.

JC:we found, then, a rather ready interest in giving us a role. They said it would have to be a minority role, because they'd have too many words to eat otherwise and besides, they wanted to have a significant role. But they thought that if we were willing to accept a minority role, they would reverse their position with the FCC and say, "COMSAT shouldn't be excluded from domestic [communications traffic]. They ought to have some kind of a role, provided it's a minority role." So, we entered into this one-third, one-third...

NG: One-third, right.

JC:one-third deal with, what was called at that time, CML.

NG: CLM, uh huh.

JC: Then, we went to the Commission and said, "How about this one?" MCI and Lockheed reversed their roles completely and now advocated COMSAT having a role in domestic, outside of the AT&T thing. The FCC, in their flexible mode, said, "That's okay, provided COMSAT is in a minority position, that's acceptable to us."

NG: Now, that takes us, actually, off into another area, because essentially CML leads us then into SBS. Let's....

JC: But this was....you raised the question about how we endeavored to enter this competitive environment and I was trying to describe how we focused on the domestic. It was an enormous area and the kinds of frustration and limitations that we were faced with.

NG: Now, let me ask you just one final, summary thing about the relationship with AT&T. Comment, if you would, on the notion that the reason that we ultimately decided to go with AT&T and not, say, with the more Johnsonian view that, you know, to just go right in there with a separate system and a separate application, that COMSAT figured that AT&T would pave the way for COMSAT--that they had a good relationship with the Federal Communications Commission....

JC: No. No, I wouldn't buy that at all. As a matter of fact, I think AT&T did not have a good relationship in this sense--that AT&T felt it was going to have a terrible time getting authorization from the FCC to put up its own system. Because if AT&T thought that they could just walk into the FCC, file an application and get it approved, they wouldn't have given the time of day to COMSAT. They'd have gone ahead and put up their own domestic satellite system.

NG: So you would say that that doesn't really have any credence at all, that you didn't see AT&T as a way to manipulate the Commission, if you will?

JC: Not at all. We saw....the thing that was attractive about AT&T was the revenues in the early years. We had a customer. We had circuits, real live customers. Looking around, if you didn't get AT&T and you didn't get Western Union, where were the customers? If I made an investment of several hundred million bucks in a satellite system--which I would have had to do--and I had to rely on customers outside of AT&T and Western Union, there was no way in which that looked like anything resembling a sound financial proposal.

NG: This is not--and you would also say then--that this is not

necessarily a view that would be reflective of the fact that AT&T sat on COMSAT's Board and really played a special relationship with COMSAT....

JC: Not at all.

NG:because of the nature of....them sitting on the Board and yet still being a competitor?

JC: Well, I think AT&T did what they did primarily because it was in their interest to do so. In other words, as I said a couple of minutes ago, they wanted to be in the domestic satellite business. They had to be playing a significant role. I think they had serious reservations about what would happen if they tried a full-court press with the FCC to get authorization for their own system. They thought they'd get bogged down and meanwhile, other guys would get approved and they might be required to put traffic on their systems and all kinds of things. If they were going to have to deal through another party, it was in their interest to deal through COMSAT in which they had a financial investment and in which we they had a relationship.

NG: Right.

JC: For the reasons I've indicated, it was also in COMSAT's interest to have some customers if it was going to go into the domestic satellite business. There was no better set of revenue potentials than those that existed through the AT&T. Now where the thing came a cropper is where I indicated: namely our ability to broaden our horizons beyond the AT&T.

NG: Although that, as you say, in essence, resolves itself in some sense, in some kind of a....

JC: Well, hardly in a way that we would have selected on our own.

NG:as a compromise.

JC: We would hardly on our own have said, "Let's go into a one-third, one-third, one-third, with MCI and Lockheed. As a matter of fact, I had serious reservations about that, because....and the strongest proponent of that was Joe McConnell. I had strong reservations because, as I remember discussing with McConnell, I said, "Well, all right, so you can make a deal, but what are we going after we make a deal? These guys have no money, they have no capability, no resources, they have no traffic! So, where's all this going to go? It's not going to go anywhere." He said, "Ah, yeah, but it'll give us

approval. The Commission will give us the charter and once we have a charter, then we'll figure out what to do."

NG: But isn't that the same strategy, essentially, that you use before, which is get the foot in the door and then we'll see what happens?

JC: Well, except that....no, I would leave out the part that says, "Then, let's see what happens." In these areas where we've said, "Let's get a"--in these hybrid systems, if you want to call them that--"Let's get a source of revenue in the early years that will permit us to build up what we think is a new business, a new market," a la the maritime....

NG: [Inaudible] in a sense.

JC:the commercial maritime business. Where this one had a question mark in my mind....

NG: Sort of a role of the dice, yes.

JC:was, "Okay, so we've got a system where we've got a nice solid base through the AT&T thing, but what's this thing we're trying to do with this MCI and Lockheed. What's that business all about?" I couldn't see that as a very sensible

way to get into the domestic satellite business, because you were dealing with two customers who were about to go bankrupt, and with no customers, and no traffic. That didn't look like a way to enter a new business.

NG: Although what alternatives did you really see that you had at the time, though?

JC: At that time, not an awful lot, because the FCC had basically said, "If you're with AT&T, that's it." McConnell's basic argument was, "Let's at least get a charter to do something and then we'll figure out how to do it."

NG: So, you sort of swallow it?

JC: So, we said, "Well, there isn't anything else around. There isn't any other router that appears open to us, let's go on blind faith that we'll find something. If worst comes to worst, okay, we won't do anything, but at least we will have had a chance to explore what might be there."

NG: As it turns out, there are other opportunities that do present themselves later on.

JC: Right. As we got into the CML arrangement, what we had

suspected was there. In other words, they had this very exotic plan for probably the most expensive domestic satellite system that anybody had ever conceived of--with no traffic. So, the biggest upfront investment with the most speculative traffic demands. So, we played around with that and we said, "We think that's an over-ambitious system, to put up a system of that capacity when you don't have any customers at all and with the kind of investment that's required, doesn't seem to make much sense. Some more modest type of a system would appear to be sensible. But even if we buy your system, where are we going to get the money from for that sort of thing?" They agreed that they--although they thought that was a kind of a system that should be built--a very high capacity system--they agreed that they didn't have the financial resources to do it. After we'd messed around for a while, we said, "Well, this doesn't look as though it's going anywhere, because we can argue about what kind of a system we could have, but if we don't have any financial resources, we're just treading water. So, do you guys really want to play in this game, given the fact that you've got the financial problems that you have, or would you be willing to sell out and we'll go around and try and find somebody to buy your interest?" So, that's the way that one went.

NG: Right, and then obviously we get with IBM....

JC: Then the IBM, we go down that other path.

NG: Right, okay. Now did....let me ask you one other retrospective question, which is: When the stipulation by the FCC was that you could go into this thing with AT&T, but they had to get off the Board--essentially that the carriers had to get off the Board--was there any reservation on your part at that point? That maybe....did that throw in another variable into the equation that COMSAT hadn't counted upon?

JC: I don't think so. I think that everyone felt that as things developed that it was sort of unrealistic in the long term that the carriers could stay on the Board, because there were going to be more and more areas in which we were going to be in a sort of a competitive environment and that therefore it was unlikely that in the long term, the carrier presence on the Board was going to make sense. I think the carriers felt that way too, that although they had to become involved initially for the reasons I think we've already discussed, that they felt that that was a kind of an awkward relationship in the long-run. AT&T hung in, of course, much longer than anyone else--than any other significant carrier--but I think they also felt that for the long-term that that was not a viable arrangement.

NG: So, would you say that that would have unburdened COMSAT a bit to not have them on the Board, and not have that particular relationship continuing--that it allowed COMSAT to move into some other areas or to think of other ideas that maybe before they'd been a little bit more constrained about?

JC: I think that that's true, yes.

NG: What evidence do you think you have of that? Give me an example of that.

JC: Well, I think that just the whole series of developments down the CML and IBM route.

NG: Okay.

JC: I would have thought that if AT&T were on the Board discussing an association with IBM in order to go toe to toe with them would have been a little awkward.

NG: Yes, that would have been awkward.

JC: But, as a matter of fact, where we gravitated to IBM was exactly for that reason. Where was a potential customer with

an enormous amount of clout that had an interest in communications? Well, there was only one other one really, other than AT&T, that had enormous communications requirements--new types of communications requirements--and who would, in this competitive environment, have great difficulty in living with this past arrangements where they basically looked to AT&T to provide its communications links. If AT&T was going to be allowed to go into the computer business, it was a non-viable situation for IBM to be completely dependent upon its competitor for its communications links between elements of its system. So, it looked like the only natural major force in the domestic communications arena, after you took out AT&T. But, I would have thought--I would think, rather--that we would have had a very awkward problems in pursuing that kind of a philosophy with the AT&T members sitting on Board. So, that....you asked me for an example. I think that's the biggest example.

NG: Well, let's move along then, a little bit, and discuss that relationship that developed into SBS, with IBM and AT--with Aetna, I'm sorry. That's a long story, in a sense. It's a story that has a lot of winding curves around it. When COMSAT first approached IBM with this proposal, obviously it was coming out of the relationship with CML....

JC: Uh huh.

NG:they needed, as you say, strong financial backing and a guaranteed, in essence, market for its service. How did COMSAT see itself in relationship to IBM? How did it perceive that that relationship was going to work and what was going to be the structure of it?

JC: Well, we were terribly optimistic, for this reason: That here was a major customer with all kinds of service requirements. He needed an ally who knew something about communications, that was not AT&T.

NG: Right.

JC: Satellites looked like a great vehicle for the kinds of services that he needed. We potentially had the opportunity to be the numero uno in domestic satellite communications because, on the one hand, we had a deal with AT&T, where we were going to handle all of the satellite traffic of AT&T. On the other hand, we had an opportunity to be in bed with the biggest potential customer, outside of AT&T. So, between the two of them, we had the opportunity, it seemed to us, to really dominate the domestic satellite system. We could care less about the Western Unions and the RCA's. If we had AT&T and IBM

as a combination of customers, we could put up systems that would be large, efficient systems, so that on an incremental basis, we ought to be able to kill anybody who had little systems to handle little bits of traffic. So, we saw in this a potential opportunity to be a very potent force in domestic satellite communications. We felt that the relationship with IBM was a natural one, because (a) they had no communications experience per se. We had no experience with providing the services directly to the customer. They had perhaps the greatest marketing reputation of any corporation in the world. We felt this was a natural alliance. So, when we went back to....when we finally pulled off the deal with IBM and where IBM agreed to spend five million [dollars] to buy off Lockheed and MCI, we were fantastically optimistic, because we thought, "This was the greatest thing that has come down the pike." We developed a relationship which we thought was a very nice one, 55/45 and we went back to the Commission full of optimism, because we were still in the minority position, which was the requirement. I think that was also a requirement from IBM's point of view, because they weren't going to enter into a joint venture where we would have an equal voice with them. So, it seemed to fit the bill extremely well. We were very optimistic that the FCC having enunciated the open skies policy, having said that we could be in it, provided we were a minority party. We were really in great shape.

NG: Wrong.

JC: And we were wrong. So, the idea that the FCC was trying to help us get along and we were not sufficiently aggressive to get authorization, I think is a bunch of baloney.

NG: All right, so then....

JC:because the least they could have done at this stage of the game is to say, "All right, we didn't tell you who to get. This is a free country. You found yourself an ally. You maintained a minority position. Fine, you're consistent with everything we've said." At that point, they said, "Wait a minute, we didn't say enough. We said you can't have this kind of a partner." Well, what kind of a competitive free spirit is that? They had never indicated that certain kinds of partners would be unacceptable. But we felt we had rigidly met everything that they had said and then somewhat to our great surprise and shock, they said, "No, you can't do that." Now, that was very deflating, because that put everything on hold. IBM said, "Well, if that's the case, we'll have to see if we can find somebody else. Meanwhile, let's mess around." So again, a big delay factor was introduced. That was obviously not very helpful. Finding that third guy was not the easiest

thing in the world. Now, the question was raised as to, you know....the FCC having indicated that this wasn't open skies after all. What kind of restrictions were they going to have....were they going to take on a third guy? They didn't like IBM. They didn't like COMSAT. We said, "we've got to find a guy who has no warts at all. If we got a guy with no warts at all, who has no interest, no involvement in either communications or data processing...."

NG: Then what's the motivation, right.

JC:then who is this guy and why is he going to put up any money?

NG: Exactly.

JC: So, that then became a big problem and we went around to dozens and dozens of people. But, that's exactly what we found; either the guy had some kind of an interest and we said, "Well gee, if we get that guy in, we go back to the FCC, then they're going to find something wrong with that guy. How do I find this guy without warts?"

NG: But you found Aetna.

JC: We found Aetna after a long series of meetings with all kinds of other companies. But, we had to make a very special arrangement with Aetna....

NG: Okay.

JC:to give them all kinds of advantages in order to get them to make the decision to make an investment. Being completely open about it, it is not the kind of a third party that you would have normally selected. You would have normally tried to find somebody that would give additional strength to the combination that we were putting together. All of our first choices were in that category. We were looking for a major kind of a user of communications systems and information and data systems....

NG: Such as....

JC:a guy who had a direct use in those things. Our number one target was Sears.

NG: Okay.

JC: We talked with Sears very, very seriously. We felt that would be a natural, because here was a guy who could utilize

communications and information processing systems who had a nationwide requirement. This was again building up that grandiose idea that we could readily dominate this scene because if you had AT&T as your customer for normal communications; you had IBM in information processing; you began to put together the Sears, the American Expresses, etc. My gosh, where does anyone else going to go? I've just started to enunciate the kind of people that we looked at: Sears, American Express, etc.. But then we began, you know, to get these signals back that, "[You had] better be careful, because you come in with another IBM-type person and the FCC might say, "Now, you need a forth guy" or "the third guy is unacceptable." So, I think our greatest frustration there was although we had said, "Let's do this pilot system and let's figure out what the policy ought to be, but meanwhile, let's go ahead and see what satellite communications could do." That thing having come a cropper and replaced by an open skies, our greatest frustration was that it wasn't really open skies for COMSAT. Every time we tried to do something, we'd get banged back.

