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ORAL HISTORY 2 TRANSCRIPT

JOHN W. O'NEILL

INTERVIEWED BY CAROL BUTLER

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BUTLER: Today is July 20, 2001. This oral history with John O'Neill is being conducted for the

Johnson Space Center Oral History Project in the offices of Signal Corporation in Houston,

Texas. Carol Butler is the interviewer and is assisted by Sandra Johnson and Kirk Freeman.

Thank you for joining us again today.

O'NEILL: My pleasure.

BUTLER: Last time we talked through a good portion of your career, and we worked up to some

of the most recent activities you were involved with. So I want to pick up today talking about

some of your involvement with the Shuttle-Mir program and the beginnings of that agreement

with Russia over there and building that connection between the two operations groups and how

you would support the people over there, the U.S. citizens working in the control center in

Russia, that sort of thing.

O'NEILL: Yes.

BUTLER: If you could tell us a little bit about how that all worked.

O'NEILL: Well, at the time that we really entered into operations development for the Shuttle-Mir program, there were so many other things going on also in the directorate that we decided to focus most of that activity in our flight director's office, as I recall, arranging that. Of course, we stayed very much in touch with that, but some of our flight directors definitely had the lead in working the interface with the Moscow control center, how we would arrange all that. We very much stayed involved with all of the requirements that were being put in place and the protocols on who would do what and how we would reach agreement on operations matters during the mission and all of that. But it was very much focused in our flight control elements and in the flight director's office.

BUTLER: Did you have to get involved at all more on a level where diplomatic concerns came into play?

O'NEILL: Yes. I can remember conversations with the Russian gentlemen who were the leads in their operations field, and they wanted to make sure that we understood their level of experience and expertise and that it was their program and that things would be operated in the way that they had evolved. It was a matter of recognizing their way of going about training and operations and all that.

So it was a learning experience, and the two cultures are somewhat different. We stress training in terms of workbooks, simulator scenarios that investigate the crew response to all possible malfunctions and anomalies and all that. They certainly prepare their cosmonaut crews to handle situations, but they do it through, I'd say, in-depth system education that's broader in

scope. They tend to not operate quite so much with handout written materials and all of that and computer based training as we do.

At that time, they did most of their training by classroom instruction to the cosmonaut crews and then our people with them. And then evaluations in a simulation kind of environment, they rely on testing and evaluations of that type. So I would say they do a more basic, "Understand what's behind the engineering of the systems and all that and then you will be prepared to operate the systems and repair things that come up."

We go directly at a detailed understanding of not only the theory and the engineering behind the systems but practice on specific failure scenarios to a greater degree. So, bringing those two cultures together was interesting.

BUTLER: That definitely would have presented some challenges.

O'NEILL: And they're still doing that today. I mean, that's how they're having to work things out.

BUTLER: Were you involved at all in setting up the agreements as to how the operations would be managed for the Space Station when that came into play?

O'NEILL: Yes. Again, in terms of having a mission operations and NASA human space flight operations' outlook and philosophy incorporated in those agreements. But there again, we had people who were traveling a great deal to Russia and working the details of that, and of course we were working with the program, too, to provide our ideas. Most of the dealing were in

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working groups and committees set up by the programs, where yes, MOD did chair some of that

activity, but most of it was chaired by the program and we played our role in trying to reach

agreement on operations.

BUTLER: Certainly some interesting things that were going on during that time frame.

O'NEILL: Yes.

BUTLER: Well, around this time, too, and as these agreements were all being worked out, you

became involved with the Operation Streamlining team which transitioned into the base

operations office. This appeared to be a NASA-wide-type organization to begin with.

O'NEILL: Yes, it was NASA-wide. I might mention that undoubtedly was the very busiest time

of my career because simultaneously I was at that time the director of the Mission Operations

Directorate [MOD]. I was also either on the board of Space Center Houston, which was quite an

interesting thing in itself, and we were going through some financial problems at that time and

having to deal with the debt service and really getting set up for a business-like approach to the

long run.

Then we were trying to get the Space Operations Management Office approach. We

didn't call it that initially. The whole SOMO and later the Consolidated Space Operations

Contract [CSOC] came about because of—well, I guess three or four basic reasons. Most basic,

it was felt on the part of NASA headquarters and the administrator himself, Mr. [Daniel S.]

