

The oral histories placed on this CD are from a few of the many people who worked together to meet the challenges of the Shuttle-Mir Program. The words that you will read are the transcripts from the audio-recorded, personal interviews conducted with each of these individuals.

In order to preserve the integrity of their audio record, these histories are presented with limited revisions and reflect the candid conversational style of the oral history format. Brackets or an ellipsis mark will indicate if the text has been annotated or edited to provide the reader a better understanding of the content.

Enjoy “hearing” these factual accountings from these people who were among those who were involved in the day-to-day activities of this historic partnership between the United States and Russia.

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**CHRISTINE A. CHIODO**

**August 4, 1998**

Interviewers: Rebecca Wright, Carol Butler, Frank Tarazona

*Wright:* Today is August 4, 1998. We are speaking with Christine Chiodo with the Shuttle-Mir Oral History Project. Rebecca Wright, Carol Butler, and Frank Tarazona.

Thank you, again, for taking time from your busy schedule to meet with us.

*Chiodo:* Sure.

*Wright:* We would like for you to start by telling us what your role or your responsibilities were with the Shuttle-Mir Program.

*Chiodo:* My role was as a NASA ops lead. Generally, the majority of my time was probably spent in Russia, I would say, doing this task. We managed a team of folks to kind of be the eyes and ears for the astronauts on board. It involved things like keeping them up to date on what their schedule was going to include, any changes to activities, changes to experiments, passing information about experiments back to the payload developers, taking care of scheduling press events, things like that. So it was a little bit of everything over there. We also talked with the astronauts a couple times a day, just trying to keep them up to date on what was going on in the world, both within NASA and outside of places.

*Wright:* How many hours a day did that cover?

*Chiodo:* It varied. I would say a standard day over there was probably ten or eleven hours a day, and it was six days a week, a little bit longer on weekends. What we would do, we would split teams. Our team was probably about nine or ten people at the most. It kind of grew about halfway through the program, so it wound up being about nine or ten people.

What we would do, all ten of us would be there during the week, kind of at staggered shifts. We would cover from generally crew wake up, or about breakfast-time, until the crew went to bed. So we would be staggered in shifts to cover that period of time during the week. Then on weekends we would generally pick about a twelve-hour portion out of the middle of the day to cover.

*Wright:* How long were you there? You said the minority of your time was in Russia, so what did that equate to?

*Chiodo:* The first time I was over there supporting in this way was when John Blaha was on board. So I worked the NASA-3 increment through NASA-7. I think, cumulative, it was probably something like over

400 days, so it was a good chunk of time.

Actually, my last trip over there, I was only supposed to be there two months, and I got over there about two weeks in and was asked to stay until Andy Thomas came back. So it wound up being closer to seven months. So it was a long trip there at the end, but it was good.

*Wright:* Did you come back or you just had things shipped to you? How did you handle this new change of duty?

*Chiodo:* Well, if I'd known ahead time I was going to be there for seven months, there are things I would have done differently. I was in an apartment. I would have moved out of my apartment. I would have taken my cats with me. Things like that. But now that we have the NASA charter plane flying over periodically, it makes it great for us that if we want little things brought to us on the charter, you can always find somebody coming over. So I definitely took advantage of that. I also had one of my cats brought over to me on the charter. A friend of mine was coming over, and one of my cats I knew would do fine on the charter and be great. The other one, I thought she better stay with the cat sitter. I don't think she would have done as well. Anyway, so that was nice. So I had Einstein with me, so that was good.

*Wright:* How did that change your feelings? Did that make it more home?

*Chiodo:* It did. It did. Initially, I was by myself in an apartment for a couple of weeks. Then another gal moved in and that's when Einstein came over. So it was nice. I mean, it was nice having somebody else in the apartment, also. It was great having my cat there. Because then when she moved out, I still had the cat to keep me company. So a little piece of home, I guess.

*Wright:* Could you tell us about your living conditions, where your apartment was and what it was like?

*Chiodo:* Sure. The apartments are great. They do a good job of setting us up over there. I was basically in a two-bedroom, two-full-bath apartment. Kitchen had a dishwasher and a microwave. Washer and dryer, TV and stereo, and really all the comforts of home. We do have a capability, special phone lines to call back to the States pretty much any time we need to, so that helps a lot, too. I mean, just knowing that that's available to you.

The apartments are great. In some way it's kind of like being in a dorm. It always reminds me of being back in college when I'm over there, because you have a bunch of people, and in general most of the folks that I work with were single, were about my age, so there were always people to go out and do stuff with, or just go to somebody's apartment and watch a movie and that sort of thing. So in a lot of ways that

sort of makes or breaks your trip.

It was like the first thing I would do, I would look at my schedule and see, okay, I'm supposed to go back here when. Who else is going to be there? You can have a great trip that way, and you can have a not-so-great trip that way, depending on kind of the mix of people you're over there with, because you're at work with them ten or eleven hours a day, and so they're not only your co-workers, they're your social network, too. I mean, they're the people you're doing stuff in the evenings with. So it's important.

*Wright:* You could start a whole family over there, I guess.

*Chiodo:* You could.

*Wright:* Everybody's very close in bond?

*Chiodo:* Yes, it is.

*Wright:* How is it different on your seven-month stay compared to the first time you went to support John Blaha there?

*Chiodo:* I would say Moscow has changed a lot. The first time I was there was actually probably about a year or two before John Blaha's mission. I was only there, I'll say "only" two weeks, two or three weeks, which at the time seemed like this huge amount of time. Now it seems like hardly worth unpacking. But the city itself has changed a lot, and NASA has gotten a lot better about supporting people over there.

Living in the apartments is just a huge difference. For the first, I think, probably two or three trips I had over there, I was living in the Penta [phonetic] Hotel, which, it's a great hotel, but being in a hotel for eight weeks at a time, it's tough. I mean, things like doing laundry. I think through the Penta I actually had to do laundry through there once. It cost me like \$136 or something. It was something ridiculous like that. But you find ways around it. You have some people washing out their clothes in the sink or the bathtub. We actually found this Russian woman that was kind of running a laundry service, so she would come by and she did a great job, so we used her.

