The oral histories placed on this Website 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.

To continue to the Oral History, choose the link below.

Go to Oral History

BRIAN DAILEY
April 19, 1999
Interviewers: Rebecca Wright, Carol Butler

Wright: Today is April 19, 1999. We're visiting with Dr. Brian Dailey in Bethesda, Maryland, as part of the Johnson Space Center Oral History Project. The interview is being conducted by Rebecca Wright, assisted by Carol Butler.

Today's subject is the Shuttle-Mir Project. We would like for you to begin by telling us how you got involved with the Phase 1 operation.

Dailey: Good. Thank you. I first came to the White House on June 1, 1992, succeeding Mark [J.] Albrecht, who was the first executive secretary of the National Space Council under President [George H. W.] Bush. I, of course, came from the Senate Armed Services Committee, where we had had quite an extensive background and exposure to Russian space issues on the committee, having gone over there with the members of the committee on two occasions.

The situation as I found it coming in on June 1st was that there was a lot of preparation going on for the summit between President Bush and [Russian] President [Boris] Yeltsin, which was to take place, I believe—I'm not certain about this—but around the 15th or 16th of June. There were a number of interagency meetings that were taking place.

The most notable subject matter of those meetings was the decision on whether or not to allow a Russian launch vehicle to launch a Western, in this case United States, satellite, because heretofore, in [19]'92, that is, there was a strong hesitancy to allow what was called non-market economies the right to get into the commercial launch services business, believing that they were not driven by any kind of market prices; rather, they were just simply driven by whatever they wanted to market. In that sense, there was no way to measure how much a particular launch vehicle cost under those kinds of socialist conditions.

China, however, was an exception to that rule back in, I think, [19]'88, '89 time period. We had approved a China launch of an American satellite back then, and this was going to be the first time they actually approved a Russian one. It was specifically the launching of an INMARSAT [International Mobile Satellite Organization] satellite on a Russian launch vehicle. That became the key interagency issue, whether or not to allow them to come in.

The Russians were pushing for actually more than just simply the launch of one U.S. satellite. U.S. satellites, parenthetically, are the vast majority of satellites that go up in the telecommunications business, and most of the satellites were all focused on launching to geosynchronized orbit at that time. Meridians [phonetic], Global Stars, and the things we know today in low Earth orbit were not even spoken

much about then, because they were not firmed-up projects. But certainly geosynchronous satellites historically have always been the key commercial niche in the market for launch vehicles, commercial launch vehicles. The Russians, with their new capabilities, particularly in the Proton, became the key vehicle that they were trying to get permission to launch this particular INMARSAT satellite.

The issue was pretty much resolved. Other things were coming up at the time that were becoming additive agenda items to the summit. The summit was supposed to have focused almost exclusively on START [Strategic Arms Reduction Treaty]. That was supposed to be the big headline issue, one of the big items that, after negotiations, were complete, that would have been the keystone upon which most of the discussions focused between President Bush and President Yeltsin. As it turned out, they did not complete as much as they hoped to complete on START activities, and so many of us were thinking specifically about what else we could put into the summit to expand the summit's interest to be far beyond that and maybe get into additional issues. Space was considered one of those areas.

There have been some assertions—in fact, a recent book on this issue asserted that that motivation was based primarily on ways to help President Bush get elected. I really can't think of anything further from the case, and I'm not even sure how that really came up as a primary driver. I think anybody who's spent time in the White House, certainly anybody who's spent time in American politics, knows that space is not going to be a big enough issue, at least not in the eighties and nineties, that it would really be something that would make or break a President. But I think, more importantly, the issue came down to what other kind of news items could come out of the summit that would be more positive.

It was obviously very late in the game by the time any of this thinking was going on, that the settlement of the issues related to INMARSAT in Russian launches were coming to a close, so it was probably around the first week, second week of June, so very, very close to the summit date. We were kind of all scrambling around, thinking about things that we thought would be very useful at the Space Council, and, in particular, to see if we could get moving on. Of course, the expectation back then was that there was no question that President Bush was going to be reelected. It was not a matter of if; it's a matter of just by how much.

Bill Clinton at the time, in the June time frame, was still a bit of an anomaly or an unknown, and therefore was not considered to be seriously a challenge to the President, and the President, in the polls, was still enjoying the great success of the Persian Gulf War, and therefore was not considered go be much threat to his presidency at the time.

So what we were really looking to was a second term, and what things we could do in the second

term today that could make it a more successful second term in the area of space and space cooperation.

