NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT EDITED ORAL HISTORY TRANSCRIPT

DUANE L. ROSS INTERVIEWED BY REBECCA WRIGHT HOUSTON, TEXAS – APRIL 19, 2013

WRIGHT: Today is April 19, 2013. This oral history interview is being conducted with Duane Ross in Houston, Texas for the Johnson Space Center Oral History Project. Duane has worked at the Johnson Space Center since August of 1967, serving most of these years as a member of the Human Resources Branch, including manager of the Astronaut Selection Office. Among his other duties as assigned, he was asked—I believe in 1995—to start an oral history project for the Center. He visits today with the JSC History Team of Rebecca Wright, Sandra Johnson, Dr. Jennifer Ross-Nazzal and Rebecca Hackler to discuss the history of the oral history project. He also serves as today's participant, which marks the 1000th interview of the project. So we welcome you to our office and thank you for all your support for all these years. Share with us how the idea first came up and why it was important for the Center to have an oral history project.

Ross: It was very interesting. The Director at the time at the Johnson Space Center was George [W. S.] Abbey. George Abbey was a major player in a lot of things I did at the Center for years. He was very interested in the astronaut selection process and the astronaut training process, so I had to go brief him regularly and get his approval on things that we were planning to do. I was in his office, talking about some astronaut selection or training issue. We were done, and I was headed out the door, and I was almost out the door when he said—he sometimes called me Mr. Ross—he said, "Mr. Ross, there's something I want you to do."

I said, "Sure."

He said, "I want you to go up to the [U.S.] Naval Institute [Annapolis, Maryland] and look at their oral history program, and I want JSC to have an oral history program."

I said, "Really?"

He said, "Yes, and you're working with Rich Dinkel." Rich Dinkel at the time was a fairly new employee at the Center, and he was a deputy director of Safety, Reliability and Quality Assurance. He is an ex-Marine test pilot. He was high-energy, a million ideas, and some of them were good.

I called Rich and said, "Did you hear about this."

He said, "Yes. Do you know what's going on?"

I said "No, but I know George, and I know we'd better get ourselves up to the Naval Institute and figure out what this is all about," and so we did. We called the head guy. His name was Paul—I think I remember his last name but I won't say it in case it's wrong. We went up to the Naval Institute in Annapolis, Maryland, met with him, and saw their oral history project. George is a big history buff. He went to the Naval Academy even though he went into the Air Force after he left there. They had done a lot of histories of some of the admirals and the key players in the Navy. We looked at a couple of his histories. Their oral history program was interesting. They had a lot of histories they had gathered, but each of their histories would take weeks to do, because they would research it and go out and do the interviews and write it all up and get it into their archives. He gave us some really great ideas on things we ought to consider.

When we got back to Houston, Rich said, "How do we start?"

I said, "We have to start by getting Bill [William A.] Larsen the board with us." Bill Larsen was a division chief at the time, but Bill had been the guy who had had the history program under his purview early on. We used to have a pretty active history program back during Apollo. In those days, we had folks gathering histories, writing histories, gathering files, but then when they started laying off people and cutting budgets, history was the first thing to go, so it was gone. We knew nothing except whatever was in Bill's memory.

We got together with Bill and said, "Here's our quest and what can we do?" Bill was great. He was instrumental in getting the oral history project up and running. He knew where everything was. He knew where all the history files were. There were some stored in this warehouse, or that warehouse at the Center. A lot of the history files had been moved down to Rice University [Houston, Texas] for preservation, but they were just in boxes in the basement down there. We went down to Rice University and talked to them. Our intention was to retrieve all those records and get everything back at JSC so we could start seeing what we had.

We tried some things that didn't work too well. We got the Public Affairs Office involved, and there was some thought that in doing some of the major historical figures, maybe do videotape on those folks and have a nice video. We even pursued at some point in time the computer programs that do voice recognition – you talk and it would translate. Those were not at a maturity level yet where they were going to be useful to us, but we looked at them. We looked at a lot of different things. We talked to Bill, and the good news is we entered into a contract to do the oral history project, and the contract has had about what—10 names—since we started.

WRIGHT: At least.

Ross: But we did do a contract. We were a cheap date because we found a technology contract out of another government agency that we could ride at a very low percentage rate. We got a budget from the Center. Mr. Abbey gave us money to go off and start this project and run it. We got—I don't know—several thousand dollars from his discretionary fund to actually buy some digital equipment that we needed to start doing the interviews.