*Wright:* How did you learn the language to converse with people like that laundry person?

*Chiodo:* A lot of gesturing. No, I had a couple of classes before I had gone over. You pick up some of it as you go. We have interpreters with us generally at work, but there would even be times that some of the Russians would stop us in the hall and they speak a little bit of English. I shouldn't say a little bit; they usually more English than we do Russian a lot of the time. Kind of like in between hand gestures and their

broken English and my broken Russian, you get the point across. Then I would usually run back up to one of the interpreters and, "Hey, would you call them and just make sure what he said was that."

I remember my first day being over there, this was during John Blaha's mission, I came in and two of the guys that were with me, they had actually come over on the same plane, so they were kind of just getting back, too. They had done all kinds of work in the control center there, so they were old hat at all that stuff.

There was a little cafeteria and we were heading down there. There's these three or four women that run the cafeteria, real nice ladies. They see Tim and Joe coming and they're all excited and it's, "Da-da-da-da," in Russian. I'm still jet-lagged. I'm still kind of like, "Where am I?" This type thing. They're talking back and forth and I'm not listening or trying to understand or able to understand or anything, I'm just kind of looking around. All of a sudden the lady gets behind the counter and she looks like she's ready to take my order. All I hear is, "[Russian phrase]," which means "young lady."

So I'm like, oh, she wants to know what I want. So I say, "Coca-Cola." And my co-workers, Tim and Joe, are just in hysterics. I'm like, "What did I do?" The cafeteria lady's got this strange look on her face.

They said, "She asked you what your name was." [Laughter] So, needless to say, I got called "Coca-Cola" for about six months after that.

*Wright:* It's nice to have the support of your co-workers. [Laughter]

*Chiodo:* It is. It is. In general, you get by with the language over there. You make do. I think more and more, more Russians are speaking English. In general, you go out with a clump a people and somebody speaks good enough Russian to get you through, so you do the best you can. You get a lot of glazed looks at you and you get used to that.

*Wright:* How did you get involved with this whole program?

*Chiodo:* I was working as a Shuttle flight activities officer, FAO. What that involves is the development of the crew time line for their mission. So I was one of a couple of people that was working the Phase One flights from that perspective. So that's how, I guess, I got involved in Phase One.

The Shuttle teams send a group of people over for the Shuttle docking missions, the Houston consultant group. I was a part of that for the first docking mission, so I kind of got a look at the work that was going on over there, kind of had that in the back of my head, well, you know, maybe that's something I'd like to do. About a year later there was an opening, a couple of openings, so I applied for one and got

into it that way.

*Wright:* Any regrets?

*Chiodo:* No. No. It's probably the hardest job I've ever done at times. It's far away the best job I ever had. It was great. I was sorry to see it end. The last trip was seven months long almost, and yes, I mean, I was glad to think, "Oh, I'm going to get to go home and drive my car," and just different things like that. But really mixed feelings, sorry to see it end. I mean, it was a special thing we were doing over there. In a lot of ways I was given an opportunity to do something that was--it's not something I could have done in Houston. Because of the fact that we were in Russia long term, there were fewer people that wanted to get involved in that, so we were doing the flight activities officer job, the payloads officer job, Cap Com job of talking to the crew member. It was great. It's something I couldn't have done here. First of all, the position doesn't exist in Houston. But it was an opportunity that I'm glad I didn't pass up.

*Wright:* Is there a highlight that you can remember that you're really glad that you took this opportunity?

*Chiodo:* I can't really think of one thing that stands out. I mean, just a series of things. You feel like you're doing a good job over there and you develop a relationship with a crew member over there. I think probably if I had to pick one highlight for me, it was probably, gosh, seven or eight months after Mike Foale's mission ended, after he got back, he had come over to Moscow for some meetings and also to kind of present some awards to folks, and Michael sat down with me and just, "Christine, you did such a good job and you made such a difference." That, you know, I don't think I've still come down from that one. It was nice. You know, it's nice when my boss says, "Christine, you're doing a good job." It's nice when Frank [Culbertson] says, "Oh, you do such a good job over there." You smile and say, "Oh, thanks." You know, it's nice to hear. Then it comes from Mike Foale, the one you were talking to all the time and the one you were working with, and it means a lot. That, for me, was probably the highlight, I think.

*Wright:* Could you share some of those times, how it was for you when you were talking to Mike Foale when he was up there? Take us back and set that tone for us.

*Chiodo:* Mike was one of those people that, you know, he would have a problem, something would go wrong with an experiment, and generally what we would do, if something went wrong with an experiment, the folks here in the POSA [Payload Operation Support Area], they listened to all our communications. So ninety-nine times out of a hundred before we call and them, "Hey, you guys need to go find out. Call the investigator, see what they want us to do," you know, they've already put those wheels in motion. So we

would get an answer back from the investigators, "Okay. We want them to do this," or, "Ask them this," or, "See if he did this." That sort of thing. You call up and you ask Mike that, and Mike's already twelve steps beyond that. Mike is probably the smartest person I've ever met. I mean, the guy's amazing. And probably more than just being a really smart guy, he's got the personality for long-duration space flight.

Generally, how our comm passes would work in Moscow, comm passes are about ten or twelve minutes long. We're supposed to have ten minutes dedicated with the crew member twice a day. Lots of times we wouldn't get that much. But we had enough time to talk to them. That wasn't a problem. But generally what would happen would be, the first few minutes would be in Russian. It would be the Russian ground team talking to their cosmonauts. Then they would say, "Okay, put Michael on."

I mean, always, during Mike's mission, the ground would be talking to the crew, and you could just hear Michael and whoever the other cosmonaut was just laughing in the background. I mean, they just sounded like they were having the time of their lives. It was nice. We were just cracking up on the ground, listening to them. I think Mike just seemed to enjoy his time the most, or just seemed to do the best. The Russian ground team just loved him. Still, this was a full year later, somebody would still stop me in the hall, "How's Michael Foale? Tell him hello." This sort of thing. It was nice.