I might add that one of the issues associated, of course, to the INMARSAT issue is whether or not, once you've done one, then it certainly means that they have a foot in the door and they start doing more and more, so that was a policy issue surrounding it. Once you've given them this right to launch, you're going to be hard pressed to take away that right in the future.

But anyway, that said, we decided to look at other things. George [W. S.] Abbey at the time was one of the members of the staff of the National Space Council, and so George and I and Liz Prestridge [phonetic], who was one of my other assistants on the Council, were beginning to try to formulate other potential things that we could broach at this late date and hopefully get on to the summit calendar at the time.

Dan [Daniel S.] Goldin and I were very close in working on these issues, which was actually quite a relief based on the prior relationship between Dick [Richard H.] Truly and Mark Albrecht, where NASA and the Space Council were like oil and water. That got very much fixed when Dan Goldin came on board and I came on board, not because of me, myself, but Mark, as well, had just as much success with Dan as I did. But I had known Dan when he was at TRW [Thompson Ramo Wooldridge, Inc.] and therefore already had a working relationship with him. We all had the same view that, one, NASA had to change and there needed to be some serious mind-set changes at NASA. George Abbey, of course, had always felt that way as well. So the Council and the NASA administrator's office became very close in the working relationship, in trying to change the agendas going forward.

We had had some press and some recommendations from Capitol Hill, most notably Barbara Mikulski's office, that had some legislative language in the bills at the time that reflected an encouragement that we find more ways to expand our relationship with Russian, since space and military byproducts associated with it were things that could be either commercialized or civilianized to the point where people were encouraging us to look at that.

George Abbey—I will not take credit for this, because George did most of the detailed thinking on it, but George was instrumental, I think, in coming up with one of the key ideas in what we could do with the Russians at this particular conference. It was literally a situation in which George and I were downstairs about to leave the old Executive Office Building when he came up with the recommendation. I tried to get it put on the agenda, the idea of doing more cooperation with the Russians on the Shuttle Program. I thought it was a very neat idea. I did, however, have one reservation; it was unclear to me what the astronaut corps was going to think about this, since these were things that revolve around safety

first and foremost. Keep in mind even though it was 1992, it was still only six years away from the *Challenger* [STS-51L] disaster, that safety was still a key item in people's minds.

The White House staff, I would say, working through the Vice President now, Vice President [Dan] Quayle, was not particularly receptive, but open-minded to trying to add something new. It wasn't the idea as much as it was the lateness of the idea. In that kind of a process place, people want to really have a paper heritage as to how things came to be, and coming up in the last five or six days of this type of situation didn't really fit the mold, so therefore there was some resistance. I don't want to even think a "Not Invented Here" situation. Really just not one that was readily accepted. The Vice President very much liked the idea and wanted us to find ways to continue to do it.

But in saying that, one of the key impediments that also surfaced on this particular issue was the State Department. A gentleman by the name of Reginald Bartholomew, who was at that time my counterpart, the Office of the Executive Secretary of the National Space Council holds an executive-level rank of three, EL-3, which is equivalent to an Under Secretary of State or Under Secretary of Defense. So my counterpart was Reginald Bartholomew in the context of space issues. The resistance from him and the State Department was very strong, very much opposed to this, I think mainly because it was a "Not Invented Here" situation. I don't hold much policy concerns on their part. They were certainly open-minded to wanting to do things with Russia, even expand things, and thought maybe it was best just to wait and then work this as a side issue coming out of the conference, maybe we'll get some wording into the joint statement that led to a path of later talking about this, but didn't want to settle on this being a main item, that there were all sorts of interagency issues that they asserted or stated would be a real concern here.

I, at the time, was a little bit disappointed with that, and felt that this was really an opportunity that couldn't be lost, because, as we all know, what is very important, as we all knew, those in the policy circles, knew that it was important to have that kind of explicit wording in a joint statement, that one could use through the rest of the bureaucracy to get things moving. If it was as vague as he implied he would like to have it, this would be one that just could be a year away, if not more. Knowing that, I decided to be bold enough to try to get this issue front and center.

It just so happens one night—I don't even know what the night was, but it was sometime in the second week of June, there was a reception at an embassy, and I happened to meet Kathy Sawyer [phonetic] there from the *Washington Post*, who was someone who was very much focused on the U.S. civil space program. Kathy is a big supporter of the idea of trying to expand as much activities in space as

possible and, I think I could safely say, even thinking that the Russian relationship would be important in the future as well.