We started putting together a target list, and what we decided was our target list should be historical. We ought to start back with the first programs and move forward, and just catch everybody we could as we go. We also talked to other places, like the Smithsonian [Institution], and places like that, to hear about their history programs. A lady at the Smithsonian had a term. She called it 'actuarial at risk,' so that's the kind of folks we started looking at first, the older people we needed to talk to while they were still around. We had pretty good luck with that. We put together a list—a priority list of the people we'd really like to talk to, and maybe a secondary list of folks that were nice to have if we could get them, too.

Rebecca [Wright] was here from almost the beginning, and we started putting together the process; what you do to have a good oral history. You don't just go sit down and have people start rambling, because it goes nowhere, even though you get some interesting information. We thought what you had to do to have a good history is to do some research first, and know about the person you're going to talk to so you help guide and direct and then help them to be able to talk about the things you want to hear about. We did that. We started doing some research, putting together some profiles on the folks, and actually got the help of the Center along the way to get some funding to have some summer researchers. We would go out and recruit folks, typically with an undergraduate degree already in history or research of some kind, so they could come down and do research for us. We had a wide variety of people come in and do thateverything from historians to engineers and other kinds of folks—but it worked really, really well.

WRIGHT: And a wide variety of colleges were represented, weren't they?

Ross: Yes, quite a few colleges. We were not prejudiced in any way on the colleges we were seeking. We just wanted some good folks. I know we had one aerospace engineering person from the University of Kentucky. We did have folks from local colleges, too, and Poland, Scotland—we've had folks from everywhere! We started putting together the research books, and then started calling folks to set up some interviews. Of course, there are all kinds of administrative things you have to think of along the way, too, like what do you need legally, so you can talk to somebody and use that information? We decided early on that the only reason you collect history is so somebody can use it. There is no reason to collect it and put it in a box. We wanted this to be useful information that we would use. We wanted to make it available to as many people as we could because there are still a lot of people who do research on space, even the early programs. That was our intent—to collect it so people could use it.

To that end, later on in the program, we actually got a super database that's accessible. All of our histories are online. Anybody anywhere can go in and look at our stuff, and they do. We have thousands and thousands of hits on the history website. You probably know what those numbers are year to year. WRIGHT: I do. In fact, we monitor those, and currently there are no less than 300,000 [Website hits] but they have reached over half a million a month that we get. Currently we have close to 800 transcripts online that are accessed by the public any day at any time.

Ross: The feedback we get from that is also excellent. The folks are really appreciative of the information. What's there is useful to them. It's really been neat. Going back to the beginning, we put together our plans, sat down with George, and it was all okay. We got Public Affairs involved to start worrying about some of the video things that they felt would be a good thing to do. That really did not work very well at all probably for a couple reasons. One may have been that I'm not sure they had the zeal that we did in going out and collecting histories, so we would falter trying to get things done that we felt were important to get done. A good example of that is we did get Al [Alan B.] Shepard's oral history on video, but it was just a couple weeks before he passed away. He was the impetus. He called us and said, "Hey, you guys have been trying to schedule this. If you're going to do this, you'd better hurry, because I'm not going to be here forever." We hurried and got it.

The other thing about that is you find out that they're not as good as the audio interviews, because if you stick a camera in somebody's face, they choke. You don't get the same kind of information you get if you're just talking casually with them. That wound up not being a good idea, and probably where that all ended is we had a big meeting, because everybody was pointing fingers about who did what wrong. We were in the associate director's office. It was a shouting match. I didn't shout. I was just listening, but there were some folks shouting. When we got done with that, everybody walked out, and the associate director motioned me to come back. She said, "I don't want to have any more meetings like this. Would you take care of it?" I said

okay. We went in a different direction right then. We were going to do only audio interviews. We were going to manage the program ourselves. We didn't need anybody trying to tell us how to do our business. It started working, I thought, very smoothly. We didn't have any major hiccups after that.

We started with our list. We started calling folks. There are some legal aspects of that, too, because if you take information from somebody, then they have to agree that you can use that. As part of the process, we did the research, go do the interviews and took the information. We had it all transcribed by a professional transcription service, but we would always give it back to the interviewee to look at before we would put it online. We got their approval because people say things that in hindsight they wish they hadn't said, and that's okay. We let them edit it. If they're happy with it, then we would go ahead and use it. We've had folks who had their package to review for years before we would get it back from them.