Goldin, that it was time to leverage the capability that had developed in the commercial world.

While NASA and the DOD [Department of Defense] were certainly instrumental in pursuing the first tracking and data retrieval from space kinds of capabilities and had developed a tremendous capability to support their programs and our programs at NASA, it had spawned an industry.

By the time we were thinking about the space operations approach, industry was spending far more on new capability. They were spending more on research and development relative to new capability than the total NASA budget. So it seemed time to take advantage of what had happened out there in the commercial sector and in industry.

So that was the number one idea, and embracing industry practices to streamline and become more efficient was a part of it also. There was definitely a feeling that too much of the NASA budget—and we've always had these budget problems, but we were really in a squeeze—too much of the total budget was having to be earmarked for operations support and that if we consolidated in some areas, took advantage of the economies of scale in such a consolidation, if we, instead of duplicating all necessary expertise at every center, had some centralized source of the specialized expertise that's so important in that field, that would contribute to the efficiency.

Then, at the bottom line, we could reduce the resources required to support operations, both staffing and money, and therefore put more into the programs. It also implied—and this became the big obstacle—a certain level of loss of control in their minds at each one of the centers. The centers had every right to worry about that, and they never quite got over that concern. It was so important to most of the centers that they have near total control over their data and mission services support at their center.

So some of the consolidation ideas and centralization ideas didn't go as far as originally intended. But still, money has been saved. The budget was definitely reduced at the beginning of the whole effort, and they have managed to continue to provide good operations support

throughout. So it was a good idea in that regard. It hasn't accomplished its total goals of maybe the level of cost savings or the amount of consolidation. Maybe those weren't solid goals. I'm not sure.

BUTLER: Just in conjecture and in looking at this idea, do you think it's something that, over time, will continue to grow like into Space Station and that the space industry will move in that direction in general?

O'NEILL: I think they will simply because of NASA's need to concentrate on its research and development mission. If we are ever allowed to pursue new programs, particularly planetary programs involving humans and all that, that's going to require this tremendous amount of talent and that available in the agency to concentrate on those programs, and there will be more of a tendency to look at what industry can take care of in the way of basic operations support and infrastructure.

And they'll continue to develop and lower the cost of these services. A good many of these services that used to be so specialized when NASA and DOD were developing those kinds of things are now almost commodities that you can buy, if not by the yard, I mean, you can contract for them in a pretty direct way with industry.

I failed to mention that aspect of getting space operations started. It was felt that there was the possibility that if programs and projects were more accountable in a full-cost accounting kind of mode for the mission and data services they were requiring, then they would be more careful, they would be maybe not quite so ambitious in all the services they wanted, and that it

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would just be a more efficient way to approach the literal purchasing of services to support the

projects. So that was in the picture, too.

BUTLER: You mentioned a little bit that some of the centers were concerned about the loss of

control.

O'NEILL: Yes.

BUTLER: Was there also just hesitation in general about such a different way of doing things?

O'NEILL: There was, and I really want to be fair to the centers and the programs and the projects.

It wasn't just that they totally wanted control for control's sake. NASA's programs are always

evolving at a pace that, what you are sure are your requirements today as the program evolves, as

you get results from the program, or as the development process goes forward, your requirements

change. So that defeats some of the fixed price, "We know exactly what we want, and we'll just

contract for that." It defeats that particular approach, which is more common in, you know, the

telecommunications industry. So these people were concerned about what process they'd have to

go through, would the whole thing be flexible enough to support them?

Indeed, one of the problems, if you want to term it that way, on that whole contracting

arrangement is that there's been such growth in the requirements since the contract was originally

let. At quick glance, if you look at the total amount of money required, it makes it look like,

well, they weren't as efficient as they should be. You have to take into account what was added

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to the contract after it was originally put in place. So it's an interesting challenge, like most of

the challenges in operations in NASA.

BUTLER: And then it's still a relatively young challenge that's been started, thinking of the age of

the space program and all.

O'NEILL: Yes, and we took advantage early on of a lot of things that came from the DOD. For

what it's worth now, the DOD is looking very hard at the experience in SOMO and CSOC, the

positives and the speed bumps that were encountered, because they are considering privatizing

the ranges, the eastern test range and the western test range. So they're trying to learn from

NASA's experience.

BUTLER: Well, that's good that they're able to build on that, and maybe it'll be of benefit to both

agencies.