NG: Now, but the concessions, essentially, that were made to Aetna were not the factors that made the deal with IBM or SBS go awry?

JC: No, I think what it emphasizes is that that was not the ideal kind of a party for the third unit.

NG: Because it didn't bring you anything.

JC: It didn't bring you anything. The only....if you wanted a guy without warts, all he could bring was money. So the deal with Aetna was made on a money basis. He wouldn't have to put up all his money to get equal rights until later on. But, he didn't really bring anything to the party, particularly if we were going to be involved in discussing the kind of a system that should be put together and making decisions as to equipment to be built and so on. Ideally, you wanted a guy who would have some capability, some knowledge, that could be used in this interplay between COMSAT and IBM. In particular, of course, Aetna simply took the position, "We don't know anything about these things and that's why we got this special deal. Now, you, the guys who know everything about communications systems, you guys go ahead and do what you want and if we don't like the end result, we can always bail out." But, the kind of a party that we really wanted is someone who had an interest in the answer and who would have an interest in the technology, would have an interest in the economics of the system, would have an interest in the way the system worked, what kind of services the system needed to provide, etc. Therefore, ideally you

wanted a user and that's why Sears or American Express was such a natural. They were the guys on the end of the line. They wanted to know, "What kind of services I need, in what timeframe, for what amount of dollars?" That we didn't get.

NG: Right, but you did get your system.

JC: We got a system. It is not the kind of a system I think that would have emerged had a Sears or American Express been the third party. I think the reason for that is that we basically favored having simple ground installations. In other words, that if you were going to put rooftop antennas everywhere, that you were going to have to keep the investment at the customer's facility as low as possible to provide the services that he needed, because to the extent that the cost of the facilities at the customer's plant went up, then the greater requirements he had to have in order to justify it and therefore, the fewer customers you had. IBM, however, had already done a lot of work on a rather sophisticated facility that would be used at the customers [site], thinking of their own needs. In other words, they were developing a facility which would handle IBM's needs. Well, probably no other customer in the United States needed anything of that sophistication and complexity. But, that was what they wanted. So, that then forced the thing in that direction and

this broad spectrum of sophisticated needs and would need this kind of equipment. We were pushing it from the other end.

[Tape Turned Over]

JC: Just to finish off on that point, when the chips were really down, and it was clear that AT&T--not AT&T, but IBM--needed this kind of a sophisticated complex for its own needs, we pushed a low-cost terminal system, because we said, "Okay, so maybe a few customers like you are going to need this big, fancy thing, but there are going to be a lot of customers who are going to need something much simpler." So, we pushed for the additional development for a low-cost terminal. That was voted down by Aetna, siding with IBM.

NG: IBM, right.

JC: At that point, we were left with the one route. Now, that would not have developed, had we had a Sears or an American Express.

NG: Well, because their needs probably would have been simpler.

JC: Their needs would have....they would have known what their needs were in what time-frame and they would have been certain that affordable systems to handle those traffic requirements

would have been part of the system that was developed. There was nothing wrong with the satellite part of this thing, it was all in the ground complex.

NG: Well, that leads me to some questions about COMSAT's relationship with IBM. Initially, as you mentioned, IBM did not want to become involved in a joint venture. They didn't want a 50/50 venture.

JC: Well, that wasn't really even a factor, because we could only be a minority party.

NG: Right, okay.

JC: So, that wasn't even an issue. But, they bought the 55/45. In other words, they had no problem with us going from one-third, which we had in CML, to forty-five [percent ownership]. So, that was really not an issue. I must say that they favored the kind of a third party that we favored--a Sears, and American Express--and these....we had no difficulty in agreeing with them that these were the targets that we should hit. But at the same time, we got the messages coming out of the FCC, you know, "Be careful, because we're going to have lots to say about what kind of a guy you bring in here."

NG: Well, let me ask you this question right out, then. I mean, a lot of people have said that IBM was too big for COMSAT to deal with, that ultimately that even though this one-third, one-third, one-third develops with IBM, COMSAT, and Aetna, that it was going to be difficult from the outset for COMSAT to be able to, in essence, provide a strong voice with a company as large as large and as powerful as IBM and it being the company, essentially, who COMSAT would look to first as being its prime customer for the system. What do you think about that?

JC: Well, I think the problem is really in the nature of the third participant.

NG: So, you think the problem was Aetna?

JC: In other words, what I was trying to say a few minutes ago. Let us suppose Sears had agreed to be part of this thing. There's no doubt in my mind that the combination of Sears and COMSAT on the Board of this joint venture, would have insisted and would have prevailed that there should be facilities developed--terminal facilities--that would be economical, that would handle the kind of traffic that was really needed, and that we wouldn't be stuck with only one super-sophisticated ground system designed especially to meet

the needs of one customer, namely IBM. But, with Aetna siding with IBM on that score....

NG: Give me the motivation for Aetna siding with IBM and not with COMSAT.

JC: Well, you probably ought to ask that of Aetna, but....

NG: Well, what was your perception, then?

JC: My perception was that they felt that IBM better knew the needs of customers and their requirements for highspeed data, etc., than COMSAT. If we'd been talking about satellites, I think they would have sided with COMSAT. But, when the debate came to pass, I think Aetna said, "Well, COMSAT doesn't know anything about customer's needs and requirements. Here's IBM saying if we develop another system. IBM must know what the market is and their knowledge of the marketplace has got to be a hell of a lot better than COMSAT's. So, we go with that." I suspect it's that simple.

NG: Was there ever a point....here we're talking maybe earlier on than later on, where it was felt by any part of COMSAT management that maybe this relationship would not work out?

JC: Well....

NG:for precisely the reasons that you're talking about now?

JC: Well, I think John Johnson--to cite a name--was more or less always of the belief that we should have gone out on our own and not establish these crippling alliances with AT&T and with IBM and that had we been out on our own--with no restrictions--that that would have been a better course of action.

NG: But Joe McConnell wanted the deal with IBM.

JC: Oh yes.

NG: He was very adamant about his support of that.

JC: Well, he had the idea of the CML, that that was a foot in the door. In other words, we could get some kind of a charter out of the FCC. That was paramount. We would worry about what to do about it later, but let's get that charter. That was McConnell's big idea. Then, once we were in it and had figured out how do we now go anywhere from this thing, then he was heavily responsible for convincing Bill McGowan and the Lockheeds that they might as well sell out and what would they

sell out for. He became the negotiator between Bill McGowan and John Opel as to what IBM would be willing to pay for this fish. He finally made the deal with Opel and McGowan--I think it was for five million bucks--to buy out the total interest of Lockheed and MCI. He thought, of course, that was the millenium had arrived, because, "We've go these guys out. We now have the biggest guy in the country in this thing and that guy was prepared to go with the 55/45 and that was really great stuff." Of course, then the blow came from the FCC that says, "Now we don't buy that."

NG: Now at what point would you say that the....

JC: I suspect that John Johnson felt somewhat, as you said earlier, that if we get in bed with a giant like IBM on a 55/45, we're not going to have a hell of a lot of control over this animal, because even though we nominally are 45%, he's going pretty much do what he wants.

NG: Well, I think also he would have felt that way even with Aetna in the picture. I mean, it didn't even have to be 55/45--that IBM was so big....

JC: Was dominant, yes....

NG:and that just by its sheer presence.

JC:and that therefore, we were not going to be able to control this beast.

NG: You don't agree with that?

JC: I don't agree with that in this sense: that sure, we could have had full control of the system if we had neither IBM nor Aetna. But, I come back to the fact that in order to have a financially viable operation, you've got to have some customers....

NG: Right.

JC:and I would have a hard time seeing where we could have accumulated the customer base that we would have needed to make this thing economically viable. [It was] absent! If we couldn't do it with an IBM in there, how in the world--with all of the IBM traffic--how in the world are we going to go around and dig up customers--with IBM having its own system, with AT&T having its own system--and make economic sense? So, we were sort of between a rock and a hard place. We couldn't develop the marketplace from scratch in a timeframe that we would have had to do that, in order to economically justify the kind of a

system that you had to put up to make technical sense. So, the answer, in my mind, was really the right kind of a third party.

NG: Now, let me ask you another question and this goes back to IBM and maybe where we can talk a little bit about where SBS took a turn for the worse, if you will, for COMSAT. Do you think that....

JC: Well, in a sense, it took a turn for the worse right at the outset. In other words, we....

NG: I was being gracious there.

JC:we originally said, right at the word go, that we needed a terminal for about a hundred thousand bucks, because we felt that if you had gotten much beyond that, you're going to limit the kind of customers that you can get, because they're not going to have the sophisticated requirements and they won't be able to economically justify something more than about a hundred thousand dollars.

NG: Right.

JC: The terminal in question was estimated by IBM at this point to be about three hundred thousand. They said, "We agree with

you. Three hundred thousand is too much money. We'll get the cost of this baby down." So, we started off, I think, pretty much in gear. Instead of the three hundred thousand going down to one hundred thousand, however, the three hundred thousand started heading for a million. That's where the problems began to generate. Every time we had a new modification or a new change in the terminal, the effect was to increase the price. So, we had a bear by the tail. As that thing started heading in the reverse direction, we became more and more adamant that we needed an alternative and a low cost terminal, then. Because, this thing wasn't heading down to a hundred [thousand], it was heading the other way and therefore, all the more need for another terminal development that would be a low-cost development. So, we worked on that very, very hard, with the result that I already described.

NG: Now, but COMSAT, as you say, got, in essence, I don't know, brought along by the tide, if you will. That there were forces that rendered COMSAT less powerful in that relationship than they might have liked to have been. One of the places that people have suggested that this occurred was that COMSAT had relied, or had hoped to rely very heavily on the marketing capability of IBM and that it being, as you said, one of the great marketing organizations in the world, that IBM didn't necessarily have that same commitment to use its marketing

organization in that way and that had it....

JC: Well, don't leave the FCC out of this. They, when they finally approved it, even with the Aetna in there, they said that you couldn't use the IBM marketing expertise, that SBS had to have its own marketing capability and they are not allowed to co-market with IBM. So....

NG: Although the basis of experience still would have been there from the IBM side.

JC: Well, it would be there by virtue of people from IBM who had gone over to SBS....

NG: Right.

JC:but that's a hell of a lot different than the marketing prowess of IBM per se. So, I think that obstacle introduced by the FCC was a very serious one, because this idea that we could not use the IBM marketing expertise directly was, I think, a very serious restriction, (a) in regard to the customers themselves, but (b) also with respect to IBM. In other words, they didn't want to get in trouble with the FCC and so they were content to sit back and say, "Well, all right, that's the way it is. SBS will...."

NG: So, you think that dampened their enthusiasm, then, for starting out this....

JC: Well, they certainly didn't send out all of their marketing people on a charge basis to say, "Go out and sell the customer." That clearly was a negative. I mean, if we had been allowed to use the marketing expertise of IBM and all of the IBM marketing people had been told, you know, "Now it's part of your job to go line up customers for this thing," I think the result would have been completely different than a couple of guys at SBS saying, "We used to work for IBM and here's what we've got to say."

NG: Although....

JC: There's an enormous difference.

NG: Although they....I guess the point being here is that there would have been a point at which COMSAT realized that, I mean, obviously as you say, COMSAT knew that they needed a lower-cost terminal, that there were going to be customers out there who wanted something that was not in the level of IBM complexity. At what point did COMSAT--or did COMSAT ever--say, "We have to do something to prove that this other market is out there."

Did COMSAT ever initiate any moves to try to bring IBM back into the fold a little bit better?

JC: Well, as I say, we did try to come up with the design of a low-cost terminal, indicate what kind of traffic this could handle. It would be a modular thing where you could add modules as the requirements of the customer increased and as they changed from low speed data to high speed data; you would add modules to accomodate that. Basically our argument was that, "We've got to look at both ends of the spectrum. Here's a modular design that can grow as the customer's needs grow. We think that that is essential to developing the kind of a market that's required."

NG: And Aetna said, "No."

JC: And Aetna said, "No."

NG: So....

JC: And I think at that point Aetna said, "No," because they were looking at the additional financial investment that was going to be required for an additioanal development and because IBM was also not sympathetic to another development which could adversely impact their primary piece of hardware.

NG: Well all right, so at what point then, do you think that COMSAT finally realized that this relationship....that essentially that good money was being invested after bad money?

JC: I would think that the turning point in attitude probably was at the point that they turned down the proposal for a low-cost terminal--that IBM was wedded to building their expensive, sophisticated piece of equipment, that they wanted to ultimately sell large numbers of those things and if they had this modular thing, they might be stuck with small numbers of these sophisticated terminals.

NG: When was that?

JC: Well, I can't give you a date on that. I would guess it probably would be in [the] late '70's. But, we can look that up.

NG: Yes.

JC: But that's an important date.

NG: Yes, uh huh.

JC: There will be an SBS....as a matter of fact, I believe it came up twice--the question of a low-cost terminal--and it was turned down both times. But, those are significant dates, because I think with that happening, we became pessimistic that you were going to get enough customers that could be able to afford this escalating-cost terminal and that we then had to find other kinds of services.

NG: Do you think that COMSAT felt boxed in by that time?

JC: Oh, I think so. I think so.

NG: How did you perceive your way out of it?

JC: Well, the only way out appeared to be to limit the kind of an investment you were prepared to make in this system.

NG: Although the investment had already been fairly great by that time.

JC: It was very great by that time. But, the only route that seemed practical was to say, "Well, we've got to put some lid on what COMSAT's going to be prepared to put in this thing. Maybe it will all come out in the last analysis, but we've got limited financial resources and we can't, you know, keep

pumping money in indefinitely. So, we've got to figure out what kind of a ceiling we're going to put on this thing and how we're going to negotiate a new arrangement with some kind of a ceiling." That's what ultimately really happened. We finally said, "You know, we're not going to put any more money in now. You can appropriate additional funds, but scale us down." That became the basis for the final negotiation, as you know.