WRIGHT: Sometimes it does become a little bit of a continual correspondence to get them back.

Ross: Yes, it does. We've had some folks who've said some things that they probably shouldn't have said, so we would have to decide how and when we wanted to release some of that information. We did—we really got some of the key members of the early space program, all the way back to the Germans who came over to the [NASA] Marshall Space Flight Center [Huntsville, Alabama] and built the rockets, to the guys down at the Cape [Canaveral, Florida] who put the first people in the Mercury capsule, to the suit technicians.

We also decided early on that this program was not just going to be for all the upper level management, because you don't get all the stories. We talked to the upper level management

folks. We talked to suit technicians. We talked to engineers. We talked to secretaries, and all kinds of folks to get their take on the space business. We started our list and started doing that. It went very well. Along the way, it was going well, and other people became aware of it. We had also talked to the other Centers. Most of the other Centers really didn't have an oral history project. They had a little bit of one, I think, maybe at Marshall or one of the other Centers, but nothing very active. We were more than willing to share what we had been doing and our process, anything we could do to help them start doing their oral histories, too.

The folks who really liked our program were [NASA] Headquarters [Washington, DC]. They latched onto it pretty quickly. Along the way, we have done several projects for Headquarters, funded by Headquarters. It has been cool, because there have been some books and publications that have come out of all the work of the oral history project. I always make sure the boss [Director of JSC] gets a copy of those and knows about what we do and hears about all the good comments we get about the program.

Probably in that regard, one of the key things—and I think one of the highlights of the program—was when we had the Shuttle-Mir Program going. The Shuttle-Mir Program Manager was Frank [L.] Culbertson. I don't know if we helped him think this or he thought it on his own. He said, "This is major. This is historical. We've got to capture this." He contacted us. Of course, we were delighted to be a part of something like that. The cool thing is he agreed to fund it, so we got money to help with the research, to help with the transcripts. Of course, most of the people we needed to talk to worked for him or worked for somebody that he had influence with, so getting the interviews was a little bit easier than it is just to get them along the way. Out of that came one of the coolest books that you can have lying on your coffee table.

WRIGHT: That's what we've got around the corner.

Ross: Yes, a lot of good information, a lot of good pictures, but the thought was the book would be the personal side of the program. All of the technical side was collected, but it wasn't in the book. It was in the CD that you could have along with the book, and that was really a great plan. Rebecca—that may have been your idea. If it was, it was a great idea, because the book is awesome. You don't get bogged down in all the technical stuff. You see the people side of it, but the technical stuff is there if you want to see it. I was really disappointed that we didn't take that same approach to the Shuttle history. The Shuttle history is great. Jennifer, you had a piece in that. I know you wrote some of the chapters. If it had been in the same vein as the Shuttle-Mir book, I think it would have been better.

Ross-Nazzal: Yes, I agree.

Ross: My opinion.

ROSS-NAZZAL: I tried to put in people, and they told me no.

Ross: Yes, my humble opinion. It was really good. That was one of the major projects we had. The other one that was interesting and, of course, history is not always about good things. There are some bad things that happen in history, too, so when we had the STS-107 [*Columbia*] accident, we were here talking locally that this is historic, and we've got to figure out what we can do to try to capture this for history. It wasn't just to capture what was going on with all the

pictures and stuff because you knew that—that was on the news every day—but to capture how the process worked to bring all the organizations together; the government agencies, the local organizations, the FBI [Federal Bureau of Investigation], police force, all those kinds of folks that got involved with that. We were talking about that here locally—Rebecca and I and Bill Larsen, trying to just figure out what we could do. Lo and behold, we got a call from Headquarters. He said, "Hey, we'd like to collect this history. Will you do it for us? We'll send you some money." Yes!

So you guys put together a great plan on the kind of things we needed to concern ourselves with in the capture, which was the organization, the data management, those kinds of things, and let the media take care of all of the other pictures and things like that. I went up and spent a lot of time in East Texas doing just that. We had a couple of hiccups along the way with Headquarters involvement that we didn't need, but I finally just called them and told them we wanted a no-fault divorce from some of these folks so we could get out and do the work that we needed to do.

WRIGHT: It was appreciated.