Another part of our job, it was not only trying to keep them up to date on the experiment stuff, but just general current events. I think we probably did a decent job of that. I remember when Princess Diana was killed, Mike Foale was on board, and Mike's British, so we told him about that. Just trying to keep them up on current events.

Now, I know one thing we didn't, and it was something I wouldn't have even thought to bring up, but while Andy Thomas was on board, the stock market just rose enormously. He just out of the blue one time asked, "How's the market doing?"

We were like, "It's up over 9,000."

He was like, "What?" It was probably like about 6,000 or something when he left. So it's just little things that you don't think to tell them that kind of comes back.

*Wright:* How do you get to know the crew member before they go to Mir?

*Chiodo:* Well, in general, they are back here. They do most of their training in Russia. They come back here for a few weeks at a time to do mostly experiment, payload experiment training. So, in general, that's how I would get to know them.

Now, we do have folks, some folks in our office, the ops lead office, travel over to Moscow and do some training with them, like out at Star City. Like Patti Moore [phonetic], she was the ops lead for David

Wolf's increment. So when Dave went to Moscow to do some training, Patti was over there for a few weeks. So you develop a relationship that way.

My role was a little bit different. We have prime ops leads for each crew member for NASA. Tony Sang was Jerry Linenger's prime person. For NASA-5, Keith Zimmerman was Mike Foale's prime person, and so on. But we have two ops leads there at all times. So I was a back-up person, filling in. Like I said, I wound up working NASA-3 through NASA-7.

*Wright:* [unclear] prime back-up? [Laughter]

*Chiodo:* Yes. Yes, maybe. [Laughter] No, we had a couple of folks. But I had met Jerry Linenger once or twice before he went up. I had never met Mike Foale. I had met Dave Wolf once or twice. I don't think I had met Andy either. It's kind of funny, I mean, the two crew members I think I got along the best with were the two I'd never met before, before they went up. It was Mike and Andy.

*Wright:* With Mike you mentioned your communication. How was the time for you after the collision? Did you feel a difference with him? Tell us about that. Was it just a little bit of a time that was tense? How did you help him get through that, and most of all, how did you help yourself get through that time?

*Chiodo:* I think the first time we talked to Mike after the collision, it was Keith Zimmerman, the prime person that talked to him. Mike gets on comm and Keith says, "Mike, how are you doing?"

Mike's like, "I'm fine. How are you guys?" Mike was concerned how we were doing. I think one of Mike's comments was, "You know, my toothbrush was in Spektr. Can you guys get me another one?" It was that sort of thing. It was unbelievable how--it still amazes me that Mike's concern was, "Well, how are you guys doing? I'm sure you're getting way more help than you need over there."

*Wright:* Sort of business as business for you guys on the ground?

*Chiodo:* With Mike it was. There was a whole host of work being done back here. One of the problems on Mir, I think one of the biggest problems we ran into, was not having enough stowage space or people not being able to find things when they needed them. I mean, there's so much stuff on board. One of the problems with Mir is they don't have a way to bring items back to Earth. The Soyuz vehicles that bring the crew back, they don't have enough space in them to bring a whole lot of items back with them. Any items they want to take off Mir either have to come down on the Shuttle or they go in the Progress vehicle and burn up on re-entry. So there's just so much stuff up there.

When we found out the collision had happened and Spektr had been closed off, we weren't real sure

exactly what was in there. We knew generally what types of items were there, but that's one of the things we had to do was have Mike call down, "What do you still have? What did you lose?"

*Wright:* Did you find it difficult talking to them, knowing that it wasn't just your conversation, that other people could hear what you were having to say? Did you feel like you had to say things and not say things? Was it comfortable for you?

*Chiodo:* In general, it was pretty comfortable. I can think of--actually, this was during Andy's mission. The Russians a lot of times would bring in special guests to talk to the crew. On this occasion they brought in this popular Russian singer, this equivalent of like Playmate of the Year, something like that. Something NASA would never do, I mean, ever. So you had this Russian singer and this woman sitting next to him, and he's singing. This is video that's going up to the crew. They're all listening. A couple hours later when we talked to Andy, Andy was like, "Now, what was the singer's name again?" I told him. He said, "And who was that woman?" That was probably the first time it hit me. I'm like, I don't want people knowing, you know, she's Playmate of Year. So I said, "Well, Andy, I'm not sure exactly who she was."

He's like, "Well, just in general, who was she?"

I said, "She was a playmate."

He's like, "Oh, so a friend." And the conversation went from there. So I don't think Andy ever understood what I meant by "playmate."

*Wright:* He might understood you without [unclear]. [Laughter]

*Chiodo:* Yes.

*Wright:* I know close to the end of this mission when they started to have some problems aboard Mir, that might have, but didn't delay his landing. I think you were one of the ones that were having to communicate with him. Did you find that an easy chore?

*Chiodo:* Luckily, I had been through that several times, that exact failure, them losing the motion control system, a number of times on Mike Foale's mission. It happened on Dave Wolf's mission. I mean, in general, I told Andy the truth. He was like, you know, "This has got to have impacts to the Shuttle."

I told him, "They have recovered from these things really quickly in the past. There certainly is no decision yet. Everybody's still pushing for an on-time launch."

That in particular wasn't a hard thing for me at all, because I'd been through it. If we had never been through it before--and actually, I think like maybe during Mike's mission, it failed pretty close towards

the end. I remember him calling down, "Jeez, this is got to impact what's going on with the Shuttle."