NG: Did COMSAT management, do you think, have a problem explaining this to its shareholders? Now obviously this is a very complicated story. I mean this is not an easy thing to say, "Well, you know, we've put a lot of money--probably more money into this than we have into anything else--and now we're going to leave it behind." What do you think the perception was from the outside of what had happened?

JC: Well, I would assume that there would be mixed viewpoints. There would be a viewpoint of one group of people that would say that, "COMSAT is in over its head. I mean it's pumping money into this thing. It's not showing signs of coming around. When are you going to call a halt to this pouring money down a rathole?" Therefore, when, as, and if we took steps to say, "You know, if COMSAT is going to play any kind of a role in domestic communications, you couldn't have a better ally than IBM and having pumped all that money in, you're going

to bail out just before the golden pot is found at the end of the rainbow."

NG: Were there people in management who were still advocating that?

JC: I don't think in management, at this stage of the game, there were very many people who were proposing to pour more money in. I think, by that time, the conclusion was that with the cost of the terminal being what it was, that your market had been narrowed down to such a small number of customers that this thing was never going to close and that therefore we'd better put a limit on how much more money we're going to put in.

NG: So at that point it was just a matter of time in terms of....

JC: Then it was a matter of time and negotiation.

NG:just to get out. Well, let me just bring up a couple of--now that we've covered that in some great detail--some other businesses that COMSAT has gotten itself involved in.

JC: I'm going to have to bail out here.

NG: Okay, do you want to do this another time?

JC: I think we should. This is a good stopping point.

NG: Okay if this is a good stopping point. What we'll do is next time start with some of the other smaller businesses, then.

JC: Yes. Some people, I think, have said that, you know, we really didn't have much of a strategy in the domestic area. What I've tried to outline here is that we did have some very definite ideas as to what we wanted to do. For a variety of reasons, we were unable to carry to carry some of those out. Had we been able to work these things out, I think we would have had quite a different result.

Roger Cochetti: If you could have foreseen how the FCC would have reacted to several of these different things, the course of everything would have been....if you'd known in advance that this wouldn't have flown. Wasn't there any way to get better intelligence on the FCC....

JC: Well, you make an interesting point. I don't know how to answer that question. In other words, I think it was a bit of a shocker to us that they were going to turn down the IBM/COMSAT deal. You could say, "Well, if you'd really had

your head screwed on right, you would have known that that was not...."

RC: Who was the Chairman at that time?

JC: I think Dick Wiley [laughter].

RC: That's great [laughter].

Fifth Interview with Dr. Joseph Charyk
COMSAT Headquarters
July 17, 1986
11:00 a.m.

NG: Let's first talk about....I guess what I'd like to talk about initially, is maybe, acquisition. I think what we should do then, is to start out and talk a little bit about the development of the Environet concept and then, obviously, the acquisition of ERT, which was COMSAT's really first acquisition, first big acquisition. That whole notion of going into that Environet concept was not necessarily one that was shared by....there was not a consensus, necessarily--among all the people in the company that that's the way the company should go.

JC: I think that's true. The biggest pusher on that, of course, was Dick Bodman. He had made contact with the people who owned ERT basically, and was very impressed with them and with their business, which he felt had enormous potential. Since they were in the environmental business and since there appeared to be important applications in the environmental area relating to space-born platforms, there seemed to be a certain synergy there. Although ERT was not doing anything that sort of was satellite-oriented, the idea that observation satellites, primarily focusing on environmental-type

information, could be a new avenue of approach for ERT and that as COMSAT looked at diversification, certainly looking at payloads that would be carried aboard satellites and that would be important to meteorological, hydrological-type problems--also, agricultural and fisheries problems--it seemed that that might be an area that could evolve and that would fit nicely with the growth and expansion of COMSAT. It also appeared that the government would be perhaps looking at the possibilities of having private industry be involved in these kinds of applications. We felt, therefore, that it would be a natural for COMSAT to be seriously looking at utilizing satellites for applications related to the environment.

NG: So, when you talk about industry, you're talking about maybe in terms of pollution control and....

JC: Well, certainly looking at water resources, for example.

NG: Right, okay. Water resources.

JC:looking at fishing resources, looking potentially at agriculture. All these things appeared to be pretty attractive possibilities....

NG: Okay.

JC:basically the landsat and meteorological satellite-type activities. Now, of course we didn't know whether, in fact, policy would permit private industry to participate in these kinds of satellite developments, or whether, in fact, the government would continue [to engage in these satellite activities]. But we felt that there was an interest and that we could be an important force in driving towards utilizing private industry for such satellite applications. We felt that those kinds of satellite applications would tie in nicely with the kind of environmental work which ERT had been doing. So, as I say, Dick Bodman--who at that time was head of COMSAT General and was very much charged with looking at areas of diversification--latched onto this as being one of the more attractive areas and drove very hard for the acquisition of ERT.

NG: Now, John McLucas was also very interested in that, was he not?

JC: Yes he was.

NG: He was a prime mover behind that.

JC: That's right. So, I would say the two that you've

mentioned were the most enthusiastic about....

NG: Now, what about the other side? Now, what was the argument....who was on the other side of the issue and why? You know, what were their objections?

JC: Well, I would guess that some of the people in COMGEN were not very enthusiastic about the potential there. I think the concern largely stemmed from the fact that ERT was really a small organization, not much of a track history. As a matter of fact, the rather promising growth was only very, very recent. So, it was a very speculative type of a relationship. The people who had concerns, I think, were not so much that COMSAT shouldn't look at these kinds of satellite areas for space-born platforms, but whether the acquisition of a fledgling company, with a limited track record, for a relatively high price, was a good thing to do. In other words, if we were really serious about this as a potential diversification, there might be better approaches than simply acquiring this small, fledgling, inexperienced company....

NG: I see.

JC:for a fancy price.

NG: Right.

JC: So, I think that was the kind of concern that was dominating those people who were not too sympathetic. There was also the concern that there were foreign involvements with ERT, which might create some concern; that COMSAT had a kind of unique place as an instrument of the United States Government and ERT was involved in a number of relationships--primarily in Saudi Arabia--with various individuals, some of whom might not have been of the "Simon Pure" variety that COMSAT would like to normally be associated with. So that was another factor. As a matter of fact, it was that kind of a concern that led McConnell to consult with Lloyd Cutler about the potential problem. Out of that study of the associations and relationships came the conclusion that if we were to acquire ERT, we should require the spin-off of that part of ERT involved in the Middle East relationships.

NG: Okay. Now, COMSAT's business with ERT doesn't really pan out in the way maybe Dick Bodman or John McLucas might have anticipated that it would. First of all, would you agree with that characterization?

JC: I would certainly agree with that, yes.

NG: Why do you think ultimately that was the case?

JC: Well, I think in part....the person who had really been responsible for running ERT on a businesslike basis was the father. Of course, he departed as part of this condition that we should spin-off the Middle East.

NG: That was Mr. Gaut?

JC: Yes.

NG: Right.

JC: Norman, his son, who then took over, I don't think had the business experience or management talent that was needed. So, I think the departure of his father was a major loss to what was ERT....

NG: I see.

JC:and who had been responsible, I think, for some of the more or less good business control of the organization. When it evolved upon Norman to carry forward, I don't think he had the experience or the business acumen for it. In addition, it was about this stage of the game that environmental support and

so on began to somewhat change character.

NG: Lose its ground, right.

JC: So, the timing was bad and the departure of the father was bad. Also, there was really no one in COMSAT very knowledgeable in this area who could really move in and play a key role in trying to make sure that the operation worked properly. It was a kind of hands-off attitude. No key, or no senior COMSAT person was put in position at ERT. In retrospect, I think that that would have been highly desirable--to take a senior COMSAT person and put him physically at ERT to look over the situation.

NG: Right, on the scene.

JC: Instead, it was operated through a board which met periodically and I guess Bodman chaired the Board and McLucas was on it, I believe [and] probably one or two people from COMSAT.

NG: Now, so you wouldn't necessarily attribute, then, the lack of success to the inability of ERT to develop a satellite technology or a satellite tie-in, as opposed to....

JC: No, I think the satellite tie-in really required COMSAT

dedication to do that, because ERT didn't know anything about satellites particularly. So, it needed a strong COMSAT presence and drive. In retrospect, you can say that the missing elements really were two-fold: 1) a strong COMSAT presence with a real knowledgeable, driving guy. Secondly, the departure of the business acumen of ERT at the time of acquisition.

NG: Right, okay.

JC: So, I think it was that combination that prevented the thing from moving ahead in as favorable a way as it might have.

NG: Right. Let's juxtapose that experience....

JC: I must say that of the people who I don't think were very enthusiastic about the acquisition, were both McConnell and Me.

NG: Oh, is that right?

JC: But having put Bodman into the key job and [we] said, "You are responsible, there was a certain amount of reluctance, unless there were very, very good reasons, to knock off his first proposal. So, a lot of questions were raised and so on. He became very emotional on it, and it was our conclusion that

it wasn't all that unreasonable. It might not have been the greatest thing that's shown up, but it clearly had some potential, some attributes and therefore, we shouldn't knock it off just because we had some reservations. I think it was in the same vein that McConnell went to Cutler and said, "Is there anything here that you can see that would dictate against an acquisition?" I think he would have been sort of delighted if Cutler had come back and said, "Oh yeah. You shouldn't get involved." But Cutler came back with this piece thing and the solution was to spin-off that part. That aspect was all right, but here that turned out to be a problem, of course, was the father went with the disposal.

NG: Sort of cutting off your nose to spite your face.

JC: Yes.

NG: Let's juxtapose that acquisition--which did occur--with an acquisition that didn't occur. By that, I'm referring to the Scientific Atlanta project, which there were a number of very strong advocates for here in the company. I guess the people--and you can correct me if I'm wrong--who it seems to me would have been the driving force behind that would have been John Johnson and David Acheson. Now, can you explain to me, for example, what was the thinking that, essentially didn't

allow COMSAT management to go with the Scientific Atlanta deal, but did go, for example, with the ERT operation?

JC: Well, the Scientific Atlanta, if my memory is correct, was not an acquisition. It was a kind of a getting together.

NG: Yes, okay, more of a partnership.

JC: Partnership in regard to the shipboard terminal. As a matter of fact, going back to the very beginnings of the discussions with Scientific Atlanta about building shipboard terminals, I had suggested to John Johnson at one time that, "Why don't we buy some of the stock of Scientific Atlanta?" It was selling at a very low price and that getting an ownership interest in Scientific Atlanta, particularly when the stock price was rather low, might be an attractive route to follow. That wasn't pursued very vigorously, but the idea that was evolved, however, was to have some sort of a joint venture in regard to the development of shipboard terminals.

NG: Now are we talking about....is that an ocean routing?

JC: Maritime....

NG: Because I've heard it referred to a number of different

ways, I need to....

JC: There are two different possibilities here. If my memory is correct, the discussions with Scientific Atlanta had to do with the development of a shipboard terminal for maritime communications.

NG: This was outside of the developments with MARISAT and INMARSAT?

JC: That's right.

NG: Okay.

JC: Then there was another potential acquisition with an outfit called Ocean Routes.

NG: Okay, all right.

JC: That was an outfit on the West Coast. They were involved in providing information to shipping companies as to routing of ships in order to avoid bad weather and to optimize the transit time of ships. But that didn't really have anything to do with Scientific Atlanta.

NG: Okay, so then those really are two very distinct....

JC: Those were two separate things.

NG: Now, this would have been, therefore, a manufacturing partnership?

JC: That's correct.

NG: Okay.

JC: Where....and I don't recall the details at this stage of the game, but I think fundamentally the concept was that COMSAT would be providing some of the technology and Scientific Atlanta would be doing manufacturing.

NG: Now this may not be a part of your recollection, but there has been discussion among company management for a long time, about the desirability of getting into manufacture.

JC: Right.

NG: Would you say that the lack of enthusiasm for the Scientific Atlanta deal was a function of that ambivalence about manufacture?

JC: Well, I think that....two things. First of all, COMSAT had no manufacturing experience. Manufacturing is a pretty tough racket, particularly if you don't have a spectrum of products to market....

NG: Yes.

JC:because basically, you're competing with companies that have a broad spectrum of products and so, the marketing force can be involved in promoting or encouraging the purchase of a wide spectrum of goods. Anything that we were talking about was going to be a very limited, focused kind of a manufacturing. The question is: could you on a kind of a narrow and modest basis, run an efficient manufacturing operation? Because, normally in manufacturing there is a certain economy of scale and if you're just manufacturing one little widget, you're probably going to have a very hard time being more efficient than an outfit that builds many similar type widgets and has the advantages of the economy of scale. Not only that, on top of that, the efficiency of the marketing organization. So, there was very considerable concern that if we were going to get involved in the manufacturing, you shouldn't do it on a small basis.

NG: Okay.

JC: In other words, if we were going to do manufacturing, then let us acquire a company of some magnitude with a reasonable spectrum of products, to which we could then add new products. So, I think that there was a school that says, "Let's not get involved in very limited, narrow manufacturing activities because we probably can't be successful at that." On the other hand, there was very strong feeling that you had to get involved into the manufacturing if you were going to diversify in a significant way. So, there was always this dichotomy between, "How do you get into the manufacturing without a major commitment and can you be successful if you start in a more modest, controlled way."

NG: More limited way. But wouldn't you also say--and I don't want to put words in your mouth--but that there was also another school of thought within the company that really advocated not getting into businesses that were too far outside of COMSAT's realm and that that would then compete with this notion of making a big investment into....