Ross: I wasn't really popular for a while, but it worked and we finally could get on and do the work we needed to do up there and got some really excellent, excellent stuff to capture the history of how that all worked. It was rough. There were some rough times up in East Texas. I went up for a while. The Discovery Channel wanted to go up and do some coverage, which was okay. The media could go up there, but you can't just let it run open loop. The same associate director called and said, "We want to support this, but we want them to have a conscience. Will

you go with them?" I spent about a week or so up there with the Discovery Channel folks, just talking about things we would like for them not to concentrate on. They were really, really good, and they were on board, so we spent a lot of time getting a lot of the stuff without the sensationalism.

As part of that, I made some pretty good friends. I love to tell the story about the sheriff of Sabine County, [Thomas N. Maddox]. We talked to him, and I got to be pretty good buddies with him. A lot of the people who came to do the recovery came from all over. There were search crews that came in from Idaho and Montana. There were a lot of firefighters and folks like that, and they just did an awesome job. A lot of them were housed out at Hemphill [Texas] at the rodeo grounds. There was a big pavilion, so they just set up their tents under the pavilion so they'd be a little bit out of the weather. FEMA [Federal Emergency Management Agency] had their big trailers there—their kitchens that they brought and could feed thousands of people in the dining room. That was set up on the other side over there.

One night about dark, I was walking down the little dirt road between the two, going down to the food tent, and the sheriff came up behind me in his police car and just harassed me. He just blew the siren, so I went spread eagle on the wall like something was up. He got out and we kind of hoo-rah-ed, but when we turned around and looked, there wasn't a soul in sight anywhere. Everybody had scattered. I don't know if that says something about some of their backgrounds or what. Whatever—there wasn't anybody going in the food tent, so that was kind of nice.

WRIGHT: I remember when you came back, you mentioned to me that working with the Discovery team that one of the things that was easy for you to figure out in a short amount of

time was how much more we were able to do by doing the oral history project the way we were doing it with audio, because they spent so much time setting up, breaking down, doing locations where we were able to walk in and within 10 minutes be set up and ready to go.

Ross: Yes, it took an hour to get 10 minutes' worth of information. Yes, it was very clear that we had been on the right track all along there. I guess we've still got some friends up in East Texas—Marsha [Cooper] with the [US] Forest Service, and some other folks like that. What we did—after we collected all of that—was to not immediately make all that available, because there was still a lot of sensitivity in that, and a lot of people who still had some really severe angst about it and anguish. We just put that on hold. We have it. It's there for posterity. We just didn't release it immediately to let everybody start looking at it.

WRIGHT: I think Headquarters used it. I remember Mike [W. Michael] Hawes was using it for lessons learned in reports.

Ross: Yes, but we didn't make it available on the website at that time. Other big things we did—one of the things—probably I shouldn't tell this, but one of the things we did—let me back up. George Abbey was a big fan of the fellow—

INTERVIEWER: Stephen Ambrose.

Ross: Stephen Ambrose. Yes, Stephen Ambrose, who was at the University of New Orleans [Louisiana] in the Eisenhower Center [for American Studies]. He wrote about Lewis and Clark and *Band of Brothers*. George liked that historical stuff, so he said, "How can we get Stephen Ambrose involved?" in this history project. We hadn't done Neil [A.] Armstrong's interview yet. I said I guess we could let him interview Neil Armstrong. George liked that idea, and so—how long did it take us—maybe a year to get those two people together because of their schedules? We finally got it all arranged, and so they came down in the oral history offices, which were offsite at the time. Neil came down and Stephen Ambrose came over from New Orleans, and his wife was with him, but also his right-hand man was with him.

They did—I don't know—a couple or three hours' worth of interviews. It was really good. Stephen Ambrose was on somebody's TV show later and said of his entire career, the highlight was getting to interview Neil Armstrong over in the oral history office at that time. That was really good for us. We got Neil's stuff. He was happy. We were happy, except the guy that was with Stephen Ambrose was not one of our favorite people. He walked off with some of Rebecca's books, and there's more to that story, but I guess that would be one of those we'd have to redact if I say what it all was, so we'll just press on from there.

WRIGHT: We just don't have enough time to talk about it, that's all!

Ross: Yes, we don't have enough time. That's a whole different interview, and it's not over, I don't think.