O'NEILL: Yes.

BUTLER: You've mentioned a couple of times throughout as we've been talking some of the

budget challenges that came across, especially in the later days of the space program as you

moved up into management. How would you deal with budget challenges in general on a

management level, on a personal level? Because they did persist throughout so much of your

career. Was there any thoughts you have on that or any one way that you would find most

effective?

O'NEILL: Well, you would go through the basic budgeting process, and everyone seriously tried to get their requirements defined to be as austere and that as you believed you had to have to operate. You would work that budget up through the system and try to defend it and try to show what would happen if you didn't get that budget. Then the marks would come back and they'd be a little less, or maybe quite a bit less. So you would just plain have to defer capability.

I mentioned that, early on when we were first flying shuttle, we had to do it with basic architecture and tools on the ground that were left from the Apollo program. It took a long time to get the money to build new ground operations support capabilities and all that. You were always very reluctant to, in any way, compromise anything that had to do with the training of crews, the training of flight controllers, and the staffing of the flight control teams. So generally it meant that new capability that would have allowed them to do a better job or a more efficient job, you kept pushing that off into the future.

And that was just when you first got the marks against the budget. Then you would go through the year, and you sincerely believed you'd done everything you could, you just couldn't take out anymore, and then you'd get another 10 percent cut or whatever. And we'd all scramble and work with the contractors, and that's when the team really comes together, not in a defensive way. I mean, when a budget decrease was decreed, the contractors and our MOD team would go to work on it, or our SOMO team, and we took big budget reductions in the early years of SOMO. We'd work on it, and we'd prioritize and just take things off the bottom of the list. That was the only way we could approach it.

BUTLER: Certainly a challenge that's probably going to be around for a while.

O'NEILL: Yes. Yes. I think it's only going to get tougher for everyone.

BUTLER: Is there any thoughts you have on how more support could be generated for the space program, either on a general public level or a congressional level for budget? Or does it need to become commercial?

O'NEILL: I think we have to depend almost totally on our contractor friends because they are allowed within their operation to literally have a public relations campaign and do some level of advertising. As you probably well know, NASA is prohibited from spending money on direct advertising. So they have to rely on the public being interested enough that it will come to the web sites and whatever that NASA's set up.

NASA's always been so open about their operation, and if you just ask, NASA, all the centers will just provide all the information they can, and they try to do it in a really straightforward and interesting and attractive way of packaging the information about their programs. But there has to be such a large element of "Come to us, and then we'll tell you."

I don't think, unless there's a problem of some kind, the public has NASA on their mind. It doesn't quite tend to come and ask about these things. So I think we need to have a more coordinated program through the contractors, who can, as I said, spend some amount of resources on that. We just need to keep what's being accomplished in the agency.

How many times here in Houston do you see where some application of space technology is helping someone in the medical field and all that? I hope that's happening across the country. I think it may be that it's a little more in Houston because we're here and there's this close

relationship with the medical center. But I guess we have to just keep trying. It's not number one on the public's interest list right now.

BUTLER: Unfortunately, and as you said, the big things that you cover in the media are usually things that are going wrong.

O'NEILL: Yes. And that goes right back to the funding problems that we do have. Unless the people in the Congress and unless the White House feels that there's tremendous public support and that there's a real constituency for space, it's not as high on their priority list as their allocating funding.

Now, I don't want to be unfair. Overall and particularly some individuals in Congress really try to be forward looking, and they realize they have to support technology pursuits and all of that to keep the country moving. But it's tougher than it once was, certainly.

BUTLER: Hopefully, the interest in the space program, which is still there even if it doesn't come out as much, because it is such exciting and different thing, hopefully that will stick around for a while.

O'NEILL: Yes. I can't help but be encouraged by the reports you get from the astronauts or the people that go out on public appearances that they always draw a very large, interested crowd, a lot of enthusiasm, particularly among the young people. So interest hasn't died off. It's just not quite at the level it once was.

BUTLER: You mentioned earlier that during the time that you were working on SOMO and being director of the MOD, you were also involved with Space Center Houston. This is one area that the public can get some exposure to the space program, but it did have some growing pains in there. If you could tell us a little bit about, first, how you got involved with the project, and then how it progressed.