JC: That's right. In other words, that if it was in fact the case that if you were going to be involved in manufacturing, you should only get involved on a big basis. There was a

concern that if you became involved on a big basis, that that would have a very negative effect on your basic businesses and that therefore, we should not go into manufacturing, if you will, because the only successful way to go would be a major acquisition. If you did a major acquisition, that would take away resources that you otherwise needed. So, what evolved was I guess a kind of compromise, which in retrospect may be the worst of all worlds, namely, "Do a kind of a homegrown thing and get your feet wet, begin to learn something. You can control the amount of money that you spend. Let's feel our way. We'll have an outlet for those people that say, 'Let's do manufacturing.' Maybe we have one or two good products which we might be able to sell, but at least we'll get experience in manufacturing, in selling, and we can always have a lid on how much money we commit, so we won't be endangering other opportunities, because we have a lid on this money that we can spend on manufacturing. So, that was the genesis for the establishment of our first manufacturing activities. The echo canceller of course, was the first vehicle that was contemplated, since that had been developed in the laboratory and was very important to our basic business.

NG: Exactly.

JC: Then behind that was the TDMA type of thing and so the

compromise solution was, "Well, all right, let's go in, but let's go in on a controlled basis. We'll always [be] able to put a lid on how much we commit."

NG: Now there was also a deal....

JC: And also, if things go beautifully and we can always keep our eyes open, maybe we could look at a major acquisition of some kind.

NG: Now during that time, if I recall correctly, there was also a deal with General Electric that happened on a fairly small basis for the manufacturing of....does that ring any kind of a bell with you?

JC: Give me a little more.

NG: Right now it's escaping....I'm trying to think what the final deal was and I guess it would have been around 1975. It was a small deal with General Electric that was concluded by David Acheson for the manufacturing of....and I can't think specifically of the product right now.

JC: You're not talking about the Cadcam business, which....

NG: No.

JC:you know, we ultimately sold to General Electric.

NG: Right, no. This was a partnership and I guess what I found is is that he had initiated it, concluded the deal and it fell of the map a little bit and nobody seems to be able to recall too well what....

JC: I must confess that so far you are not ringing any bells.

NG: All right, well....

JC: But....

NG: Your response is not unusual. Every time I bring it up somebody says, "I've never heard of it," although I do know that he did conclude this deal, or at least his recollection is that he did.

JC: A manufacturing-type thing?

NG: Yes, it was a manufacturing....

JC: Who was going to manufacture what?

NG: G.E. was going to manufacture and COMSAT was going to provide the technology.

JC: You don't know in what area?

NG: It's sticking in the back of my mind. Well, you know, if I come up with it....

JC: Yes.

NG: So, anyway, so here we have this more or less, I think you would characterize it as a limited effort into manufacture.

JC: Right, right. And limited to products that we sort of had evolved, like in the laboratory and ones that we thought were important to our basic business. In other words, echo cancellers were terribly crucial to the success of our basic business and there weren't any real good manufacturers of echo cancellers, so that was kind of a natural.

NG: Right, that's a fairly specific product.

JC: We had done a lot of pioneering work in TDMA and there again, that was on the horizon. That was important to the

further development of satellite technology. So that was a logical product. So, we looked at a sort of a carefully controlled, growing manufacturing business, aimed at products close to our basic business.

NG: Now why did you characterize that as maybe the worst compromise of all?

JC: Well, first of all, I think everybody in their heart felt that you were going to have an awfully hard time being successful if you had a very narrow range of products that you were able to market. By definition, you were here going to have a very narrow, specialized set of products....

NG: Yes.

JC:and that if anybody else entered the field with similar products--particularly an outfit that was involved in a wide range of products in that area--you could find yourself in a very difficult competitive position....

NG: Right.

JC:because as long as you had a sort of a monopoly or a leadership role in a product, maybe it was okay. But if that

became an attractive area, probably other people would be in it and they would be in a position to manufacture on a more efficient basis than you and you might find yourself out on a limb. So, it was kind of a dangerous path. You could find yourself exposed and then have the water cut off.

NG: So, are you saying that management didn't listen to its own instincts?

JC: No, I think that the management felt that as long as you were careful in how far you got committed, this was probably okay. In other words, you didn't want to get yourself so committed, so far out, that if adverse things happened, you would then have major write-offs to contend with. As long as it was reasonably modest and as long as you had unique products, fine. Maybe, by looking around, you would have a way of association with other manufacturing companies that would permit your piece and their piece to fit very well, and that could be an attractive thing.

NG: So, you still have yet to explain, though, why you feel that that was not necessarily....why didn't that pan out? What was wrong with that theory?

JC: Well, I think that once you got in, the pressure to expand

and to grow, became very, very, very great. To really keep a lid on this thing became very difficult, because....

NG: Can you give me a for instance? Something that comes to mind?

JC: Well, one product after another would be proposed, or an acquisition....somebody would have a hot idea on....or potentially a product that could be added to this product base.

NG: Right.

JC: That would be some guy with an idea who would be evaluated as having a great potential. There would be a cost out of all proportion to real assets to acquire that idea or that organization. So, we were continually being besieged by proposals to buy this or acquire that or join with whoever. To therefore sort of keep a lid on the kinds of products and amount of money committed to this thing became very, very difficult, because the people involved in that would be coming up with new proposals all the time and basically arguing the success of the thing depended upon expanding, growing, etc.

NG: So it took on a life of its own.

JC: So it took on a life of its own, yes. So, those pressures got us into a lot of things that, in retrospect, you could say were not too closely allied with our basic business.

NG: Like what?

JC: Well, the focus for a lot of these expansive efforts came out of the West Coast operation. That led to things like the Cadcam business....

NG: Right.

JC:ultimately it led to the Amplica acquisition. Those are primarily....

NG: Compact software?

JC:Compact software. Those, I think, are the main examples. The stimulus of that really came from the West Coast and Bodman. Again, the idea that, "Okay, we had one or two little pieces here, but you weren't going to make a business out of one or two little pieces. We had to have this and we had to have that and we had to put them all together and we had to acquire this, that, and the other thing. So, that became a big pressure point by the people involved in the different

elements of that business.

NG: So, would you characterize yourself as one of the people who belonged to the school that [believed that] COMSAT shouldn't go too far astray from the kinds of business--not the businesses--but the kinds of technologies that it really had a strong familiarity with?

JC: Yes, I would certainly put myself in that category.

NG: Uh huh, okay. Let's leap off from this, then, a little bit and talk now about two projects that are very different. The first is about Aerosat and the other is about DBS, STC. Let's start with Aerosat, because that's a little story into itself.

JC: Yes.

NG: But again, another place where COMSAT actually made a fair effort to engage in a business that I think there was clearly a proven need for--I don't think that any of the people involved would have said that there wasn't--but that didn't work out.

JC: Yes, and that was really....why that didn't work out was really a government decision. The history of that basically

this technology." So, our main goal, at that point, was to be involved in some fashion, so that when the time was ripe for commercial application, we would be in a strong position. Well, NASA then developed this relationship with the Europeans and the Canadians. Then it was a government decision that, "This really wasn't researchy. This was more in the applications area and that the FAA ought to be the proper government agency--not NASA." So, the FAA then proceeded to reactivate the arrangements with the Canadians and with the Europeans.

NG: Now, was the FAA, do you think, convinced of the need for this kind of a technology or....

JC: The FAA was convinced of the need to study the technology, to test it out in the real environment. On the basis of that experience, to then decide how it would be utilized.

NG: Yes.

JC: Then, as that progressed, the government decision was that this was probably not a government activity and it should be left to private industry. I must say we probably had some role to play in pushing that idea--that instead of the FAA being involved, that private industry should be involved and we were

was that the government felt that the application of satellites to aeronautical communication was important and basically NASA was originally involved in working out arrangements with Europeans and with Canadians. We had indicated that in due course, we think this would be a private--should be a private--industry activity, not a government activity. The counter-argument was that still it was very early in the game, it wasn't ripe for commercial application; which, I think is true, it would require substantial government support. You couldn't run this thing as a straight commercial business.

NG: Was that because the airlines wouldn't necessarily invest in it? Were they not convinced of the need for that type....

JC: The airlines were not convinced of the need....

NG: Okay.

JC:and there was considerable question about the technology, of the kind of equipment which would have to be used, the frequencies which would have to be used for the application. Basically, the idea was that you had to equip some airplanes, you had to have the satellites up and you had to do some experimentation, before you could say, "Okay, now I understand all of that and I can now say I'm going to apply

the logical entity to be involved in aeronautical communications. So, that instead of the FAA being the participant as far as the United States was concerned, that it would be more logical in this pre-operational test activity, to have the entity that could then carry it on. So....

NG: Meaning COMSAT.

JC: Meaning COMSAT. The government position ultimately was that that was probably a good argument, that the private industry should do it, but they weren't about to anoint COMSAT as the chosen instrument. So then the Europeans and the Canadians were informed that the FAA was out and that it would be an industry--private industry--in the United States that would participate with them in such a joint program; but that the United States government was not prepared to name the private entity. So, to the great amazement of the Europeans and the Canadians, they were told that they should select the entity to represent the United States.

NG: It's called passing the buck.

JC: So, they really couldn't believe it--that they would be selecting the U.S. representative.

NG: By the FAA? By the....

JC: By the government, really--and the FAA, in particular--that we had been encouraged to make all of these expenditures in the anticipation that we had an ongoing program and we didn't expect--after operating in good faith and spending our money--that we would be....we felt that we at least ought to be reimbursed for the money that we had spent in good faith. Of course, the FAA said that they didn't agree with that, because we never had a contract. Which was true; we had a kind of an oral understanding, but hardly a contract that would hold up.

NG: Hard to go to court with that.

JC: So, we then filed a complaint, sought to get some recovery and we did ultimately recover some funds. So, I think the fact that we recovered something meant that that was some bearing in our case.

NG: Some basis to that, yes. Now, let me ask you a question, because this ties in a little bit with what some government people have talked about, in terms of COMSAT's peculiar stance, in a sense--of being initially quasi-public, quasi-private--that here COMSAT was in a position where it

could provide a service and it was.....

JC: there was only one customer, the FAA.

NG: Right, but that they [COMSAT] could provide a service that, for example, would be able to....for which they were uniquely qualified--that they were already the chosen instrument....

JC: We were not the chosen instrument in Aerosat....

NG: Right, but....

JC:according to the government.

NG: But, COMSAT was the chosen instrument of the government for INTELSAT and that maybe that this created a certain--I don't know how to say this properly--but a certain sort of corporate culture inside of COMSAT that led it to believe that it had a special role vis-a-vis private industry. It was a step away from private industry, but also was a step away from government--that it had this unique role and that that unique role could be counted on outside of the INTELSAT business.

JC: Well, I would put it another way. I would say that the

Congress, having created this special instrument to be the vehicle by which the United States would pursue communications satellite technology; we felt that it would be totally illogical to say, "We went to all that trouble and that that charter was limited to just point-to-point international communications;" that if we were going to be a leader, we were going to have to do research and development. We were going to have to establish a laboratory. We were going to have to be the world leaders. You couldn't say that our charter is limited to this one small aspect of satellite communications and it doesn't include domestic, it doesn't include aeronautical, it doesn't include maritime, it doesn't include a dozen other things. [COMSAT believed] that we had to assume the we were the outfit that was going to be looked to to provide a leadership role in the applications of communications satellite technology, wherever those applications might be--in mobile, in fixed, in land-mobile, in sea-mobile, in aeronautical, whatever--and that therefore, as the technology evolved and as we saw applications, we felt it was perfectly natural and proper that we should be permitted to apply our experience and our technology to develop these new areas. As we discussed in the domestic case, we faced an avalanche of opposition to that concept.

NG: To that attitude, right.

NG: Yes.

JC: But, nevertheless, they then went through a so-called competition and ultimately COMSAT got selected. After COMSAT got selected, the problem of funding came to the fore and it was concluded that the FAA, who would have to provide the money, did not have the funds to dedicate to this project in the relative importance that this project had to other projects that the FAA had to carry on. In other words, the Congress basically said, "Look, you have so much money, you can spend it....you set your priorities." This project dropped out of the list of priorities that was capable of being funded.

NG: Yes.

JC: So, after three rounds, the Europeans and the Canadians were finally told that the program couldn't proceed because there was no funding; which was kind of a big shock and turmoil after all that period of time. Of course, in good faith, we had spent a lot of money.

NG: Yes.

JC: Then, we thought that we had sort of been led down the primrose path.

JC: That was true in maritime, it was true in aeronautical, it was true every time we've tried to carry out what we considered to be our charter.

NG: Now, do you think in hindsight that that....would you still stick by that tenet?

JC: Absolutely. Otherwise, the whole COMSAT Act doesn't make any sense. You wouldn't set up a chosen instrument and then say, "But they're excluded from doing anything but that very narrow area," because you're not going to be a leader very long if you confine yourself to that narrow area.

NG: Because certainly the carriers would have made that argument.

JC: You couldn't....there's no way you could have maintained a leadership in the technology or anything else, if you just painted yourself into a little corner and stayed there. So, the growth of COMSAT and really the carrying out of our mandate to be a kind of a world leader was only possible if we were allowed to apply that technology wherever the technology seemed to make commercial sense.

NG: So, do you think that, in essence, then, the government, pressured by these outside forces--the carriers....

JC: Absolutely.

NG:were basically....

JC: Absolutely, it was....

NG:countervailed the law?

JC: Well, the carriers' position--even when they were on our Board--was that the COMSAT Act was limited to international....

NG: Right.

JC:and that therefore it was open season outside of that. All of the people who suddenly saw--all of the industry people who suddenly saw--satellite communications as an area that might be profitable then descended upon the government to say that COMSAT had no special status. So, we were then continuously faced with an avalanche of people arguing that we should not be allowed to do this. We should not be allowed to do that. We should not be allowed to do the other thing. As I say, the COMSAT Act doesn't make sense if it simply limits you

to one tiny facet and that's all. I think had that been appreciated at the time the COMSAT Act was being considered, that the language would have been different. But the prevailing attitude was that satellites were a long way off and they might have some limited application internationally, but you sure didn't need them domestically. We had all kinds of terrestrial and other things and that therefore, "Sure, some way down the road in the future, there might be other applications, but for now, the big thing is the international." The Congress and the people really promoting the legislation had no idea that in a matter of a few years, we'd be building all kinds of more applications.