The situation was such that Kathy had asked me what kind of things were going on in the summit, and I happened to mention this idea, which she thought was a really neat idea, but also explaining to her that it was one of those things that, as in any bureaucracy, as anything she's seen in this U.S. bureaucracy, that there would obviously be different views, and it wasn't having much success in getting the attention of the White House staff to the point where they would bring it up to the President directly and see what the President thought of it.

So Kathy interviewed me a bit more on this issue, on background, and I think it was the next day or the day after, she came out with an article on this very issue, saying that there was a stalemate and a real problem. My impression—I don't know this for a fact—my impression is that the President and Quayle, in particular, took the issue up together and discussed it, and thought it was a very good idea, and it became a viable part of the agenda, and was later agreed on by Boris Yeltsin and George Bush as an item that there would be future expansion. So from a bureaucratic politics standpoint, it was one of the early successes in trying to get things moving down the field.

I might say that as part of the process leading up to it, I mentioned that George Abbey was going to check the astronaut corps, who at the time said, in principle, they don't mind the idea, but there were a lot of issues associated with it. Safety issues, as I said before, certainly came up as a key concern. He said he had taken care of the astronaut corps. As you know, George is so historically associated with that and has been such a godfather over that particular activity, that I had every bit of confidence that George would work the issue very effectively, and he did, as he always does.

Then, of course, we also had another problem, and that is that the National Space Council was really much like the National Security Council in terms of its process and how it handles things. It isn't so much the initiator of policy initiatives as much as it is the drafter of policy. While we might dictate that it is the intentions of the agencies within the U.S. Government associated with the space program, be it DOD [Department of Defense] or NASA or, frankly, even NOAA [National Oceanic and Atmospheric Administration] or the FAA [Federal Aviation Administration], since they have a role in space flight, it was general form not to initiate specific recommendations.

So Dan Goldin and I, in one of our many late night meetings, he used to come over at the end of the day and sit around the White House, and we would discuss what was going on and what we needed to work on. That's how close the relationship was. Almost every evening, George and he would come over.

George would frequently spend a lot of time over there at NASA, and we'd oftentimes go out and have dinner as well, depending upon what was going on that night, or go to a reception or something.

But anyway, we were recalling this whole situation and George's idea. I asked him, rather than I make this recommendation, that he send me a letter with this particular initiative so it would be initiated from NASA to me, and therefore I could take it. My appropriate role was to coordinate and adjudicate and review and coordinate throughout the government a particular initiative that was a recommendation on the part of an agency head, in this case Dan Goldin. So that was, by way of background, partly what led up to the way we did this activity.

We later had, at the summit—I, again, forgot which date it was, it was the 16th, probably—we had a breakfast in the Blair House with Boris Yeltsin. It was chaired on the American side by the Vice President, so it was Vice President Quayle and President Yeltsin, the purpose of which, of course, was to talk only exclusively about space cooperation. Since the Vice President was the chair of the National Space Council, it was his prerogative to hold such a meeting. In the meeting was Grachev [phonetic], who I believe was the Minister of Defense at the time, a number of other big wigs in the Russian Government. I think the Deputy Foreign Minister was there as well.

There was also the notable absence of the fact that Yuri Koptev was not at this particular breakfast. Now, you have to keep in mind that the Russian Space Agency was sort of nonexistent until about two or three months before this summit meeting. I'm being approximate here. It could actually be more than that. It could be less than that. But Yuri came from the Ministry of Heavy Industry, which, of course, is always the codeword for defense products. In this case, he was responsible for the space program. He assembled two or three people to form up to that point which was the Russian Space Agency.

The Russian Space Agency was really quite novel in terms of any kind of exposure to the West, and he was my counterpart, but he was also Dan Goldin's counterpart, because there was no counterpart to me exactly, and yet there was no counterpart to even Dan Goldin there, more so him than me, though, but the reason why there was no counterpart, of course, is that there really had been no budget assigned to it. He was sort of putting together his agency. It was unclear where it was going to lead.

We thought Yuri was extremely important, though, to make him as a critical success factor going forward. Sounds a little odd, but at the time you have to also keep in mind that there were a number of industry initiatives going on. I want to be careful to use "industry" in quotes when I'm talking about the Russian side, but certainly on the U.S. side. Rockwell Corporation was working out a docking mechanism

that could be used either on Space Station activities or other things like Shuttle dockings to Mir, even. They were working directly with NPO Energia, Yuri Semenov [phonetic], and he was a rather interesting individual, to say the least, but Yuri representing, again in quotes, the Russian "industry," knowing full well that they really are government industry, nonetheless, was extremely well connected, and from an industry standpoint, seemed like a logical [unclear] for them to negotiate.