O'NEILL: Well, I was on the board of Space Center Houston mainly because of my role in the Mission Operations Directorate. I was the deputy in MOD, I believe, when I was first on the board. The way the board is set up, outside members predominate, but there has to be five, I think, NASA members on the board, and the board chairman is traditionally a NASA person.

It was important to have someone from MOD because the public tour of the center and a whole lot of what they would like to display in Space Center Houston had to do with the operations, and we fortunately or sometimes unfortunately are in the limelight because of the control center and all of that. So it was considered to be a positive thing to have someone from the astronaut office and someone from MOD on the board. So that's how I got involved right from the start.

The people that really got the whole thing going were Bill [William R.] Kelly, at that time the director of—I don't know how well I get the name right. It isn't Center Operations—but it was the Center Management Directorate, and Hal [Harold S.] Stall, who is the head of Public Affairs, it was really Hal Stall's vision, and it took his enthusiasm and energy and dedication to keep the whole thing going.

So at first it was, what is the concept, and can we raise the money? And it had to be outside money. There was a very definite limitation on what NASA could do. A small amount

of funding was authorized by the Congress, and, frankly, it was equal with some amount of inflation to what was granted to KSC [Kennedy Space Center, Florida] years ago when they were putting their visitor center in place. But you could only tap that funding in very specialized cases. In the end, it was only used for the improvements on site to allow visitor access and that to buildings and facilities on site.

The rest of the money had to be raised through a bond issue, donations from major companies, and all that. So the first part of it was a big fund-raising and bond issue kind of thing. The county and all that helped by issuing the Manned Space Flight Education Foundation bond package and all of that.

Then we embarked on finding the people that could do the planning and all of that at the facility. Fortunately, the Disney organization—I should mention that Marty Sklar, who is the head of [Walt] Disney Imagineering, the engineering branch of Disney that builds their different venues and is really on top of all the fantastic development they do at their visitor parks and all that, he was a part of the board also. But we were fortunate enough to engage Disney's interest, and they steered us to the Bob Rogers Corporation [BRC Imagination Arts], an independent design and development and concept firm that did a lot of Disney's work, and they started putting the conceptual plans together.

Then we engaged an architect. By that time, Madison Avenue had gotten behind the bond issue sufficiently so we went ahead with the plans. At every step along the way, the board and people from the center that we would bring in and get involved advised us on what the exhibits, what the venues and everything, would be.

It took a little longer than we planned, ended up being about a 70 million-dollar investment overall, but I think it opened in '92.

We didn't quite have the visitor traffic initially that we had hoped for so there were some issues about servicing the debt, servicing what we owed on the bonds and all of that, but we engaged financial consultants who helped us restructure the debt and restructure admittance and all of that a little bit. So I think they're on a pretty solid basis.

They embarked, in the management of the center, on pursuit of venues that had a little more appeal to the youngsters. It was intended all along to really educate people about the space program, and I think the center did a great job of that right from the start. But you're talking about families' discretionary entertainment money, so there'd better be a pretty large entertainment element along with the educational element, and I think they've done a good job of balancing that now. So I think they're on solid ground. I'm proud of the facility. I'm always pleased to take people over there.

BUTLER: It's pretty nice. We go over there whenever we have new interns that come in to help with the project, give them a chance to get an idea of what the early programs were like.

O'NEILL: Yes. I particularly enjoy the films that are made up of old footage and then the new film that was developed. That really helps explain a whole lot of what the program's about to people.

BUTLER: When you were putting this together, as you said, there was opportunity for visitors to come on site, and they did take tram tours of various locations, which include the new Mission Control Center. Were there ever talks about access to the old Mission Control Center, or is that something that's not really possible to have the public be able to go in?

O'NEILL: Well, there would be quite a facility expense related to that. I'm not sure what the recent planning is. Yes, from a historical sense one of the Apollo control rooms is still maintained much as it was. It's a national historic site. I mean, the displays and that aren't active in that anymore, but it's still there.

One of the things that makes it rather expensive to provide access to any of these facilities is the access that you have to provide for people who have physical problems. It's very difficult to figure out how you can bring people in and take care of getting them to upper floors by some elevator path that doesn't now exist that won't interfere with everyday business. That's the big thing about all the tour activity, it cannot interfere with day-to-day training or operations activities.

That's also the great thing about the tour. They're actually watching real things going on, but in order to allow the public to do that and not interfere with or distract people who are carrying out those activities is a challenge. That put a little bit of a limit on what you could do.