NG: So you're saying that in essence, they were limited by their place in history, I mean in the sense that they couldn't see past their own immediate use of the technology and that therefore, then, worked to COMSAT's detriment?

JC: And once the potential was seen with the success of the original international, then everybody jumped on the bandwagon and said, "Okay, keep COMSAT out. Here we come." So, that was the big problem that we then faced, was the sort of unanimous opposition to the idea that COMSAT had any kind of a mandate other than this very narrow international one.

NG: You feel that that line that then would have been pursued--obviously, in the courts and to the FCC and whatever--that then doesn't really come to hold water, because now we're, you know, obviously, on the domestic scene (when it came to domestic satellites) the open skies notion really prevails. The essence of the Act really wasn't adhered to in your view, then?

JC: Well, let me put it slightly differently, that had there been a feeling that satellite communications would move ahead as rapidly as it did, there would have been much more careful drafting of language in the Act, to make sure that this chosen instrument was, in fact, going to be a chosen instrument. It made no sense to enact legislation that said, "This is a chosen instrument for one small piece of this business, and outside of that, everybody's free to do what they like." That would make no sense. So, had there been a real feeling for the speed and the power of this technology at the outset, I think the Act would have been different. But, the Act having been enacted with some, at least, vagueness in what it applied to, that provided a vehicle for everybody else to rush into the picture and say, "Oh no, not COMSAT," in these other applications.

NG: Yes.

JC: There was....we were a voice crying in the wilderness, because it was to nobody's interest to extend, if you will, the COMSAT charter.

NG: Right, except to COMSAT.

JC: And that's why I say we were a voice in the wilderness. There was nobody that would argue, "Yes, COMSAT should really have the charter, as the chosen instrument, to do all these other things."

NG: So, once you moved off of square one, i.e. past the legislation, there was no more constituency except COMSAT's own....

JC: Right. So, then our basic problem began to....was to really fight for a position in all these other application areas. In some we were more successful than in the others. I think in the maritime, we were very successful.

NG: Yes.

JC: In the aeronautical, we could have been successful. At least we got to the point where we were the chosen instrument....

NG: Right, but again after a long....

JC:even if we were chosen by the Europeans. But, in the domestic, we really got hurt, because we got held back, limited, constrained, so that we really couldn't do the kind of a full approach that we would have done had there been no obstruction to us. [End of Interview]

Sixth Interview with Dr. Joseph Charyk
June 24, 1986
COMSAT Headquarters
2:00 p.m.

NG: Okay, why don't you just give me a brief overview of what you feel happened in the DBS deal from the beginning to the present?

JC: Well, I think the interest in DBS began to develop as the technology moved ahead and we could see the potential of high-powered satellites, and corresponding smaller and less expensive terminals on the ground. It appeared from our studies and our research that one could contemplate having satellites with powers from a hundred to two hundred watts and that meant you could get down to receiving dishes at the home, maybe as low as two feet in diameter. We felt that that was the next logical step in technology and that for distribution of materials, this could be a very powerful system, because basically, for the relatively low cost of installation of a receiving facility at a businessplace or at one's home, one could be in a position to receive multiple channels of high-quality television. There would also be no problem in encoding or encrypting the materials, so that you had security and so that you also had a way of charging for the delivery of various materials. This seemed like such a natural step in the

further development of communications satellites, that we focused on ascertaining the nature of the market and in particular, since this would be a rather large financial undertaking, potential partners who might be willing to join us in such an endeavor, recognizing that we could bring the satellite technology and the earth station technology, but that we had very little experience in the kinds of products that would have to be delivered and the kinds of products that there would be an interest in on the part of the marketplace.

NG: Did you have a potential partner in mind at the time?

JC: We basically thought of people who had access to materials. That logically suggested people like motion picture people, major television entities, people who were interested in the expansion of the information horizon, people like Ted Turner, people like Rupert Murdoch. So basically, people who were involved in the information business and we could offer a very unique way to deliver information at relatively low cost. So, that was the type of association that we sought.

NG: Were those potential partners approached actively?

JC: Well, one of the first outfits that we approached was Sears. Those discussions went quite well for quite a while and

looked very encouraging. There happened to be one member of the Sears Board, who was involved in television in New Orleans, who was adamantly opposed to the Sears entry into the thing. But, I think the outside of him, the management of Sears and the Board was basically sympathetic to participating in such a joint venture. But, since he was a fairly dynamic voice and also a major shareholder, there was an attempt to bring him around, rather than to force a decision which would be contrary to his desire.

NG: Who was that?

JC: I can't recall the guy's name, but I think he's still on the Sears Board. We can pull it out, that's no problem. It is my understanding that he has now done a 180 [degree turnaround] and is all for it now. But, at that time, he was adamantly opposed.

NG: Better late than never, I suppose.

JC: But, in any event, that ultimately led to a very great disappointment....

NG: That was sort of a last minute....I mean, I think....is it true that COMSAT really counted on that deal, in essence?

JC: We counted on that deal. We had worked on it for something like six months or more. We were waiting for the Sears Board meeting at which the thing was going to be endorsed. We had worked out all the details of the partnership arrangement and all we needed was the final action by the Sears Board. We had the PR announcements all made, ready to go. Then, we got this call from the Vice President of Sears with whom we had been primarily dealing, saying he needed to see us on an urgent basis and he could come wherever we were. It so happened where we were at Disneyland, as part of the INTELSAT meeting that was being held in Orlando at that time. But, they then flew down on the Sears plane to meet us there and gave us the sad news that they had elected not to pursue this opportunity at this time. That was a big disappointment, because I think the Sears association would have been a very powerful [one]. First of all, they had a lot of information that they'd like to deliver. I mean, the electronic catalogue was really a kind of a concept here and this looked like the next step in the development of the Sears retailing business. Furthermore, they provided the vehicle throughout the country where people could make arrangements to have access to the system--to purchase their units, to have them installed, to sign up for the service. So, at the same time, we would have had the product, all the business centers throughout the country where people

could sign up. We would provide the satellite component and so that looked like a very exciting thing all around. But....

NG: Did COMSAT then decide to turn to these other television-type entities, motion picture entities?

JC: Well, then we began to look at what other possibilities there might be. At that time, I guess Dick Bodman was placed in charge of exploring, with other potential companies, their interest in such an arrangement. He talked with a very large number of companies. The one that got closest to, of course, was CBS. That was, again, an experience that looked promising for a while and where for a period of something like six months, we worked very, very closely together in all aspects of studying the market and the growth of the market and the economics and the technical aspects and pretty much across the board. CBS....the situation was not as clean as with Sears in that they were very sensitive always to their affiliates, the attitude of the affiliates to such a system, how the marketplace--the stock market, rather--would look at such a venture by CBS. There were some people at CBS who felt that if it looked as though CBS was going to make a major commitment in this area, that it would have a negative effect on the CBS stock. That was always a factor which was in there. So, within the CBS organization, we had sort of divided opinions,

but we did work with them very closely for a period of about six months and, of course, they ultimately decided that they weren't going to pursue that.

NG: Right. Now, was COMSAT at that time also pursuing other options, or was the CBS....I mean, was it a sense, again, that....

JC: Once we get in high gear with CBS, it obviously put a bit of a damper on other contacts, but they were not completely excluded. So, I guess Bodman must have talked with thirty, forty different companies of all stripes.

NG: Why do you think there was such a dichotomy, in essence, between COMSAT's real enthusiasm for this project and its vision for this project and the, shall we say, reluctance, on the part of the broadcasting industry to actually involve them themselves in this?

JC: Well, I think the broadcasting industry is easy to understand. As I indicated, the affiliates of CBS--and it would be true of the affiliates of the other networks--would look somewhat askance at the idea of delivering into the homes of their area of activity, through such a system. Presumably, that would be at the expense of people watching the local

stations. So, you couldn't expect the affiliates to be very enthusiastic about that kind of a system. Obviously, the affiliates attitudes are very important in determining how the major networks look at different issues.

NG: What about some of the other broadcasting entities, not necessarily broadcasting in the sense of....

JC: Well, people like HBO, Showtime, and so on, were very closely involved with the cable people. Again, if they were to look towards a satellite solution, they would run into difficulty with their cable franchises, who were very important--well, crucial--to their revenues. So, they did not want to offend the cable systems. At the same time, however, they were intrigued with idea that here was a system which would have no geographical limitations. Unlike serving a particular area which was cabled, here is a system that could go anywhere. As one of the Vice Presidents of CBS commented, the cost of the nationwide system was less than the cost of cabling one of the boroughs of New York City. So that was a pretty effective point. The problem in all of these, however, was the one concerning the development of subscribers as a function of time; recognizing that most of the money had to be put in on the front end. Therefore, it was impossible to see an early significant return on your investment. This was

clearly a long-term deal. You had to put a lot of money out and there wasn't going to be a pay-off for a good number of years. The whole thing depended upon how fast you could market, how fast you could install, how fast you could provide services that people would be willing to pay for. There was also a limitation which was raised by a number of people that we talked with, the fact that our first satellites were only capable of three channels and the feeling that that was really not adequate; that if that was the limit of the options that you were willing to provide customers, that was pretty meager. The thing would be a lot more attractive if you had, let's say, nine channels that you could offer. So, that was felt to be perhaps the limit of the original system and a feeling that somehow or other, we ought to either have better satellites or some other way of getting something closer to nine channels than the three channels that we were talking about.

NG: Was there also a feeling that maybe the cable markets that had already been developed would not, then, be receptive to the introduction of a more limited service?

JC: Well, that you would not be able to have any kind of an impact in areas that were already cabled, because most of the cable companies were offering, you know, many, many times that number of channels....

NG: Sometimes as much as a hundred time, yes.

JC:anywhere from thirty on up.

NG: Exactly.

JC: Here we've come in with our little three [channel system]. That wouldn't have much of an impact in an area that was cabled. Now, in areas that were uncabled, obviously, three is better than nothing. There you might have an attraction. But to have a significant impact in areas that were either cabled or on the verge of being cabled, there was a feeling that you would have to have a lot more than three channels. Our focus, however, was looking at the uncabled areas and trying to show that even any reasonable penetration of the uncabled areas, would produce a sound economic picture. In other words, there was enough of a market and there was reason to think that you could build up that market rapidly enough--focusing only on uncabled areas--to make economic sense out of this. So, even if you got zero in the cabled areas, it would be a good financial proposition--albeit one that wasn't going to produce an early return. If you were after a quick return, this was not very attractive. A lot of companies that we talked to, their attitude was: there are limited way in which they can

invest their capital and by in large, the pressure is to invest in those things that have an early return. This looks like relatively high risk, uncertain marketplace, and a long-term payoff. Therefore, there were shorter term things that looked better. So, it was hard to get people who were willing to go for the long-term and invest the kind of capital that would be necessary, as compared to other alternatives, presumably that they had.

NG: Well, so let's move along a little bit. What happened in the development of COMSAT's thinking after the loss of Sears and the loss of CBS as a partner? What happened at that juncture?

JC: Well, the focus was on, "Is there any way we can test the marketplace in a more limited fashion, so we don't have to put up all the money. Can we somehow utilize or modify existing satellites so that we could, in a limited area, do a kind of pilot project? That led to the idea of a modification of one of the SBS satellites, which would permit high power in an early timeframe, into the Northeast part of the country. We might test all of the concepts in that area and, depending upon the answers, we could eliminate some of the questions that people were asking. So, we would be able to get in early, we would be able to get information, and we would be able to hold

back the big expenditures until we had some input from this test program. That was also, I would say, stimulated in part by the entry on the scene of this outfit that was advertising direct broadcasting in the Northeast part of the United States; U.S.....

NG: Was it Super T.V. or something?

JC: No, it was United States....USCI. They did quite a PR job on us, basically saying that they were there, "Quick, cheap, while COMSAT was out in their gold Cadillac, you know, dreaming up very expensive systems and [they were] years away. If you really wanted DBS, it was here now and the way to get it was USCI." These were the entrepreneurial types, quick on the move, and COMSAT would be there years later and billions of dollars more. They did a pretty good PR job on us in Fortune and other publications. Our idea to then get in quicker, by a modification of the SBS satellite, was conditioned, obviously by that kind of a PR campaign. Then, we tried a little bit of a counter-campaign that said, "We'll be there, with higher power, sooner." That people shouldn't install these big, enormous dishes that are going to bring down their roofs, when we can get a little two-footer and we can be there in roughly the same timeframe. So that was then the approach that we began to push; for this limited coverage with the modified SBS

satellite in an early timeframe. I suspect that in some respects, that led to their demise, because they then felt the pressure of time. So they charged down and they started advertising [and] installing like mad, these big, bulky, antennae....

NG: Exactly.

JC: ...and they ran themselves into the ground. They just ran themselves out of their financial resources and ultimately the hole was so deep, they couldn't come out.

NG: But what kind of pressure did that place, then, also on COMSAT? I mean there's a two-way pressure there.

JC: Well, in some respects, it took the heat off our early entry, because it was clear that these guys weren't going to kill us. They were going to kill themselves. But, on the other hand, we still hadn't found anybody who was willing to play our game. So, as things went from bad to worse, we ultimately talked with USCI about combining forces. When we explored that in some depth, it became fairly clear that the baggage that they brought to the party and what kind of financial figure they wanted to attach to the baggage was, from our point of view, unrealistic. So, we made the decision that

we wouldn't pursue that one. If they were going to go down the drain, they were going to go down the drain. We also recognized that that wouldn't be a positive chapter in DBS, because the people who were skeptics in the first instance were going to say, "Well, all right, here's a fella that tried it and so here he's bankrupt. Therefore, this is a risky business and it's a rough market." The kinds of subscriber build-up rates that we were talking about to make economic sense out of this thing were many times what these fellas had been able to achieve. I think when they were all done, they had maybe ten thousand subscribers. That was just a drop in the bucket of business. So, the cynics would also point to that and say, "Well, with all that effort, they only got ten thousand subscribers. If you moved at that rate or maybe even in multiples of two or three of that, it will still be an enormous financial pit." So, I would say that the demise of USCI certainly discouraged people who might have been on the fence about looking seriously at the DBS business. So, in retrospect, it's hard to tell what would have happened if the Sears thing had gone through.