It was true, folks were concerned over here and they were doing a lot of work. What happened if we were 100 yards away and the Mir would lose attitude control? What could we do? That sort of thing. So that type of analysis was all going on back here, but we didn't know the results of it. It was a little bit tougher when it was happening early on. But once we watched the Russians recover from it--the Russians are pretty amazing in that way. I mean, the failures that they run into and they always, always find a way to fix them. I mean, there's always a spare on board or they can always find some work around to take care of these things. I hope that's one of the things NASA's learned. That's why that Mir Space Station that was only supposed to be up there for five years is now up there for twelve. The Russians are great at that stuff, masters of that stuff.

*Wright:* How were you received in their mission control?

*Chiodo:* I think, you know, in general when we first started going over there, there weren't that many women working in their control center. They weren't used to having very many women engineers or women with any kind of authority over there or that sort of thing. So you go through a period where you do have to prove yourself. I think now, now that they're used to working with me and now that probably half the people we send over there are women, I mean, they are used to it and I really haven't seen any problems.

But something you've probably heard is the Russians are so big on relationships. It couldn't be more true. They want to sit down and get to know you and hear about your family and hear where you went on vacation and all that stuff. They want to get to know you before they're going to trust you. That's good. In some ways I wish things were a little bit like that here. I really didn't run into any problems.

I mentioned there were fewer women. Also an age thing, too. In general, most of the people we would work with over there are in their fifties. In general, the people we would send over there are late twenties, early thirties. We have some on both ends. We have some older than that, we have some younger than that, but, in general, the average age over there for NASA is probably, I would say, probably late twenties or early thirties.

*Wright:* Did you ever encounter a time where you had hard negotiations with them and you had to prove your point to get something done?

*Chiodo:* One of the things I thought that was going to be one of my primary jobs when I went over there was going to be negotiating with the Russians. I really thought I was going to spend 80 percent of time arguing with them and that sort of thing. That wasn't the case at all. I would say 90 percent of the time I

spent arguing with people is people back in Houston, our experimenters, deciding what they want to do with their hardware. It was that sort of thing.

In general, the Russians were always willing to listen to our side of things. There were a lot of cases where we just approached things differently. There were times when we would lose. We would want something some way and they'd say, "Well, we do it this way because," blah, blah, blah, blah, blah, and end of story.

One of our jobs over there was, we needed to realize, say, okay, is this a big deal that we're not going to do this the way we're used to? That's when you call the big guns, "Hey, this may be a problem," or, "I just need to let you know that this is happening."

Phase One management was fantastic in supporting us. Every morning between, usually anywhere between 6 a.m. and 7 a.m. Houston time, we knew the phone was going to ring. It was either going to be Frank Culbertson or Jim VanLaak.

*Wright:* They were checking in.

*Chiodo:* They were. They were. They were great. I mean, even Christmas day we're all over there, and we had the room decorated in lights. Somebody brought in Santa hats and we're giving out candy canes to the Russian ground team. They're looking at us like we're nuts. It was probably 6 a.m. and Frank called. I think he had actually called the night before, late. I was like, "Jeez, you better get to bed. I'm sure your kids are going to be up early."

He's like, "Oh, I'm still wrapping gifts."

It was nice when they would call or it was nice when other folks would call, just hearing little stories, like that, like Frank talking about being up late trying to wrap gifts and that sort of thing. It makes you feel like you're not so far away. So it was good.

*Wright:* You feel like you had an impact or brought the American culture to the folks that you met over in Russia?

*Chiodo:* Yes. I mean, I think we definitely did have an impact over there. Actually I can remember one time, Victor Blagov, who was the head of the Russian Flight Director Group--well, he's the deputy flight director--him sitting on the couch and talking to one of our ops leads who was a male, and it just so happened that I think our entire support team at the time was female. We had all these people walking through. Victor is asking John, "John, what is wrong with the men at NASA? You guys are being just taken over by these women over here. How do you get any work done with all these beautiful women

around?" You know, blah, blah, blah. There are people that would say, "Oh, that's sexual discrimination," or that's whatever. It wasn't. It was more chivalry than anything over there. They treat women terrific over there.

*Wright:* You spent so much time and had experienced so many increments. Was one tougher than the other? I know one was longer than the other, but did you find one tougher to be there?

*Chiodo:* I don't know if I'd say tougher. Each increment was different. Each increment had its own set of problems. Jerry Linenger's increment was tough, because that really was when a lot of the Mir systems problems started. That's when they had the fire. They had some coolant leaks. Also I think our ability to support the experiments that they were doing, it wasn't as mature as it wound up being at the end, so we still were having a lot of changes to the procedures he was doing and that sort of thing. So it was really hectic over there. I think that was kind of NASA's baptism by fire--pun intended--at the problems that you can encounter. So that one was probably the hardest.

Then the collision happened on Mike Foale's increment. Maybe if that had been the first big problem out of the chute it would have been the same, but we kind of had been through it, knew a little bit more on how to handle it. We knew that the Russians would be giving us the information we needed or what they knew at the time. So each increment was different. I'd say for me, Jerry's was probably the hardest.

*Wright:* You mentioned the different jobs that you learned how to do, and some were the first time that you'd ever encountered those. Is there one part of that was the most unique, that was the most challenging that you had to learn that kept you on your toes?

*Chiodo:* Yes. Well, I'll tell you something that I wasn't expecting over there. Like I mentioned, we were wearing many hats over there. We were doing the crew schedule and working experiments and making sure their press events got scheduled right and that sort of thing. When the fire happened and when the collision happened, I mean, that place was just swarming with press over there. Here at NASA, the press all go to one spot and we have NASA spokespeople. We send them a flight director, and the flight director comes over and briefs them on what's going on. I know the flight directors and the crew members, they get a little bit of training on how to do a good job at that. We got no training. That was something totally unexpected for me over there.

In Moscow, they don't keep their press in one spot. So that's one thing we learned. We put a sign on our door, "NASA personnel only," blah, blah, blah. We had to keep the door shut. But you would walk

out of the door to go to the bathroom or to go talk to somebody and they're, honestly, six inches away from you is a camera and it's running and there's a light, and people are grabbing you wanting to talk to you. That was completely unexpected. That was tough. That was tough.