But, nonetheless, Yuri Semenov wanted to negotiate directly with the Russian Government. I was very, very apprehensive about that and very concerned. For one thing, there was some intelligence reports that I had seen at the time that made me wonder about what some of the activities were that Energia was doing, and I obviously can't go any further than that, but suffice it to say that it made me very concerned that we, as a government, should not be probably going head to head with them in any kind of negotiation, but rather should let them work with U.S. industry as appropriate, but we needed to find our appropriate counterpart, and Yuri Koptev, in our mind, turned out to be a person that we could do business with.

We had spent some time with Yuri through the summit leading-up situation and, therefore, started to feel very comfortable with him, thought he was a man of integrity, and I think he is a man of integrity, that we were able to think, well, maybe that's our counterpart, that's who we ought to deal with. So we made sure we bifurcated this activity. People want to talk to industry, in this case Semenov, and, say, Rockwell or any other company, let them talk like that. We're going to talk with Yuri Koptev.

Well, Yuri wasn't there at this breakfast, and so Dan Goldin took it upon himself to get up and—I forgot who he went to talk to in the meeting, but he went and tried to find out where Yuri was and get him invited to the table. If you look at the official photographs of the breakfast, there is no Yuri Koptev at the table, but Dan was successful, and halfway—or I should say by a third of the way through the breakfast, they set up another table setting for Yuri, and he ultimately sat at the table, and that's where we started to discuss some of the major activities.

Keep in mind we hadn't really nailed down the final language for the joint communique on Russian cooperation, so this breakfast was intended to kind of finalize or let the ink dry, so to speak, on this particular activity, but it wasn't a done deal. So we had a few things we had to go over. We didn't take it for granted that this was going to end up in the communique.

I think I'll limit my memory to that, because that's pretty much everything I remember of importance in that meeting. I'm sure we discussed a wide range and set of issues. I think the breakfast lasted about an hour to an hour and a half, something along that line, and ultimately led up to the final press

release and, better than that, of course, the joint communique initiating it.

One thing that was agreed to out of that meeting is that Dan Goldin and I would fly to Russia very quickly after that, probably in the July time frame, I think it was, and we would have follow-up meetings to begin to put into place and detail the wording of the agreement to make it a real program. Of course, being the person that I am, I wanted to make certain we pushed that really quickly and got it nailed down. That was pretty much it in terms of everything up to the summit, up to and including the summit. I must say it was a pretty fast-moving first two weeks for me on the job, but, nonetheless, it was a quite interesting time. We ultimately went over to Russia.

I don't know if there's anything you want to ask me in that context before moving on to Russia, but I'll be glad to stop there for a second.

Wright: Had you had prior experience working with the Russians before this event?

Dailey: One of my Ph.D. fields is Soviet foreign policy, and diplomatic history was another one. Of course, in diplomatic history you learned a lot about Russian heritage and diplomatic tactics, and, of course, in Soviet foreign policy I learned quite a bit about it. One of my other Ph.D. fields was in defense. My main one was in defense studies, and I learned a lot about Soviet military history, and took a Russian course in the context of getting my Ph.D.

I had made one trip over to Russia in 1976 and actually took the Transiberian Express all the way across Russia, so I got a good feel for the country. I didn't get back to Russia again until about—I think it was 1989, 1990, was the first trip, when Jim [James] Woolsey [phonetic], who at that time was the ambassador to the CFE talks, Conventional Forces in Europe talks, and he and I were working closely on trying to develop some feedback channel, since I worked at the Senate, some feedback channel to the Russians on how serious our positions were on various things, knowing full well the Senate Armed Services Committee would be the committee of jurisdiction in the approval process of the treaty, consent and advice on this particular treaty.

Then from there I took a number of other trips to Russia, mainly with congressional delegations, Senator [Sam] Nunn once and Senator [Richard] Lugar, later on with Senator [Strom] Thurmond, as well as Carl Levin, who is now the ranking member of the Armed Services Committee. We spent a lot of time on Russian conversion, and I had a lot of experience helping to write the language on the Nunn-Lugar Act that was designed primarily to find ways to provide financing to Russian companies as a way to transition

them from a military production standpoint to more commercial. So I had, relative to most people in government, I guess, quite a bit of experience dealing with them.