NG: Well, that's speculation and probably isn't useful.

JC: We felt that also to give the image that we were serious, we had to indicate that we were going forward. The biggest

indication of going forward, of course, was to have a contract for satellites. It had been our hope, of course, that before that contract had gone too far down the road, that a partner or partners would have been in place and sharing the load and adding to the creditability of the whole enterprise. But as things evolved, we were left with the contract....

NG: Exactly.

JC:and the contract went further and further down the road....

NG: And there's no partner.

JC:and there's no way of getting out, unless you say, "I'm out of the business and I'm just going to cut out this contract--cancel the contract--and re-group." Also, with the passage of time and the improving technology, it became clear that you could, in fact, get more than three channels; that with roughly a satellite of the same size we could get twice that, six. So, now we were funding a satellite which was going to produce about half the capacity that a new satellite starting at that point could produce. So, potentially, you were funding a somewhat obsolete satellite and that aggravated the situation.

NG: Well, let me ask you a couple of quick questions and then we'll turn our attention to some of the other things--which is there have been a number of comments that said that if COMSAT had not invested its financial resources in some other ventures at that time, is maybe you know, I might say Amplica or something like that, that they could have made the DBS system work on its own without a partner; that the requirements of DBS were not that great, that COMSAT couldn't have done it, but that it scattered its forces, in essence. How do you feel about that?

JC: Oh, I don't think that that's right, because if you take away some of our major expenditures, like the acquisition of Amplica, that wouldn't have made the difference. The real requirement, it seems to me, was the acquisition in the same way of the kind of product that people would be willing to pay for. Our original thought was that that probably was in the encryption and decryption and you had to have then, the boxes for the decryption--that that was probably the foot in the door. But, as you developed the system, then other services would come along. But, you had to have some information being delivered that would have broad appeal. It was our thought that that was probably television. If we could deliver very high quality television, particularly programs that you

couldn't see through cable or over the air, or maybe even rent from your local video store, that could be an attractive force. That was probably the only thing that would have the broad appeal that would produce the subscription rates that were needed to get this thing underway. On the other hand, we were not exactly pros in acquisition of that kind of material. Therefore, we felt it was terribly important if we could somehow bring into this effort somebody who was in that business, who had that experience, such as one of the major motion picture companies.

NG: The other question, actually, that I was going to ask you about is in terms of the management structure of that envisioned subsidiary....

JC: If I [may] interrupt....

NG: Yes.

JC:the other element that was, we felt, terribly needed, was the marketing and a method for the getting the home equipment into the consumer's hands....

NG: Yes.

JC:which meant a distribution system, which meant ways in which people could readily get access to this material, have it installed. That was the area where also we had no expertise....

NG: Right.

JC:in the marketing and the installation. So, the product, the information product, the marketing, and the installation, we didn't have any strength in. These are the kinds of talents we looked for. That's why Sears was so attractive to us. They partially filled the two missing elements that we felt were critical to this undertaking.

NG: Well, as I said before, this ties in, in that a number of people have suggested that because COMSAT didn't, as you say, have this intrinsic expertise--and specifically in the entertainment field--that, in essence, it had stuck itself out on a limb in terms of actually developing the management expertise and getting itself into a field where, for example, you would have to pay people from the entertainment industry far more than any officer of COMSAT had ever made--because obviously that's a different kind of an industry with a different kind of set of expectations. It was, again, an instance of COMSAT as a smaller company attempting to take a bigger bite out of a bigger piece of meat.

JC: Well, I think it would have been very difficult, if not impossible, for COMSAT to marshal within itself all the resources to do this kind of a program; to establish the marketing expertise, to establish the programming expertise, to establish the distribution centers and so on. That would have been a massive undertaking, which, even if it were successful, it would have taken an enormous amount of money and an enormous amount of time. Here you had the clock running, however. So, we felt that it was unrealistic to expect that we would build up these other capabilities in the depth that would be required to do the whole thing ourselves. We wouldn't want to bet the company on that one project....

NG: Yes.

JC:which it would have involved doing. So, we felt our best approach was to seek alliances and relationships with people who already had these skills in place and who might want to join with us in a joint venture.

NG: I guess the analogy here is the analogy of SBS, where again, COMSAT gets into, as a smaller entity with a more limited set of talents, getting into a business with a very large partner, with a lot of hope and expectation and then,

essentially, being--I shouldn't say engulfed in a sense--but led around a little bit, and that maybe this....in the decisionmaking of COMSAT management that these kinds of ventures have been, say, less than fruitful.

JC: Well, the question is, do you want to play in these kinds of things a significant role, or do you just want to sort of pass the baton over to other people who are going to do it? It seemed to us that the direct braodcasting was the next natural extension of satellite communications technology. COMSAT had to be a prominent player if we were going to, first of all, carry on the image of being a pioneer company in satellite communications. We couldn't just sort of phase out and say, "It's too big for us." On the other hand, to say, "We're going to bet the company on that one thing," didn't seem like the right thing either. The only practical alternative seemed to be some sort of relationship with other companies that would share in the financial undertaking and would also provide someof the ingredients that such a project would need to have in order for it to be successful. So that was the route that we took. I think one could say that our timing might have been a little off, that we were too early on the scene with the idea, we were ruffling too many feathers, and that maybe the technology wasn't quite ready yet; because instead of getting a three channel satellite, we could have gotten a satellite [that

was] much more sophisticated if we had waited a few more years. You'd have also had earth stations that were much simpler and perhaps much more practical. I guess even today, we're looking at a flat-plate antennae, which would certainly be far preferable to the classical dish-type antennae. It could mount flush on the side of a building. Furthermore, the encrypting and decrypting technology has moved ahead. Again, in a later timeframe, one could have had a more sophisticated encryption system at lower cost. So, I think one could argue that maybe we moved out a little too quickly and that [if] we had waited a little bit longer and had better technology to offer....the problem, however, would have remained the same. In other words, I don't think that we could have done it on our own. I don't think that it would have been sensible, if we had really felt the technology was there and that there was a potential marketplace, to simply wash our hands and say, "This is too big for us."

NG: Yes.

JC: We've been back talking with other people and....hopefully, however, perhaps with a more positive response than we got when we first started out. But, I continue to believe that the delivery of all different kinds of information, through a high-powered satellite to very small, inexpensive receivers, is

going to be a big thing.

NG: I think there's a lot of people who agree with that, that it's certainly not dead.

JC: It's going to emerge in some fashion at some point.

NG: Yes.

JC: I hope that when it does, that COMSAT will have a significant role in it, because I think it is the logical extension from where we are now.

NG: Well, as I said before, let's turn a little bit away from....you know, in the '60's we went chronologically and in the '70's essentially we went thematically into the '80's. What I'd like to do now is just to get some impressions from you about people and organizations and whatnot that you've been associated with during your time here. Let's start with the Board. You've seen the transition of the Board under several Chairmen, from Leo Welch to General McCormack to Mr. McConell and then Mr. Harper and obviously, then, to yourself. How do you perceive the change? What are the differences? How were the differences expressed in the way COMSAT viewed itself, the way the Board operated, as we went through these five or six

Chairmen, I suppose?

JC: Well, originally, of course, we have the rather unique arrangement where roughly half the Board was represented by the carriers and that was a bit of an awkward period in that, as we've discussed before, basically the carriers felt that the legislation was very restrictive and that basically COMSAT was limited to providing space segment services in the international point to point business, period. Any time we'd start thinking or talking about anything beyond that, we knew that you'd have this very practical problem that you would have no sympathy from the carrier Directors. So, that produced a situation where you had to sort of slowly and deliberately try to introduce people to why it was important that COMSAT did something other than this very limited area of activity. Later on, after the carriers left, that restriction, of course, was not there, but nevertheless there was great sensitivity to the fact--I guess it even persists somewhat to this day--great sensitivity to that fact that our major customer is AT&T....

NG: Who sat on your Board.

JC:and that some overwhelming percentage of our revenues and our well-being depends on AT&T. Therefore, we just can't be oblivious to AT&T's attitude on various questions.

Therefore, we've got to have a nice, good, smooth working relationship with AT&T. Later on that would broaden to include IBM. That's a sort of ambivalent thing, too, because IBM and AT&T don't exactly see eye to eye on a lot of things.

Nevertheless, we potentially had to be very careful about our relationship with IBM and AT&T. I think that attitude of the Board had an awful lot to do with the development--in the early days of the domestic satellite business--the development of the effort to strongly pursue with AT&T, some sort of a relationship in the domestic [satellite business] and not get into a situation where we might be, basically, toe to toe with AT&T in the domestic arena....

NG: Right.

JC:that it was unrealistic for COMSAT and AT&T to sort of spar as equals in putting up domestic satellite systems. Therefore, our best bet was to develop some sort of a relationship with AT&T where we would not be diametrically opposed to each other. I think that was a strong Board attitude which conditioned, in some measure, how we proceeded in the domestic arena.

I think that there also has been a sort of a feeling in the Board....I don't know how to describe it, but they're never

quite sure about whether the things that we say about the technology are for real or whether there's some wishful thinking involved. In other words, most of the things that we talk about, I think are rather exotic to the average Board member. I mean, they have come from worlds in which the kinds of subjects that are discussed at Board meetings are much more comfortable. You're manufacturing something or you are doing things that are fairly conventional.

NG: Exactly.

JC: Suddenly, you start talking about moon, I mean IR sensors and solar rays and....they [are] left a little bit uncomfortable. [Board members thought], "How much of this technology do we really believe."

NG: It's too sci-fi, in a sense.

JC: "I mean, are they leading us on? How solid is this stuff?" Even today, you sense that, as we talk about various projects. They're not sure how much is for real and how much of it is wishful thinking on our part and [therefore is still] a certain uncomfortableness in dealing with some of this more exotic technology.

NG: Do you think that that would have been different, say, under your Chairmanship than, say, under someone like Mr. McConnell's Chairmanship, who didn't have the hands-on technical expertise that you did? I mean, were you able to allay fears better, in essence?

JC: Well, I think we would have moved somewhat differently in that I think that we would have pushed this technology and the applications of that technology more vigorously, in an earlier time-frame. Now, whether that would all have ended up better is, I guess, an open question. But, I think we would have been much more aggressive, if you will, in pushing the technology and the applications of the technology and looking at the kinds of markets that there might be for that technology. [There would have been] less sensitive to whether we were reaching too far from a technological point of view, much less sensitivity as to whether we were offending somebody by so doing. Now, as I say, whether that would have added up to a better assault or a worse assault is pure speculation. But, yes, I think there would have been a difference in the way the company would have moved.

NG: What about--if you could just give me some offhand comments, as much as you would, obviously, want to put on some tape--about the different Board Chairmen? Start out with Mr.

Welch. I mean what was your relationship with him and how do you feel that he functioned in the COMSAT setting? How well do you think he functioned?

JC: Well, he was a very conservative individual. He, I think, had great reservations about whether all of the statements of what the technology was capable of doing were for real. I think he was always uncomfortable [about] whether we could really do all these things. [He was] very sensitive about expending funds on things that looked fairly exotic.

NG: Although at that time....

JC: I think the thing that really converted him was when the Early Bird went up successfully.

NG: That was the most exotic thing....

JC: I really think that he didn't expect that that would happen. So, I spent an awful lot of time with Leo Welch, trying to convince him that these things were within our bounds, that they were reasonable risks, that the technology really could do some of these things. I think he had a great scepticism as to whether the technology was really ripe for all of these things. He had a tendency to look to the carriers for

the expert opinion on whether the technology was ready or not. I used to point out, though, that he was not likely to get a really unbiased viewpoint there either, because....

NG: Well, they had their own interests.

JC:they had their own axes to grind and so on.

NG: Exactly.

JC: But, I think that the Early Bird made him a bit of a believer and gave him a feeling that we, in fact, had brought together people--technical people--who were going to be reasonably authoritative on the state of technology and what could be done and what couldn't be done and what the risks were.

NG: Do you think he also had some hesitancy about whether or not this public/private company could actually function, whether....

JC: Oh, I think so. I mean, it was, I think in his mind a kind of an experiment that had been set up through a compromise--political compromise--and I suspect that he might have envisaged that someday this would really become owned by the carriers. In other words, that somehow it would revert

back to the carrier's original proposal. I think he would have been much more comfortable had the thing moved in that direction, instead of in the opposite direction.

NG: In the other direction. Your relationship with him you would characterize as what?

JC: Oh, I think that it was a good relationship. I think that over a period of time, he developed a confidence that I wouldn't mislead him about the technical risks, that I would not mislead him about the solidity of different programs. He was a pretty powerful voice in the original stock offering in going for the \$200 million. Whereas, there were other Directors who were much more skittish about whether we should just charge out with a big plan and \$00 million. [They thought] we should be much more conservative. But, I think Leo got to the point where he became perhaps the strongest advocate for going out and getting plenty of money. [Welch's attitude was], "If you're going to do it, let's get enough money to do it with."

NG: Was Mr. Conner the person on the other side of that?

JC: He was the opposite extreme, yes.

NG: I just wanted to check that out. What about General McCormack. Now, he was a very different kind of a Board Chairman, a very different kind of a personality. How would you characterize his tenure?

JC: Well, I think McCormack was a guy who a lot of people liked and he liked a lot of people. He liked to get broad associations and he loved people and he didn't like to see irritation and he didn't like to see differences. He was for everything being quiescent and smooth and comfortable. So, to the extent that you could keep things in a kind of quiescent, comfortable fashion, he was most comfortable.

NG: Was that a bad thing or a good thing for COMSAT?