Most of the time, the press over there would speak English. All the major networks were over there and a lot of even the local TV stations spoke enough English that they could communicate with you. So they would come to you and say, "Oh, we just heard from the Russians that," blah, blah, blah. How do you respond to that? You don't know if it's true or not. So that was a learning experience. That was something I really did not expect to run into over there.

*Wright:* I think the phones were ringing back and forth between the office that you were in and the offices that are here in Houston.

*Chiodo:* Yes. Yes. The time difference, it's a nine-hour time difference between Houston and Moscow. So really, in general, by the time the day is starting to wind down in Moscow, say, around five or six, that's when folks are just coming in over here. If it was something important, of course, you would page Frank or we would do what we needed to. But in general, you try to handle the mini emergencies as they would come up. So it was interesting.

*Wright:* You said you were there for Christmas, so that means it was cold there.

*Chiodo:* Yes.

*Wright:* How did you adapt to the cold weather?

*Chiodo:* It really wasn't that bad. I grew up in the Northeast, so I was used to cold weather. It never really got just blistering cold, like "I don't want to leave my apartment" cold. It was probably about 20 degree Fahrenheit, which was warmer than I expected. The problem was it stayed that way for three months, three or four months.

I did this last trip all wrong. I spent my winter in Moscow and my summer in Houston. So I need to get smarter about that.

*Wright:* Were you there all different seasons, since you were there the 400 days?

*Chiodo:* Yes.

*Wright:* Did you get to see Russia in its full cycle?

*Chiodo:* Yes. I think, in general, I did. I think I hit most of the major holidays over there.

*Wright:* Our holidays or theirs, or both?

*Chiodo:* Probably both. But the last trip I was there I hit Christmas and New Year's. It was the first Christmas I'd been away from home, so that was kind of strange. But you had eight other people in the same situation, so we all had a big Christmas dinner and we watched "The Grinch." Somebody brought "The Grinch" video over and we had a little gift exchange. It made it nice.

New Year's was terrific over there. That's probably one of the best New Year's Eves we've had over there. We said, "Oh, we're all going to go to Red Square." I thought Red Square's just going to be packed. We got down there and they had bands like set up right outside of Red Square, so there was a big crowd out there. But really in Red Square there was maybe a couple hundred people, which is nothing with the size of the place. So I won't forget that. That was fun.

*Wright:* Does Russia sponsor activities for New Year's, or was this just all individual things that people had done for the holiday outside of Red Square?

*Chiodo:* Outside of Red Square it was all sponsored. Unfortunately, it's gotten to the point where there's a lot of advertising there. Even you go in Red Square and every once in a while you'll see somebody's hung up banners for whatever. So I don't remember who was sponsoring whatever this New Year's Eve thing was. They had big screens. You could see the bands playing.

*Wright:* I guess that was a different setting compared to maybe when you were there the first time around.

*Chiodo:* Yes.

*Wright:* Because of the changes that are being made there.

*Chiodo:* Yes.

*Wright:* Did you see changes being made also in the areas where you were living? You mentioned the apartments were there. Were the apartments new compared to when you were there and stayed at the hotel?

*Chiodo:* As far as I know, the apartments were there while I was living at the hotel. We did have some folks living in the apartments. Generally, we put our really long-term people there, the ones that were going to be there for four or five months. When I was living at the hotel, the most it was, was two months

or something. I'm pretty sure there simply weren't apartments available, additional apartments available in that area. But NASA's continuing to kind of scoop up the apartments that are over there. For Phase Two, that is where all our people will be housed over there.

*Wright:* About the commute, how long did it take you to get and from work?

*Chiodo:* It was probably about half an hour, forty minutes, by van. Traffic is insane over there. I can remember the first couple weeks I was over there, it was white knuckles the whole way.

[Brief interruption] Actually, a couple of our interpreters are here visiting from Moscow.

Traffic is just a mess over there. Like I said, the first couple weeks was bad. After that, it's nothing. It doesn't even faze you anymore.

*Wright:* But you didn't have to drive, you always had someone?

*Chiodo:* Exactly, yes. We always had a van taking us back and forth.

*Wright:* So that was a good thing.

*Chiodo:* Yes, thank heavens.

*Wright:* What about excursions? Did you have a chance to go do anything on your free time?

*Chiodo:* I did.

*Wright:* I'm sure it was wonderful. Did you get to take some trips?

*Chiodo:* Actually, it was only during my last trip over there, because I was over there so long, was I able to take any time off. So I did a couple of long weekends. A lot of folks would go up to St. Petersburg, and that's a great trip to do. I've done that a couple of times. I also, this trip, went to Cairo for a couple days and went to Prague for a couple of days, on separate trips. Has anybody talked to you about the Green Bay Packer banner?

*Wright:* No.

*Chiodo:* Oh, this is a good story. There is a guy that works over in psychological support. He's one of the people that sets up family conferences. When the Progress resupply vehicles go up, his group is responsible for getting the things the crew member wants on there, maybe some more books or movies or

photographs or candy or whatever on there. But this guy is a big Green Bay Packers fan, and this friend of his is a big New England Patriots fan, who has spent a ton of time in Moscow. It just so happened a couple of years ago, the Packers played the Patriots in the Super Bowl. So the Packers fan, Steve, had this party and he had this big Packers banner up. Sometime during the party that banner disappeared.

I won't point any fingers, but that people have taken that banner basically all over the world and have been photographed with the banner. It's been everywhere. I know it's been down to Australia. It's been to Antarctica. It went with the cosmonauts on survival training in Siberia or up at the Black Sea. It's been on orbit. It's been on Mir. It's just been everywhere.

We realized, this was back in February, this friend of mine called and said, "The banner's never been to Africa. You want to go to Cairo?"

I'm like, "Yes. Let's do it."

So we were there, it was just for a weekend, but we went. So I've got a picture of me on a camel holding the banner in front of the pyramids.

*Wright:* All these pictures, do they go back to the original owner?