That was good. We got Neil's stuff, and he was happy and we were really happy with that. Those are the three things that always come to mind when I think about the program as the highlights. The thing that comes to mind is how much work the oral history office has done with so little, because we fight for funding every year. We're about the same level we started. We haven't had increases, and we've had to spend silver bullets lots of times just to keep everybody happy. The good news is it's worked really well. We've got a lot of good stuff. People use it. We get a lot of good comments about it. We've got books. We've got whatever else, so there is a lot of stuff you can point to and say this is what you're paying for with this piddling amount of money. This can't go away. History is important, but then when people start cutting, they're always looking for the stuff that they don't do day to day that makes their programs go. It's been a struggle.

The good news was Mike [Michael L.] Coats has been our Director until very recently. He was a Naval Academy grad. He had a double major in math and history. He loved history, and so as soon as he got here, I said, "Hey, have you heard about our oral history program? Let me tell you about that."

He said, "Oh, yes. As long as I'm here, we're going to do it, because I love history."

I said, "Okay." So we've been fortunate so far to get folks to agree to continue the program. The fact that we've got so many interviews—they're useful, they're online, people love them—it's a big highlight, and the amount of work that you all have done with very little support and resources is just incredible. This is probably the highest yield program we have at the Center in terms of what we get out of it versus what we put into it. The other part of that is I think the Shuttle-Mir book was a real milestone. Obviously getting Neil Armstrong's interview done by somebody that made the boss really happy was a milestone. The efforts we put into the *Columbia* recovery is a real milestone. I may have missed those other things we ought to touch on.

WRIGHT: You talked about the extension that we were able to make with the education effort of bringing these students in for six to eight weeks. Of course, Jennifer [Ross-Nazzal] came in as an intern and served that time period, and then came on as a full-time intern with USRA [Universities Space Research Association] and now is the JSC Historian. It's been a great effort there.

ROSS: Yes, it's a win-win situation for us and academia because this is a good program—a good thing folks can come in and work on.

WRIGHT: Then Rebecca Hackler came in as an intern, and now she's here working on the Commercial Orbital Transportation Services Program history collecting and helping us to pull that together. Sandra [Johnson] came in as an all-around person. There are very few people who can do oral history, editing and understand how the mechanics work of audio processing and archival and all the preservation techniques. When we first started the project, one of the first things done was that there was an inventory made of the products that came back from Rice and that were here with the tapes; there was a lot of media that was sitting that was basically becoming obsolete.

ROSS: Yes, a lot of stuff we found was on all kinds of old tapes, cassettes, reel to reel, skinny reel to reel, fat reel to reel. There was a lot of valuable data we knew was on there, but in talking to anybody, you'll find that some of those old tapes—they become un-laminated and you ruin them if you play them. A lot of that stuff you only get one chance to capture. I think early on

when we figured out that we needed to start trying to preserve all that information on tapes, we didn't have the capability to do that. I think there's a place in Austin we found.

INTERVIEWER: Bismeaux Studios—that's the Asleep at the Wheel [musicians] folks. They're the ones that did it. That's where it was done.

Ross: Who could rescue tapes you could only play one time? Then we got—I guess—the capability after we talked the Center out of some more money to get some equipment because when I go where all of the stuff is, I'm not allowed to touch any buttons.

WRIGHT: We're not either. She's still moving reel-to-reels. We do give credit a lot to Paul Rollins, who was here at the beginning and did the research, because Sandra, on a little bit of training money, was able to go a number of years ago to a conference and calls me in a break and said, "We've got to do something different, because we've been putting everything on CD." That's when they were discovering that CDs do last 100 years but the data on them doesn't. Everything else that we had done up until that time period Paul had researched, and the equipment, everything—it was state of the art and it stayed that way. We'd go to a conference and we'd find out that we were—Sandra, have you got a comment

JOHNSON: Yes, every time we went to a conference or anything, one thing I always noticed was that the stuff they would talk about we'd already been doing. It's something which was interesting, because it always was an ego boost, I guess, that we had been doing that the right way from the beginning. Paul did do that research and found the equipment, and so we were always ahead of what other people were doing with oral history.

Ross: Yes, so now when we do it, we collect them on the external hard drives.

JOHNSON: We collect them on memory cards, and it's all born digital now. Then we store it and move it and have it backed up on external hard drives. It's a lot simpler now than it was.

WRIGHT: Yes, our process has changed where we can give people the option if they want CD audio or would they just like us to drop Mp3s to them in a drop box so that they have that audio. It's been an interesting technological process as well.