JC: Well, I would say that given the kind of environment that we were in, you couldn't move very fast if you tried to keep everybody happy--that we were interlopers in any event, because of all the things we've previously discussed: how we were viewed by the carriers, how we were viewed by the Commission, how we were viewed by the State Department. Unless you had some aggressiveness and some arguments, you weren't going to make progress. You were going to get ploughed under....[Tape Turned Over]

So I think that in the development phase, it's almost impossible not to grate organizations and people the wrong way. If you're kind of just sort of sitting on your plateau, maybe you can do it, but I don't think you can in a build-up phase.

NG: Do you think that he made it more difficult for COMSAT to come to some kind of conclusion early on the definitive arrangements?

JC: Well, I think the Board felt that he was being much too lenient in agreeing to various things with the State Department.

NG: Too compromising, you mean?

JC: Too compromising. In other words, [he was] too interested in not raising any flak, too interested in not rubbing people the wrong way. As a result, things were being given away in the international negotiations, which the Board resented.

NG: Such as?

JC: Well, I think that the questions as to....for example, other systems, which was one of the final issues....

NG: Separate systems, right.

JC:the question as to the role of COMSAT....

NG: As manager, you mean?

JC:as manager; questions of voting of how the Board of Governors would function and on what kinds of issues, on procurement, on a whole series of issues. I think that finally some of the difficulties with the Board stem back to the view that he was too malleable and wouldn't stand up when it counted.

NG: Would you characterize him as....how do I say this....hand wringing in public?

JC: Well, he was a Gentleman Jim, you see, which....the adjective is not without merit.

NG: Would you say that he was basically eased out of COMSAT?

JC: I would say that the Board probably felt that he did not have the aggressiveness that the organization needed at that point.

NG: Your relationship with him; how would you characterize that?

JC: Well, it was fine. He was a very easy person to work with because he wanted things to go smoothly. By and large, I could do almost anything that I wanted.

NG: There's something sort of comforting about that.

JC: Well, but he was heavily involved in the international negotiations.

NG: Right.

JC:he and Johnson. I sort of stayed out of that because I could see that that was not going to be aided by my presence. Furthermore, the ultimate result there might not be everything that the members of the Board wanted. The main thing was to keep the company going while we were hassling around with how the thing should be organized internationally.

NG: So, now we actually go from--I mean, I hate to use a pejorative term, but--from the sublime to the ridiculous. I mean, Mr. McConnell was not an indecisive man.

JC: Not at all. It is true that the Board I think, then looked for someone who would be really, really, rough and tough.

[McConnell was a] great negotiator. H--McConnell--had, of course, negotiated the British aluminum deal for Reynolds, which was one of the big coups in commercial negotiations up to that point. I mean, it was basically working the British aluminum deal against an array of forces in the United Kingdom opposed to that. So, he gained an enormous reputation out of the success in that negotiation. I think that really appealed to the Board very much, that here was a real tough and rough person. He was selected in contrast to the possibility of bringing Leo Welch back. Leo Welch had expressed some interest in coming back and had done a certain amount of lobbying.

NG: Although, actually, McConnell really didn't want the job, by his own account.

JC: He didn't. He didn't, but the Board finally went to him and said, "Look, we don't....we think you're the right guy and we have these other sort of suggestions, but we think a rough, tough...."

NG: Why weren't you selected for that at that time?

JC: Well, I think that the answer was that they felt that I would be okay in sort of making sure the company continued on its course, but that what the company needed was an image of a

real tough charger and that in the dealings that the Chairman would have with the outside world--with the financial community, with other companies--that McConnell would present the image of a real tough character; [he would be] aggressive. At the same time, that it would be complementary to me in that the corporation could move ahead on its basic business, while at the same time having this external image. So, it was viewed that the McConnell external, myself internal, would be a very effective combination.

NG: Sort of a complement, uh huh.

JC: Now, I'm putting....I'm speculating, but that would be my assessment of how they looked at it. Interestingly enough, you know, they didn't really name a chief executive at that point....

NG: That was my next question.

JC:and that was somewhat deliberate, too. That they felt that the combination of the two of us was really like an office of the chief executive and that they didn't have to name either one the chief executive, but that since what was wanted here was sort of a combination of two kinds of things, that you wouldn't call either one a chief executive, but it would be

like an office of the chief executive.

NG: So, you wouldn't necessarily characterize that from your own perspective as a slight?

JC: No, no.

NG: Okay, because he was not in residence, I mean, he was still off doing his other business....

JC: That's right. That's right.

NG:and was essentially less hands-on....

JC: Our working relationship was really excellent. In other words, we respected each other very much. We consulted each other on those things that we felt were important. I don't think that he ever had the feeling that I never alerted him to some kind of a problem that was nascent. In turn, he would tell me about the things that he was up to. So, that was a very nice relationship.

NG: But, he didn't have such a nice relationship with everybody who was an upper level officer in the company. Some people have characterized him, as being intimidating....

JC: Well, he was certainly intimidating.

NG:and belittling at times.

JC: Well, his choice of words would create that impression.

NG: I'm trying to be somewhat genteel here. Do you think that was....how do you think that worked in a sense, as far as COMSAT management working together as a unit? Was that a positive or a negative influence on decision-making?

JC: Well, I think it is certainly true that the bulk of the COMSAT people were sort of intimidated by him. Therefore, [they were] very hesitant to really get into any kind of discussion or debate with him about anything....

NG: Yes.

JC:because he could be pretty brutal in those kinds of discussions. So, you can say that dialogue was discouraged between him and a lot of people. On the other hand, I had a pretty good idea of how various people felt and it wasn't that McConnell then didn't get the in-put, but he didn't get it on a direct basis.

NG: So, it wasn't that dissent necessarily was forbidden, it just didn't go through necessarily those same channels?

JC: Yes, it was more of a....you went through channels kind of thing. He was not the kind of a guy to....well, certainly, he never bypassed me. If he talked with anybody, he told me. He told what....and other times, he would tell me to do things. He would say, "Now look, this is your job. We're going to stay in channels. You tell them;" and so on.

NG: Yes.

JC: So, it made the communications more in a line of communications, rather than direct.

NG: Because one of the perceptions that he has about his own tenure is that when he was here he enjoyed, for example, going around from office to office....

JC: He did. He did.

NG:and I wondered whether that was more intimidating for people or whether it actually encouraged more discussion?

JC: Oh, I think that was intimidating to people.

NG: I think it was intimidating, yes.

JC: He thought that he was sort of showing his openness, but when he'd barge into somebody's office, the individual would be petrified. I don't think there was any big deep discussion in some of those visits. But, it is true that he wanted to be seen and he would appear at different parts of the company, unannounced and say nice things to people and so on. But, it wasn't in the nature of, you know, trying to have a discussion on some substantive matter, but more or less the appearance that he was sensitive to the people and that everybody had an important role to play and that his presence recognized that he thought they were an important link in the chain. I think that's fine. I don't have anything against that.

NG: So, you really see that....that information was being transmitted....

JC: Not directly from the people to him, but it was getting there.

NG: And you would characterize your relationship with him as a positive one, then?

JC: Yes, I would certainly say so. We worked very closely together, as you know.

NG: Now what about....you know, we move then, into Mr. Harper, who again is, in essence, almost a step back towards a more--how should I say?--not lackadaisical, but easygoing....

JC: Laissez-faire, laissez-faire.

NG:laissez-faire type management style. How would you characterize his term here?

JC: Well, pretty much what you've said. In other words, he was interested in the future of the company and the company moving ahead, but he was not the aggressive type of individual that McConnell would have been. He basically now did have a lot of dialogue with officers around the place. Basically, he got from a lot of the people their feelings on the importance of diversification and new kinds of activities for COMSAT; the whole West Coast activity that Brown was working on under Bodman, the whole environment there of local area networks, and Cadcam, and solid state, and all that--big diversification concepts. I think that he was sympathetic to the idea that COMSAT had to diversify, that it was important to diversify in

order to provide an attractive company for people who could see opportunities to grow and expand and what have you. He was very sensitive to people's attitudes and environment. [He tried to] find and produce the right kind of a climate in which people would be happy: [through] incentives, good working conditions, receptiveness to people's ideas and new things to do. So, I think he was trying to focus on an environment that would be receptive to ideas and to encourage people to move out and to look out at broader areas and to incentivize people to do that through various kinds of fringe benefits and supplemental compensation. It was only in his time-frame that COMSAT really moved somewhat aggressively into supplemental compensation, stock options and all these kinds of things, which were designed to give people an incentive to build and then to benefit on the results of that building.

NG: Now, let me ask you a question. When Mr. McConnell decided to step down and you....and Mr. Harper was obviously considered as Board Chairman. Why, at that time, do you think that the Board didn't turn directly to you? Why again was there an intervening period, there, do you think?

JC: I'm not sure what all of the factors were at the time. You'd probably have to get that from some of the other Directors. I suspect that they felt that the sort of

combination that McConnell and I had represented was a pretty effective one. I mean, the combination of a sort combination that McConnell and I had represented was a pretty effective one. I mean the the combination of sort of an inside and outside and that was a good thing and maybe it was better to continue that kind of a format, rather than try something new. But, I honestly don't know.

NG: Okay. How would you characterize your relationship with Mr. Harper?

JC: Very good. Very good.

NG: And again.....

JC: Quite different than [my relationship with] McConnell, obviously.

NG: In what sense?

JC: Well, in terms of the fact that Harper was much more interested in sitting down with other people and, you know, getting their ideas and their pitches on various things. So, people would have an opportunity to try to sell him something and they didn't feel that they had to try to sell me. With

McConnell, that was never the problem because, as I said, the chain went right through [me] and you didn't sell McConnell independently. Whereas Harper was much more receptive to getting a pitch from a Bodman or a Brown or what have you and developing a sympathetic response to it.

NG: Now, how would you characterize your own tenure here? I mean, what were your strengths and what were your weaknesses? When I say your tenure here, I'm talking about as Board Chairman.

JC: Well, when I became Board Chairman, it was clear that we had to do some focusing, because we had bitten off some big things in a lot of different directions, and some of those bites weren't too tasty. The focus was not so much on thinking of new things to do, as on saying, "We better get our arms around some of these things and disassemble, get rid of, focus, do something." So, I would view my term as Chairman as being more one of trying to figure out how we could consolidate into something that had meaning and to regroup and then look at areas to move out in, but....

NG: So, you're saying [your tenure was] a transitional period?

JC:getting out of SBS, for example, was a very big thing

to try to do....

NG:Yes.

JC:and we succeeded in that. But, I spent an enormous amount of time with IBM and so on--Aetna--in working our way out of that one. We had the whole string of things like the cadcam operations and what have you, which had been acquired as a result of Brown and Bodman, which we had to do something about. We were having the DBS thing to grapple with. It was clear that unless we did something to stem the bleeding in the SBS, that all the other things that were in trouble....that we had to get rid of things--miscellaneous things--like cadcam, ERT, what have you, which now were not fitting. So, what I meant by consolidation is "Get out of those things that are causing heavy bleeding, get rid of those things, in some fashion, that didn't made sense and that didn't fit, while at the same time trying to develop a focus as to where we were should go." So, in the time I was Chairman, I viewed my job as being one to do this consolidation and sorting process and to try to create an environment from which we could then move out with a better focus. But, the big item that remained there, of course, was the DBS. [Inaudible]

NG: Now take a look at your entire career here. What would you

say--and these kinds of questions are just insidious, but always necessary--was the greatest achievement that you feel that you brought to the company and what was what you perceive to be the largest mistake that you might have made?

JC: Well, I think that those aren't very difficult questions, in the sense that I think in creating an international system of communications by satellites, we far exceeded what anybody thought would be possible in the time-frame in question; starting with people who didn't think it was possible at all, to people who thought it would take, you know, a long, long period of time. The fact that the world suddenly became satellite communications interconnected in a relatively short period, I think, is a source of great satisfaction. To involve that many countries all over the world [in a] rapidly changing technology and to bring that into a complete spectrum of service that's better and cheaper in a very short period of time, I think has got to be thought of as a....and that, after all, was the primary mandate of COMSAT, beyond what even the more ambitious people thought would be realistic, has got to be the greatest accomplishment.

On the disappointment front, I think I would have to put as number one and number two and I'm not quite sure in what order; the DBS thing, because there, I think, that is an enormous

potential of satellite communications. But, for whatever reason--be it timing, be it approach, be it people--we didn't quite get the right formula to bring that about in a way that would be very meaningful and where COMSAT would be a major factor. And yet, I think, that's going to happen, but we just didn't find it in the time-frame that we had to work in. As a result, we spent an awful lot of money in a way that was unfortunate. The other big disappointment, I think, has to be the domestic satellite business and the fact that we were never able to really be turned loose in the domestic arena without one and a half arms tied behind our back. In other words, we were held back. We were limited. We were foreclosed on different kinds of options and we kind of bumped around from one place to another and when we finally got there, we had new restrictions placed on us. As I think as we discussed in some detail, we got into SBS with a third party that really was not the force that was needed there, but we were precluded by having the right kind of a force by the FCC. Therefore, for whatever reasons, we ended up in a program that was sort of not up with the SBS thing which went sour. That's got to be a big disappointment.

NG: Would you say that....

JC: So, I think those were the two big disappointments.

NG: Would you say that your view of the FCC overall--COMSAT's relationship with the FCC--would be characterized overall as being a positive or negative one? We've talked on a variety of wide-ranging issues.

JC: Oh, I would say, no question, negative. In other words, we became a kind of small, easy target. Of course, all the guys that were opposed to anything that we wanted to do had a field day. They could run roughshod over the FCC staff and Commissioners and so on. We were sitting out there, unprotected, this little neophyte out there out there and they could knock us over the head right and left and that would distract them from doing more important things like focussing on AT&T's rates and other things. So, we get a big rate case, you know, we get....every time we turn around, there's some kind of an investigation going on, or a query about this, that, or we've got to provide some information on this, that, and the other thing. So....

NG: So, you think COMSAT was an easy target?