*Chiodo:* The original owner, as of right now, I think he knows there's something up with the banner. He doesn't know where his banner is. But there is somebody putting together a photo album, "The Travels Of The Banner." This banner has been absolutely everywhere.

*Wright:* So he's been left in the dark and everybody else is having a good time with it?

*Chiodo:* Yes.

*Wright:* Oh, how funny.

*Chiodo:* Exactly.

*Wright:* Are you going to try to get as many people together as you can when you give him the album?

*Chiodo:* We've been talking about how to--we actually have to give him the banner back, too. So we've been talking about what's the best way to do this. We were trying to figure out somehow, gosh, does anybody know anybody in the Green Bay Packers? Could we get Brett Favre to present this banner to him? I think folks are still trying to figure out--

*Wright:* They may go for it. That's a great PR story, that it's been everywhere.

*Chiodo:* I think so, too. Yes, there's apparently a great picture of, I think, it's on the Shuttle, but it's got Mike Foale in one corner and Wendy Lawrence with one corner, and this thing's in the mid deck.

*Wright:* That's terrific.

*Chiodo:* Yes.

*Wright:* Did all of you try to work together to keep a light atmosphere? You know, having things like that always seems to make people have a good time together.

*Chiodo:* Yes.

*Wright:* Is that something that everybody tried to do, is keep that type of attitude?

*Chiodo:* You try to. With some folks, it depended on what was going on during the mission. Andy's mission was probably the smoothest one I worked. In general, the mood over there was really good. When there were problems going on, on other people's missions, it was tough over there. You also get into a mode where if you have somebody coming over for six weeks, the first week they're over there, they're still trying to get adjusted and get into the swing of things. Then the last, probably, two weeks they're there it's, "When's my plane?" That sort of thing. So it's tough.

Luckily, we always had a flow of people coming in and out. We tried not to swap everybody out at the same time, so you wouldn't have those kind of spikes and lulls.

*Wright:* Have a good exchange of information?

*Chiodo:* Yes.

*Wright:* I guess, everybody that came in had something new to say?

*Chiodo:* In general, what we did, we had five or six, in general, positions over there. Each position, somebody would be there for six weeks, and then the next person in their position would come over to take over for them. It really was just getting fresh bodies in.

*Wright:* We talked about your high point. Was there a low point during these 400 days that you were part of the Russian contingent that you thought "Maybe I made the wrong choice. Maybe it'd been better if I hadn't done this"?

*Chiodo:* No. I can honestly say there was never a time when I said I did the wrong thing. In general, when things were going bad over there, you're so busy you don't have time to think about it. But you come out of that a couple weeks later and you feel great, you know you got through it.

*Wright:* Was there any down time when you all were waiting or just sometimes that you all were sitting, everybody looked at each other like, "What are we supposed to be doing?"

*Chiodo:* Definitely not a lot. Weekends, in general, were slower than weekdays. But a lot of times you would spend weekends catching up on paperwork or catching up on E-mail or things like that. I always kind of looked forward the weekends. I mean, yes, it was long hours, but at least you would get caught up, caught up on everything.

During Andy's mission we, like I said, it was probably the smoothest of all. He did a great job running his experiments. The experiments held up pretty well. There was probably more down time during Andy's mission than any of the others, but we were never bored over there, looking for stuff to do, anyway. There was always plenty of things to keep us busy.

*Wright:* How about the food? What did you do for lunch every day? Here there's many, many choices, but what did you do for lunch? What did you do when you went home for dinner?

*Chiodo:* In general, at the control center there is a cafeteria there, so we would go there every day for lunch. I remember looking at the menu the first time, "Well, this is all in Russian. I can't read any of this. It's great that those Russian classes taught me office supplies, but this isn't helping me." [Laughter]

Anyway, but you go there with people that already been and they say, oh, this is this and this is this. I could almost always find something that was good over there. The cafeteria ladies all got to know us. I remember this one time I ordered whatever, and the cafeteria lady, Galia, said in Russian, "Do you want a salad with that?" They have all kinds of little side salads.

I said, "No, that's okay."

She said, "This one, this one is new. It's delicious." I couldn't tell what it was by the name. Chicken was in there. So I thought maybe it's some kind of chicken mayonnaise-type salad.

I said, "It's good?"

She says, "Oh, [Russian phrase]. Very good. Very delicious."

I'm like, "Okay. I'll have that."

So she calls my number and I go to pick up my tray and I look and it is this--we affectionately called "chicken jello." I mean, it's like aspic, just clear with this layer of chicken. I'm just like walking

back to the table, like, oh, my gosh. I put this down. I had to like hide it behind something. I couldn't even look at it. One of our interpreters are like, "Oh, that's great." They're eating it.

*Wright:* So you didn't taste it?

*Chiodo:* No. No, I did not taste it. I'm not real adventurous when it comes to that. They're big into tongue over there, too. Nine times out of ten there was tongue on the menu. So you try to get the cafeteria when it opens at noon, because if you go there at two, you get tongue. That's your only choice. You get tongue or you get nothing.

*Wright:* When you went out, did you have more a choice?

*Chiodo:* Yes. In Moscow, there really is everything there. McDonald's is everywhere. You have T.G.I. Fridays. You have various American restaurants over there. There definitely is not a shortage of places to go to go out over there. Stores over there, grocery stores, in general, the big supermarkets like we're used to aren't very common over there, but they have a ton of little stores over there. You can, in general, find just about anything you wanted. Also I had a membership at the American Embassy commissary, so they would have all kinds of American foods over there. I could get tortilla chips and that sort of thing. We would load up and feed the masses.

*Wright:* How about other shopping? Did you buy clothes after you were there, the seven months in winter?

*Chiodo:* A couple of times I did. I think people would be surprised to know how expensive it is to live in Moscow. It's ridiculous. Clothes over there, you would pay three times the price that you would here and the quality would be half as good. So I really didn't buy much clothes over there.