Ross: You remind me of a couple of things. One is the fact that when we collect these histories, we give them back to the people in a form that they can be proud of and show their families. We've even had requests from the families. One person comes to mind. They were really happy. They were delighted that we had done that to collect the history from their loved ones, and they wanted copies of it to share with their families. Now that you mention it, that was really encouraging.

You made me think of another thing that was kind of a highlight, too, in terms of going to conferences. We were at a conference in Portland, Oregon doing a panel briefing on the process we had gone through with the *Columbia* recovery activity. There were some folks in there listening to it, and a fellow came up afterwards. He had some questions. He wanted to ask some questions about how we did everything. So we got to talking to him. His name was Don Fraser.

He had come down from the Charles Schulz Museum in Santa Rosa, California. I guess he'd come up from there. He and Charles Schulz' wife Jeannie had been talking about trying to collect oral histories from the folks who'd been there a long time before they were gone.

They'd been trying to think about how to do that. He came down to the conference, and he really liked our talk. We spent quite a bit of time with Don, talking about the things that we thought were important, and how we ought to do that. He invited us up anytime to come to the Charles Schulz Museum. Not long after that, I had to go out to California for an astronaut candidate training trip, and I went up and visited with him for a day. You all went up, I think, and visited with him for a while, too.

WRIGHT: It's interesting because, of course, the connection between Charles Schulz and NASA with Charles Schulz providing the Silver Snoopy [Award] artwork. We had received information that the Schulz Library was looking for someone in the area to conduct an interview with a local person for an exhibit they wanted to do about Apollo 10. We contacted you and you said yes, do it, so we volunteered to do that. We had a conference that we were going to, so we made that side trip to go visit them to see that exhibit. We were able to see the product that we did in an exhibit, which was something new for us. Don Fraser, as well as Jeannie Schulz took us around and showed us everything in the museum.

That connection even went further. We stayed in contact off and on with Don. Come to find out, he is a good friend of General [John R.] Dailey, and when we needed to make contact with the former Deputy Administrator of NASA to do an interview for NASA Headquarters, Don connected that dot so we were able to get in and see him pretty soon. It's been an interesting cycle there of meeting those folks. Ross: A lot of coincidental steps. The connection with Don Fraser and Jack Dailey is they were both ex-Marine pilots. Don Fraser was an old Marine A4 pilot. When we started talking with Charles—I say 'we' but it was before my time—talking to Charles Schulz, NASA decided they wanted a symbol of safety; something that people could see and they'd think 'safety,' like when you see Smokey the Bear, you think, okay, don't set forest fires. They decided the one thing that everybody recognized was Snoopy, so they said, I wonder if we could use Snoopy as some kind of a symbol of our safety program—Snoopy the astronaut kind of thing.

A fellow named Al [Albert M.] Chop, who was a public affairs guy at the time, actually contacted Charles Schulz and started working that process. Charles Schulz agreed to do it, but part of the agreement was that he had to draw the Snoopy astronaut. Well, absolutely—who else would? When he was talking to his buddy, Don Fraser, he said, "I'm not sure what this ought to look like." Don Fraser took his A4 flight suit, helmet and everything and went over there. He was actually the model for the Silver Snoopy. He has the original sketch that Charles Schulz sat and did when they came up with the Snoopy astronaut. He gave me a copy of it while I was up there, because I have a Snoopy plaque—a Snoopy astronaut—on my wall at work. That was just a real coincidental string of events. That was a good one. That was another highlight, I thought—if we could reach out to a whole different section of the overall media.

WRIGHT: It seems like a long time ago. I guess it was when Mr. Abbey stopped you at the door and told you that he had something else for you to do. As we close up for this morning, do you feel like it has met or reached your expectations and the goals that you all first talked about or are there other things that you would like for the project to go to in the future? Ross: When he said that, I said, "Oh heck." I didn't need something else to do, particularly something else that I didn't have a clue what he was talking about. I like history but I'm not a history guy. I don't know anything about any of that stuff. We got to thinking about it later. Then he worked with Rich Dinkel, who was a brand-new guy. We tried to figure out why he would give that to me and Rich Dinkel when there were people over there that worked in history and did stuff like that, but then we finally figured out along the way that, as I mentioned, Rich was full of ideas. He went 100 miles an hour everywhere, but I had been here for a long time, and I knew all of the people and knew the programs. I knew what the pitfalls were and had a little bit of sensitivity about organizations and stuff. We were an ideal match-up to try to get something out of both of those experiences into something that was workable.