JC: Oh, extremely easy target and we had no constituency. I mean, we had no defenders, if you will. We're out there alone and [are] a nice, small, vulnerable target and they cut loose

on us. Where I do have regrets, I guess, is that we probably could have done a lot better in marshalling an information campaign, where instead of sort of trying to lie low, we had a lot of things that we could brag about and we could, perhaps with a lot more effort, have gotten a lot better treatment in the press, maybe in the Congress, and in a lot of other places, that would have begun to dent a little bit the attacks on us. Even a kind of a public relations campaign with the Commission itself, the Commissioners....

NG: Because certainly, AT&T always had one.

NG: AT&T always have. We could have assigned somebody full-time to the Chairman of the FCC and the other Commissioners and said, "Live with those guys and just tell them the good things every time they hear a negative thing, you know."

NG: Well, they used to say there was a Vice President of AT&T for every Commissioner.

JC: Yes. Well, I think that's true. Now, we may not have been able to go that far, but I think we could have done a lot more than we did. I think as a Monday morning quarterback, I think it would have been justified to spend a lot of money in "public

relations" in the broad sense; by that, I mean the Congress, the FCC, etc., and with the media. I think that the attitude of McConnell, in particular, was against that sort of thing. In other words, he did not believe in big campaigns of that type, that our work would speak louder than words. In other words, if we did our job and did it right, that was the best answer and the hell with anybody says.

NG: To be right is to be moral...

JC: So, he wasn't for any big budget in this area. Of course, was sort of Mr. External, you know.

NG: Yes.

JC: So, the result was that we did not have a big budget for a program of this type. On the other hand, I've got to think that, in retrospect, that we could have at least modulated some of the pressures that were put on us. We might have been able to build up some sort of a constituency in the Congress and other places with that kind of an effort, [a constituency] which we didn't have.

NG: You talked a little about the issue of AT&T sitting on the Board and the other carriers and some of the hardship that that

imposed on some of the limitations that were there. One of the things that in the legislation that had been intended to counterbalance that, was the Presidential Directors. I was wondering whether you felt....and obviously Mr. Meany sat on the Board for quite some time, and Mr. Donner sat on the Board for quite some time and Mr. Haggerty. Do you think that the Presidential Board Directors actually fulfilled their purpose in terms of representing the public interest in COMSAT?

JC: Well, I would say so. In other words, first of all they gave to the Board a kind of an image that the country meant what it said in the Communications Satellite Act, that it was the policy of the United States. After all, here was the ex-Chairman of General Motors, here was the AFL-CIO head. I mean, this wasn't just an ordinary company. The United States attached great importance to this company, otherwise the President wouldn't put those kind of people on the Board. So, we had a special aura, that in fact, we were a special type of a corporation. The United States had said it is the mission of this country to establish [satellite communications] and so on. [Having the Presidential Directors was] a re-affirmation that they really meant it. I think, without exception, the Presidential Directors have always worked in a frame of what's best for the company. I haven't, in my mind, distinguished them from any other kind of a Director. They looked at all the

issues objectively and there was no particular angle that they introduced. It was an honest debate as to what was the best thing for the company to do. I think they all recognized that the carriers, when they were on the Board, had mixed kinds of emotions and responsibilities and that they had their own axes to grind and that that was recognized. When things could come down to a final issue, I think every Director factored into his mind that there was a little bit of an angle in what the carrier Directors had said. So, I think all in all, the Board has been very good at looking at these kinds of questions. With other people, I could imagine quite a different result.

NG: In what sense?

JC: Well, you could visualize that if you would have gotten six Ted Westfalls....[laughter]

NG: Six Ted Westfalls, three Joe McConnells, and....

JC: Yes, you'd get quite a different result.

NG: Yes.

JC: The particular individuals that ended up on the Board I think did an extremely good job in keeping the thing in the

right perspective.

NG: Name for me five people that you worked with, whether on the Board or as officers of COMSAT, who you felt were the most important people that you worked with, who made the biggest impact, as far as you were concerned, were the most....that you had the most positive ongoing relationship with. I'd like to....if you can exclude....if you're going to include McConnell and Johnson, don't. If you're going to exclude them, tell me that you would exclude them.

JC: No, I wouldn't exclude them.

NG: Okay, well then don't exclude them.

JC: I don't know why you say that, but anyway.

NG: Well, just because it's too obvious.

JC: All right, well then tell me why it's not too obvious.

JC: Well, I think from what I have said, you would probably have gathered that I would name them.

NG: Right.

JC: If that's what you mean by too obvious, okay.

NG: All right.

JC: I would say that the credit, a lot of the credit in the early years would have to go to a guy like Sig Reiger.

NG: Okay.

JC: On the technical end, certainly, throughout the whole period, Sidney Metzger. How many have I got now?

NG: That's only two. You don't have to limit....you can be as liberal as you want with that, or as conservative.

JC: I'm just trying to....you mean the positive, now?

NG: The people that you felt had the biggest impact and that could be a positive or a negative impact.

JC: Oh well, if you're going to throw in the negative impact....

NG: Well, whoever you feel made a dent in one way or the other.

JC: Well, I think you have to say that Dick Bodman was a big disappointment because so much was expected and so many problems were created.....

NG: Okay.

JC:that you'd have to put him in the negative category. So, if you wanted to include both positive and negative, he would certainly be in there. I think I'd take great satisfaction out of the fact that we created a situation where Irv Goldstein could succeed me, because it was completely out of the pattern of the company. Here was a guy who had started just as an attorney and we had developed a kind of a career path....

NG: Certainly.

JC:and built him along that career path to the point where he finally ended up as Chairman. I take a lot of satisfaction in that, because one of the things that we probably didn't do very well was in career development for people. In his case, it worked out superbly. So, I think here was a guy who, despite all the vicissitudes and so on, was able to move ahead, was able to assume greater responsibility, and finally came to the top of the heap. So, I think you've got to put him in the

list of guys who, you know, went through the whole cycle here. There weren't very many people....

NG: No, there weren't.

JC:because he produced a kind of a confidence on the part of the carriers that there would be a responsiveness to their operational needs, [an attitude of,] "The customer's always right," kind of thing. They were comfortable with him and I think that a lot of the growth in the traffic that AT&T came up with and using satellites as against cables in different parts of the world was because they felt that there was going to be an operational responsiveness to their needs, that here's a guy that they could work with and talk with. He wasn't going to give them a big, hard time....the twelve reasons why something couldn't be done. I guess the bottom line is sort of an operational confidence. That created an atmosphere in which the traffic, the international traffic could grow. That was terribly important. Now, in many other respects, he may not have been, you know, the great leader or anything. But producing that kind of an aura of confidence on the part of the users, in that lifetime, I think was a very important contribution. Have I run out of names?

NG: You can stop if you want.

Roger Cochetti: You did five.

NG: You did five.

JC: I'm just worrying that I have either not mentioned somebody who....

NG: I mean, there have been a lot of people and it's a question that comes out of right field. You haven't thought about it.

JC: Where we've had the greatest weakness is sort of fairly obvious, in the financial area and in the public relations area. We've already talked about the public relations in some detail--that had we really developed a strong element there and had we had the budget and the resources to dedicate in these critical times-frames to saying good things about COMSAT and projecting the image which, I think was pretty positive, of things that we had done, we could have modulated, at least, some of the negatives. But, there we never had, for a whole variety of reasons, the kind of leadership that was necessary. The financial area was weak over most of the early period.

NG: How did you characterize your relationship with John Johnson?

JC: Well, I would say [it was] very good. In other words, I had great respect for him in the tremendous job that he did in the whole international thing. I think that when we got into the COMSAT General activities, that on some issues, there were perhaps were stronger differences of opinion. I think in the international, we never had much of a difference of opinion.

NG: But you were also fairly independent of each other at that time, would you say that, no.

JC: Not really. Not really. In other words, I was involved in some of the international contacts. I went with him to all different parts of the world. He would do the original trip, then we'd come on to try to close it out. So, I think in the international, there was hardly any difference of opinion on anything. When he took over COMSAT General, he of course, had different ideas on the domestic.

NG: Yes.

JC: Left to his resources, he would have gone for a separate system, exclusive of AT&T or IBM or anybody else. We discussed why I think that that wouldn't have worked. But, on that one, I think he was always unsympathetic to the deal that we made

with AT&T and to the adventure with IBM. So, on those, we had lots of differences. I think that in his COMSAT General leadership, that there developed a kind of a....I want to call it a schism between COMSAT General and the rest of the organization. In other words, COMSAT General tended to be kind of a closed body....[an attitude of] it's ours....it's [a] we against they," kind of thing. You're either a loyalist or you weren't. [Johnson's attitude was], "My guys are better than your guys and I don't want any of your guys. I'm going to give my guys....my guys can always do the job better than any of your guys." So, whereas one would have hoped for a lot of flow of people in and out of COMSAT General, I think Johnny ran it pretty much as his own little fiefdom. That tends to produce some problems now and then. [It] produces problems in people. It produces problems in relationships--different parts of the company working together--certain frictions. But, that's about the only negative thing that I can say about Johnson, if you want negative things.

NG: You don't have to say anything negative at all, if you don't care to. Let me ask you one....

JC: But, he was obviously a great asset and I put him in your list of five guys who had the biggest impact on [the company] because certainly, he did a fantastic job in the whole

international arena.

NG: If you could just bear with me one second [Replaces Tape]

Let me ask you a more forward-reaching question and take us out of the past and bring us into the future and to the present a little bit better. COMSAT is moving into a relatively new era now. There's new management, with some new attitudes. There's some certainly new challenges from the notion of separate systems, internationally from the fiber optic cables. What's your image of what COMSAT's requirements are for the future and how they're going to be able to meet the challenges that are going to be posed to them?

JC: Well, I would simply say that I think that's the kind of natural extension of what I was saying a little while ago--that when I became Chairman, we were kind of in the process of consolidation and getting rid of things that didn't fit and so on, and trying to get ourselves into a position where we could, in a more logical way, look at the future and the kinds of things that we should place our bets on. I think that now, with new management and so on, that it is very appropriate that they should now try to develop a plan as to where they think the opportunities are for COMSAT and to determine the kinds of things that are needed in order to pursue these opportunities.

That may require different kinds of skills, different talents, and so on. But, what COMSAT needs is to be a company that can grow, and I think grow on its technical reputation, because we have an excellent technical reputation. I think with the speed at which technology is evolving, we must maintain the deserved reputation of technical leadership. If we become just an ordinary company, then I think we're going to have a very difficult time. But, we start out with an excellent technical reputation, which we should be able to maintain and build on. Then, it's a matter of selecting those business opportunities that we think are most suited to the size of our company, our experience, and the rest of it, and pursue those. Those can certainly be different than what we've done. I think there's still a bit of the consolidation process left, because we still have the problem of these high-powered satellites....

NG: Satelllites.

JC:and some of the residue of DBS to deal with. So, there's a little bit of consolidation left. But beyond that, I think it's a question of, what are the best opportunities, and what kind of resources do we have available to apply to those new opportunities, and what kinds of skills, capabilities and so on do we need. So, I think that the mission is fairly clear. The specific elements of the strategic plan, of course,

are something else again. That's where the whole wisdom of what we select to do now will be tested at some time in the future.

NG: Do you feel that fiber optics and/or the separate systems issues poses a big obstacle for COMSAT in the future?

JC: Well, I think the fiber optics is a very important thing. We cannot minimize that as a competitive force to the future extension of satellite communications. I personally can't get really excited about separate systems being a big factor, but I think that in optical fibers, we have enough of a competitive force that we're going to have to be very clever about the kinds of satellite systems that evolve if they are going to play the proper role in world communications as against optic fibers.

NG: Always at the end of these interviews, and this is a ridiculous thing to ask you at this point, but--I mean, we've spent maybe ten or twelve hours doing these interview....is there anything that you feel we've sort of grossly overlooked, or that I've grossly overlooked in the way that we've conducted the interviews or the kinds of issues that we've brought up, that you feel are important and you feel like you haven't been able to interject in the discussion?

JC: I don't think so, but....

RC: Can I add a management editorial comment, which is that after we've gone over these tapes, one of our objectives is to see if there are any gaps that we can determine and we may be coming back to you.

JC: There may be gaps, but I can't think of any offhand.

NG: Okay, I mean it's....we've had so much discussion.

JC: But, what I would think that....the information that you've gathered and different opinions from different people who may have seen things from a different perspective and some of the background on how decisions were made and the reasons for that, can certainly provide a reservoir of very valuable information, because the differences of opinion and different forces are going to be with the company forevermore. I think it's easy to be a Monday morning quarterback and say, "Well, hell, if we had done this or if we hadn't done that, it would be a whole different ball game." Of course, I always believed that we should have done something else, and if we'd done it my way, it would have been a different result. But, I think that it would be very productive, particularly for someone who is looking at

strategic planning, to sort of go through this kind of material and sort of see if there are lessons there that can be learned. I mean, we're talking about very important issues with, at that time, the picture not being at all clear as to what's going to happen. We have all political forces and regulatory forces at work, international forces, the FCC, Congress, and what have you. You see different attitudes of different people, and proposals as to how we might improve things or do things better, and I suspect that if you were to do another thing like this, say, in another ten, fifteen years, regardless of what you'd think, you're going to find enormous similarities.

NG: I have a feeling that you're probably right. Plus ça change, plus c'est la meme chose. [Translation: The more things change, the more the stay the same].

JC: What's that saying that someboy says? "Those who don't read history will relive it or something?"

NG: Condemned to repeat.

JC: Bound to repeat it. Therefore, I would simply end on the note that I hope that somebody who is involved primarily in strategic planning and projecting the image of the corporation

can find in this reservoir of material, some lessons and some things that could be useful and say, "Well, they didn't do that at that time and had they done that, they could have had a difference. So, maybe, we'd better do that." So, I think in planning for the future, in looking at those different kinds of things that we do--both internally and externally--there might be lessons in what we have done here and I would hope somebody does that.

NG: Okay. [Interview End]