BUTLER: I certainly understand. They are doing an important job.

O'NEILL: Yes. But that's one of, I think, the really great things about Space Center Houston. There is no venue or mock-up or anything on any level that's not completely accessible, and I think that's wonderful. It's not only required, but I think that's a very, very good requirement. You really want to open it up so that everybody can see.

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BUTLER: Absolutely. They always seem like they're having fun whenever I'm over there. You

can see the kids having a great time.

O'NEILL: Yes.

BUTLER: You eventually did move on and retire from NASA.

O'NEILL: Yes.

BUTLER: And you've moved into consulting. You work with USRA [Universities Space

Research Association] and I believe you're in USA [United Space Alliance] to some extent. Can

you mention anything about some of your reasons for moving on? Was it just time to move into

a new area for you?

O'NEILL: Well, a whole lot of it had to do with the Space Operations Management Office and

the impending CSOC, or Consolidated Space Operations Contract. I was already sixty-seven,

nearly sixty-eight, years old when I retired, and I really felt that the people who would manage

and operate the CSOC contract and SOMO, in the long haul, needed to be the ones in place when

the RFP [request for proposal] was finally issued and when the Source Evaluation Board was

really going through their activity.

I was there through the issuance of the RFP for the Phase A studies, and I stayed through

the completion of that, but when you are going to go for the long-haul contract, it really seemed

to me that I needed to move on and turn it over to the people who would really operate and manage the contract for the long haul. So that was a big part of my decision.

And age-wise, it seemed like the right time, although I only stayed really retired for about six months and found out I wasn't as ready to—mainly not interact with the people. I missed the people. I missed being involved in what was going on. I know I've repeated this to a lot of people, but I do have to say it's nice to not be any longer responsible for the budget or those budget cuts or for the personnel matters. But I just couldn't get away from wanting to be involved on the program. So if there's an area where I really think I can contribute and the company thinks I can contribute, yes, I work at it. I try to.

BUTLER: Can you tell us a little bit about what you've been involved with at USRA? Since that's dealing with students, it must be a slightly different area for you.

O'NEILL: I do not have that much to do with the student activity at USRA. That is handled by Barbara Rumbaugh-Hammond. She is the manager of that activity.

In the Houston operation they also have a small subcontract with the CSOC contract with Lockheed-Martin [Corporation] and Honeywell [International, Inc.], who are partners on that. That small subcontract mainly has to do with the providing of liaison and interface with the research communities, who are, in the end, the true customers of mission and data services and what NASA does.

So one of the things that USRA does is they conduct periodic science working groups where the participants are well-known researchers in the different disciplines involved in space research, and it provides for interaction between CSOC management and these researchers so

that they can let CSOC know what's going well and where they think something would really benefit them in the future or something that could be improved upon. So it makes for a very constructive interaction. USRA handles that.

But USRA is involved in many areas. They operate the Lunar Planetary Institute [LPI] here. Well, they operate institutes for NASA at five other NASA centers, also. So they're involved across a wide variety of fronts. They keep an eye on new activities like the utilization and operations management process for Space Station, where some people in Congress and some people in NASA even feel that that activity would be better managed by a non-profit who is outside NASA but in close contact with the research community. So we're tracking those kinds of things.

BUTLER: Well, that's certainly an important bond there with the research community and then, on the opposite angle, with the academic community in a different way. That's very interesting. I hadn't realized that they were involved in all of that.

O'NEILL: Yes. They have a much broader base than a lot of people would think.

BUTLER: That's great. Hopefully, that's all working out well for you, in that you're able to work when you want to.

O'NEILL: Yes. Yes. I end up with the inevitable conflicts of different companies that I'm working with having important meetings at the same time, like working for NASA when you were always having trouble keeping your time and schedule together.

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BUTLER: I think sometimes it's hard to avoid in any job.

O'NEILL: Yes.

BUTLER: Looking back over your career with NASA, it took a lot of different people to make

everything happen, make it all come together for the various programs. Are there any

individuals that had a significant impact on you personally or that you think were had a vital

contribution to the program that you'd like to mention?

O'NEILL: Well, you could take almost every one of the people I worked directly for: Jim [James

W.] Bilodeau, who was the division chief that I worked for for many years, Gene [Eugene F.]