As I mentioned, we tried some ideas that didn't work. My first reaction was that I don't need something else to do. Here I am in the wrong place at the wrong time again to get something else to do. He must have been thinking about that, and I was the first guy that walked into the office. I don't know. As it turned out, Mr. Abbey didn't do things like that. He always has a plan. He's really a smart guy. Incidentally, I still work for him, even though he's been gone for years. I'm happy to do that, because if you talk about who lives and breathes the space program, and had more interest in making it work than anybody else in the world, it was probably him. He was a great influence to have.

Our expectations—starting off, we didn't have any because we didn't know what we were doing. We went to the Naval Institute and found out what an oral history might look like. We came back and started thinking about how many people we'd talk to. We never had any idea—any thought—that we would be doing the 1000th interview in the oral history project. You're

thinking we'll get a few dozen, maybe a couple hundred, but that will be good. We'll be good to go, but then you get you guys involved, who always have great ideas and get more out of our resources than we could ever hope. It has far exceeded any expectations I had.

Of course, along the way, what could be the coolest thing you could do? You could have a book about some of this stuff. We've done that. We've done that what—about three or four times now with different things? I think the Shuttle-Mir was probably my favorite because it has pictures. I love pictures, plus I was here. I knew those people. It was just capturing a piece of my life, too, but it was very good.

WRIGHT: I give such great credit to Clay Morgan for pulling that information together.

Ross: Yes, Clay Morgan is Barbara [R.] Morgan's husband. Barbara Morgan was our first educator astronaut. She was a back-up to Christa McAuliffe for [STS-]51L [*Challenger*], and so when we hired her back with the '98 [astronaut] class, they moved down here. Clay came down, and Clay's a writer. He's a historian, had done some children's books. He was helping us. I guess you all talked him into taking on that job. That was great. It was super. He really did a good job. Everybody was happy.

WRIGHT: We were. We were very happy.

Ross: This program exceeded any expectations I would have had a long time ago, so where we go from here is keep doing what we're doing and look for our opportunities, like the Shuttle-Mir

book and things like that. Again, I was so sad that we didn't get the Shuttle history book to work on.

WRIGHT: We're working on one now that I know that you've been very instrumental in helping us put together. Jennifer is working on it now. It's *Making Space for Women*, which we feel is like a Shuttle-Mir book in the sense that it's very unique. No one else has done a book like that, so we hope to have volumes of it. This just happens to be the first one, so hopefully while you're still putting around here, we have another one that we can give you to pass on.

Ross: I hope so. I won't claim any big part in that, but the 1978 class was the first astronaut class that I helped with the selection process. Of course, one of our going-in positions on that class was that we need to expand our horizons. We need to include women in the program, and how do we do that. We worked a lot of things to try to get a lot of women to apply, and to be sure that they were considered all along the way. We actually selected the first six women astronauts and proved that it was a good idea. It was a good idea. Back then, there were some women managers at the Center, but none in really high levels. That started to change, and I was just noticing the other day, everybody I work for is a woman, and I have no problems with that at all.

WRIGHT: I was about to say now you have a brand-new boss that's not only female but a former astronaut [Ellen L. Ochoa].

ROSS: A former astronaut, yes. I knew her when she was starry-eyed and a branch chief out at the [NASA] Ames Research Center [Moffett Field, California], so it's really fun in that regard. They're all great.

WRIGHT: We just want to go on record to thank you for being the wind beneath our wings because without you, we would not have been able to survive the last years, and we know that. We know that, and we're just grateful we didn't have to go to you too many times to help bail us out of any kind of problem, but we always knew that you were at the other end of the phone, so we really appreciate you being such a part—and not running from Mr. Abbey and telling him, "Oh, I'm not doing this project!"

Ross: That wasn't an option.

WRIGHT: We're glad. We're glad that that was a condition of employment for you, so we appreciate all the years together. We hope we have many more.

Ross: I love it. Yes, I absolutely love it.

WRIGHT: Thank you for coming in this morning.

Ross: Thank you for asking me to do the 1000th interview. That means a lot to me.

WRIGHT: It means a lot to us. We appreciate it.

Ross: That was cool.

WRIGHT: Thank you.

[End of interview]