People did bring me catalogs, so I would do some shopping and get it delivered actually through the embassy. They can deliver to me over there. So a couple times I had that happen. Or I'd have it delivered to a friend of mine who was coming over on the next charter, that sort of thing. Clothes were something I never really bought over there. A lot of souvenirs the first couple months I was there. That was about it.

*Wright:* Do you have a favorite that you bought?

*Chiodo:* Souvenirs?

*Wright:* Something special that you were glad you found that reminds you of being over there?

*Chiodo:* You know, most of my souvenirs have gone to my mom. [Laughter] She was the one calling over, "Yes, but that doll I gave to your aunt. Can you see if you can find me--you know, well, she just really liked it," and that sort of thing.

No, I can't really think of anything. There's this one type of egg that I've kind of wound up collecting, that I probably have four or five of those that I'll hang onto.

*Wright:* Going back to clothes, when you went to work, was there something special you had to wear? Was it a very comfortable atmosphere?

*Chiodo:* Very comfortable. In general, now, when all the press was over there, we would try to look at least a little professional. But in general, you would see folks in Dockers, sweaters. A lot of the guys would wear shirts and ties every day. They probably didn't need to. Some of the Russians did, some of them didn't. In general, it was a pretty casual atmosphere. I mean, you could go in blue jeans. I definitely wouldn't do that right out of the chute over there. Like we said, they're big into relationships over there and getting to know you. I think probably the first month or two I was there, skirt and heels or dress pants or something like that. After that, you would see all kinds of dress over there.

*Wright:* You were over there, but while you were there and your team was there, you had a group of people supporting you here. In fact, you invited us into this room today called the POSA room. Could you tell us what they did, and did you also work as part of that team when you were here?

*Chiodo:* Yes. The POSA is Payload Operation Support Area. In general, it is staffed by a group of Lockheed-Martin folks. They basically are here Houston-time from about midnight until two in the afternoon, which corresponds to a work day in Moscow of like 9 a.m. to 11 p.m. So basically while the crew was awake.

Most of the folks that supported over here also came over to Moscow to help out over there. We didn't really have any NASA folks in here, I mean, full-time. I would say we had people visiting three days a week, probably. It was probably more than that. I would say probably every day somebody from NASA pokes their head in here and sees how everybody's doing and just checks in with them. These guys did a great job.

Unfortunately, they were given this task that, it's kind of like, "Anything we need over in Moscow. We need you guys to go chase down this obscure fact. We need you guys to go run this down." So these guys, day to day they probably never knew what they were going to be working on the next day. Even like

little things, like logical support stuff. "Hey, can somebody track down the Steelers score for me?" I mean, just little things like that. When we were over there for Christmas, they had arranged for one of the people that runs our voice loops to play Christmas music over our voice loops to us. I mean, things like that.

*Wright:* How many people were in here? Did it vary or was it the same amount of people?

*Chiodo:* In general, it was probably two or three. But I feel sorry for the guys that are in here midnight to 9 a.m. I mean, they are the only ones in this building, just about.

*Wright:* But it was nice, I guess, for you to know that they were here.

*Chiodo:* It was great. It was great. Also, if an experiment broke at three in the morning Houston time, it was nice; they got to call the experimenter and wake him up, not us.

*Wright:* That's a benefit.

*Chiodo:* Yes.

*Wright:* Overall, your positions have been so varied the last few years, do you feel that the Shuttle-Mir Program is going to be a benefit to International Space Station?

*Chiodo:* Yes. I think what we learned, my perspective, we learned how to run a mission. That's not just how to take care of the crew member, but it was how to take care of the people over in Moscow. We're going to have people living in Moscow, possibly at the other centers, I don't know, long term. It's a special-needs thing. I think it's one of the things NASA's probably still learning. I mean, we're getting a whole lot better at it.

While I was there during Andy's increment, one of the other folks there from my group was there with his family. He was one of the first folks to actually bring his full family over here. He's got a wife and three kids, aged, I think, four to twelve, or something. So little ones he has over there.

It's one of the things NASA's still learning, I think, is how you attract the right type of person to that job and how you keep them happy over there.

*Wright:* Did you find changes not only in how you did business, but did you see people change, become more flexible, just overall?

*Chiodo:* Yes. I know I'm a lot more patient now. [Laughter] I mean, you learn to be. I can remember when I first got back here, my first day back, my car was dead. I had a friend of mine kind of follow me to

the service station. But we went to lunch afterwards. We sit down and--boom--there's a waiter, there's our food and there's our check, and we're out. It's like, this is bizarre. (In Moscow), you go to a restaurant and you sit there for ten or fifteen minutes and somebody strolls by and they go, "Yes, you want menus?," that sort of thing. In Russia, when they give you your check it's your invitation to leave. So it's considered impolite for them to hand you a check before you ask for it, which we learned the hard way. We sat there, "Jeez, where's our check?"

*Wright:* It's one of those cultural differences that you had to learn.

*Chiodo:* Yes, that's true. So I'm a lot more patient now, both work-wise and otherwise, too. In the Shuttle world, the crew member asks a question and you have an answer to him back in thirty seconds. You've got a huge team of people that are paid to know those answers. In Moscow we had a much smaller group. Whereas in the Shuttle world your mission is ten days long. I mean, no way can you afford to waste any time. In Moscow, missions were four and a half months long. So you kind of have a different approach to things.

If you expected a long-duration crew member to work at the same pace that the Shuttle crew does for four and a half months, it couldn't be done. You try and let them manage their schedule as best they can. You tell them what the time critical things are. "Okay, you need to start this at this time and make sure you shut it off three and a half hours later." You give them constraints like that, but, in general, you let them run their day.

*Wright:* Anything that would keep you from going back and doing this again or possibly through Phase Two, spending some more time over there, taking your experiences?