Kranz, Warren [J.] North, who was head of the Flight Crew Support Division when I first came

to NASA. And then people in program management and directorate management. I know I've

mentioned Chris [Christopher C.] Kraft [Jr.]. I mean, you couldn't help but be affected by his

ability to stay on top of the situation and really determine what was important and zero in on it.

I do recall that some time ago, when some of us were asked to fill in a questionnaire

about what we considered to be the important traits and that for NASA management, at the very

end they said, "Well, who is your hero? What person stands out most in your mind?"

Bob [Robert R.] Gilruth, of course, he was the center director. You didn't have so much

interaction, but we work in an environment, and I'd like to think it's still that way today, where if

you had a better idea or you thought there was a problem that really needed to be addressed, in

pretty short order you could be in front of Dr. Gilruth or in front of the program managers explaining what you thought needed to be done.

Now, you'd better have some solid backing for your thoughts, but I was just so impressed that these people would take the time to give you a hearing. Of course, you went through some reviews in your organizations to make sure that these were appropriate topics to be surfaced, but when you did have any chance to interact with or observe Dr. Gilruth or the guy that I named as my hero, George [M.] Low, they were so professional and they listened to everyone at every level and gave what they had to say due consideration. They didn't tolerate frivolous things, but they were just such professional managers and just drew the best out of everyone, to the degree that you couldn't help but be impressed. It influenced how you thought you ought to operate.

I'm sure forgetting a lot of people. I mean, golly, the Glynn [S.] Lunneys and Bob [Robert F.] Thompsons and all of those people who were so outstanding.

BUTLER: Certainly for such an endeavor as the space program, especially in the early days, coming up with everything fresh from the start, it did take some outstanding people.

O'NEILL: And another guy that really deserves a lot of credit, I think, for keeping things together and he had such an uncanny feeling for people was George [W. S.] Abbey. He had more to do with the shaping of the good, young management capability in MOD than anyone I could think of because he was just in touch all over the place and was constantly bringing in someone, saying, here's a guy or here's a young woman that you really need to consider, which meant you'd better really consider them. They always performed so well. He was a very good judge of people in that regard.

BUTLER: That's fortunate.

Well, looking back over your career again, as well, what would you consider personally to be your biggest challenge and, conversely, your most significant accomplishment?

O'NEILL: As spectacular as the accomplishments were on Apollo 8 and Apollo 11, yes, I'd go back to the Apollo era, even though, you know, the first flights of shuttle were so amazing. Apollo 8 and Apollo 11 happened pretty much as planned. So I tend to think more about having to handle the situation on Apollo 13, having to handle the situation on Skylab that wasn't life threatening but it was certainly program threatening. The way that we all came together and came up with things that had never even been thought about before to resolve the situation, yes, I'm very proud of what we did there. My part was mainly on the procedures end, but on the other hand, it took that to implement what the rest of the organization, including the contractors, came up with.

Then beyond those kinds of things, maybe most people wouldn't stress this kind of thing, but several times I was asked to, at the center level and at the directorate level, get involved in trying to restructure and do the best you could of breaking down some organization barriers and working things out so that it became a more effective organization. I'm proud of what we accomplished there in many cases. I know that doesn't immediately come to most people's minds, but you really had a lot of people to deal with and a lot of cooperation to develop, where maybe it wasn't there initially. I'm proud of our handling of those things in such a way that it didn't create a lot of animosity and everyone worked together, and it worked out fairly well.

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BUTLER: It certainly did, and that's certainly something to be proud of in all of those cases.

I'd like to take a moment to ask Sandra and Kirk if they had any questions for you.

Okay. Well, is there anything that you can think of that we haven't covered that you'd

like to mention or any final thoughts?

O'NEILL: No. Just how great it's been, the years working with NASA. I never could have

imagined as we're driving into Houston coming here from Albuquerque [New Mexico], how

things would unfold and how really interesting it would be and what great people I would work

with. It's still so good to see them, and it's still a pleasure to look back on what we've

accomplished over the years. So it's been a great run.

BUTLER: That's good, and it's very fortunate that you are able to say that.

O'NEILL: Yes. I really feel that way.

BUTLER: Well, we appreciate you sharing those experiences and that great run with us.

O'NEILL: My pleasure.

BUTLER: It's certainly been very interesting.

O'NEILL: Yes. The years really got away.

BUTLER: They do. They go by very quickly.

[End of Interview]