*Chiodo:* No. I would be shocked if I didn't go back. I look forward to going back. I know some of the Russian shift flight directors are here in Houston now and I'm looking forward to seeing them. From day one, they really made us feel welcome over there. They're not just my colleagues, they honestly are my friends over there. I come back and they want to know, "How are the cats? How was this trip? How was that?" I'm in the process of buying a house, so a couple of them were, "Oh, how's your house?" That sort of thing. Yes, I look forward to seeing them. It will probably be a couple of months, but I look forward to going back.

*Wright:* As we were visiting, we had a group of interpreters that came through. How were your experiences with those? Did you have to get used to having the middle person there, or was that easy for you?

*Chiodo:* It kind of gets back to the whole patience thing. It's another thing you learn, is how to talk using an interpreter and how to break things into a decent-sized sentence. You know, it was almost interpreter-related a lot. One of our interpreters, Michael, who walked in here, he's phenomenal. You would say a sentence and you wait for him to translate it and he's like, "Tell me more. Give me a bigger chunk of something to translate." Those guys are there day in, day out. I'm there for two months and then I'm back in the States. Or I'm there for seven months and then I'm back. Those guys aren't. I mean, those guys are there full time. They're like the secret people that actually run things over there. They've got the relationship with all the Russians. So that helps a lot, too.

*Wright:* Did you have to build a trust with them to know that they were really saying what you were saying?

*Chiodo:* I never felt like there was a time that I would say something and they weren't interpreting correctly. A lot of times we would be having a discussion amongst ourselves, just with the Americans, "Do we do this? Do we want to do this? Well, why don't we ask this." This sort of thing. One of the interpreters would be sitting there listening to us, and would be like, "Well, you want me to call So-and-so and find out?" It'd be like, "Yes." You'd get to the point where you trust them implicitly to do stuff like that. We're really lucky, we have a real sharp group of interpreters, and that was just key. They also, whether they like or not, sometimes get to be our Russian instructors. Some of my best phrases I learned from the interpreters. [Laughter] That's not for camera, though.

*Wright:* Will you be sharing those? [Laughter] Well, we all have to learn what we have to learn to deal with what we have to deal with.

*Chiodo:* That's true. You do what you have to do.

*Wright:* We thank you for your time today. Is there anything else that you'd like to share with us, something that maybe we didn't cover that you've thought about?

*Chiodo:* I can't really think of anything.

*Wright:* What we'd like for you to do is if you could just show us how this room works or tell us what's in here, so that we can at least capture that.

*Chiodo:* Okay. It's not going to be very exciting, but sure. Okay.

*Wright:* That's okay. We take it all and then we just kind of let it flow. [Laughter]

*Chiodo:* Okay.

*Wright:* You might want to start with your friends up here [photos on the wall]. A lot of these folks you know, don't you?

*Chiodo:* Yes, as a matter of fact.

*Wright:* You didn't work with Shannon Lucid. Your first time was with John Blaha, right?

*Chiodo:* Not in Moscow.

*Wright:* But you worked with her here?

*Chiodo:* Yes. When I was doing the Shuttle-only-type thing. So I worked her Shuttle flights.

Yes, these are our cast of heroes here. Starting off with Norm [Norman] Thagard's flight and then all the way through. I guess we don't have any of Dave and Andy up yet. Actually, I just thought one of the things over in Moscow, we have a wall, kind of similar to this, smaller pictures. But we have the crews, kind of like their official astronaut portrait over there. We started at one point coming up with names for everybody. Somebody was, I think Norm Thagard, we were like, "Oh, that's our man in the can." Shannon was "That's our ace in space." It was that sort of thing. We have kind of our wall of fame over there, too.

*Wright:* So are you going to finish these, or that's the only two we're going to get? Do you remember the rest?

*Chiodo:* One of them was "Our hero in zero G." I can't remember what the other ones were.

These are just a couple of layouts of some of the modules, some of the Mir modules. Like I said, it was tough for us to keep track of what all was located where. Or when Andy would call down, "Hey, you guys, you know, keep me honest, I'm stowing this behind panel 214. If I need to find it again, help me." Just trying to figure out, okay, now where the heck did he put that thing? Just keeping track of where everything was.

*Wright:* Did you have a training on the modules or was this on the job you learned where everything was?

*Chiodo:* In general it was on the job. A lot of the folks that had been there before me had put together

some great reference material that had layouts like this. "Okay, here's where the treadmill is. Here's the galley is," and that sort of thing. So I had a general idea of where things were laid out.

This is kind of the area I would say where most of the work gets done in these two rows. This black phone right here is where they talk to Moscow. The jobs they do here, I mean, are varied. They'll have some long-term things that they need to work on. We keep track of obviously the progress the astronauts are making on experiments and that sort of thing. So that sort of tracking gets done here. But little things, too. "Can you guys make sure So-and-so sees a copy of this video that was downlinked?" That sort of thing. These guys, it's not a glamorous job back here. They do it well. They do a real good job.

Most of the computers in here--E-mail, with the time difference being what it is, E-mail is absolutely essential. There's no way we could do our jobs without it. These guys kind of try to funnel our E-mail for us and make sure we're seeing what we need to see and taking care of the other things for us.

*Wright:* You never really felt isolated from here, because you had so many different forms of communication while you were there?

*Chiodo:* Yes, it's true. Actually, towards the end of our trip over there, they set up kind of a video teleconferencing-type thing for us that we would use for family conferences. People could bring in the wife and kids and have them on camera and you'd be able to see each other for twenty minutes or so, or actually however long. It was nice. That sort of thing helps.

*Wright:* I can understand why it would be so hard for you to put together a job description of what you did.

*Chiodo:* It is. You do what needs done and you never know what that is.

*Wright:* We thank you for all the information and for your time.

*Chiodo:* Oh, sure. You bet.

*Wright:* Good luck with wherever it takes you in the future.

*Chiodo:* Yes, who knows. [Laughter]

*Wright:* More experiences, you'll just have more adventures.

*Chiodo:* Yes, more adventures. That's what I'm looking for.

*Wright:* Well, thank you for speaking with us.

*Chiodo:* Oh, you bet.

[End of interview]