Since then, I've had a lot of experience in dealing with them. When I went to Lockheed Corporation in 1993, I became the person on this venture that we later did with them on Proton, later formed as LKE, Lockheed-Khrunichev-Energia, this launch business that now has evolved to International Launch Services. I'm the longest serving board member on that particular activity since 1993, so I've had a chance to meet their people in a lot more detail, including Yuri Koptev, subsequent to my departure out of government.

Wright: That prepares you to move into your next focus, which was space. If you would, share those first few days of those negotiations and those times that you were there.

Dailey: Well, it's an interesting problem, because we ran into the NASA bureaucracy in its fullest extent. There was a gentleman by the name of Sam [Samuel W.] Keller, I think his name was, and he was the associate administrator, I believe—you may need to correct me on that—the associate administrator for Russia [Associate Administrator for Russian Programs]. His title evolved and changed. That's why I say I think it was that title when we first went over there to Russia. He was strong resisting this initiative, and it was going to take forever. It was really a problem. A lot of the other NASA officials working on Russian issues were also sort of—I don't know if it was "Not Invented Here." I don't want to really speculate, but I can only assure you it was a very nasty situation.

Nonetheless, George Abbey and myself, Liz Prestridge, Gerald Messara [phonetic], and, of course, Dan Goldin and I were flying over to Russia. My memory is really not serving me well in terms of the sequence of this, but there were two trips to Russia, and later the head of the National Reconnaissance Office, Marty Vega [phonetic], and the national intelligence officer for strategic forces joined us on one of these trips to Russia. Larry Gershwin [phonetic] was his name, from CIA [Central Intelligence Agency].

It was very public, very open. There was nothing secret about it at all, not in Marty's position nor in Larry Gershwin's position. But we brought them over, because, again, the objective here was to kind of expand relationships in many areas. It wasn't just in the area of civil space. So they came along with us and we actually visited the facility down on DSS-9 [phonetic] production, SS-18 production facility on Nepapatrosk [phonetic], where we found it particularly interesting, since that was one of the most highly

classified missile bases around at the time, missile production facilities.

That said, though, we had a long process to go in this first trip. In fact, I'm almost certain that the second trip is where these other two people joined us. But we had to work up a working agenda, so to speak, on trying to see if we can get some kind of definitive plan put in place to have a cooperate Shuttle-Mir relationship.

Brian O'Connor was another individual, I forget what his actual title was at the time, he was, of course, a former officer in the U.S. military, and he was also resistant, in fact, speaking for the astronaut corps, being a former astronaut himself. He was strongly opposed to this activity, arguing to me that this is something that the astronaut corps did not want to do, because in the quick due diligence they did prior to us coming over there, since they spent some time there before we arrived, was that there was a lot of questions about the overall safety capabilities and performance.

In fact, it came to a head one day when Dan Goldin and I and Brian O'Connor were in the back of a Russian limousine going out to the Energia facilities to meet with Semenov, who was desperately trying to negotiate directly with us, as I was mentioning before, to see if he could get money into his coffers for cooperation on issues. Brian was laying out his position that he was very concerned, that he could not recommend moving forward, and then he started to speak in a lot of policy ways about whether or not this was a good idea to do, at which time I said I was very disappointed with him, and we had some serious words about, "You do your job and we do ours," in terms of policies [unclear] and the administration, and unless there was some overriding safety issue that you can show us, that there was no question that the policy was going to go through, and that it was imperative, if not vitally important, that we continue with this kind of a program, particularly as a way to find a transition for Russian industry to become more commercial, more civil in its orientation, rather than building military products.

Dan listened the whole time; he did not say much. He let me carry the conversation. He got into policy issues, which Dan always deferred to me on. When we finally got to the gates of the facility, it was getting into a pretty heated discussion, so to speak, and we moved forward, overruled what he said. Again, if he had come and showed us something that was definitive in terms of—I don't mean definitive in the sense it would hold up in a court of law type definitive, but just something that was more than just anecdotal evidence that they had safety concerns, it would be one thing, but he showed nothing like that. It was just, "I didn't like the facilities. They weren't clean."

Well, anybody that's spent time in Russia knows you don't see the same kind of procedures. Russians don't spend money on infrastructure. They think that's a giant waste of money. So if a building's

falling apart, the last thing they're going to do is spend a ruble on that versus a ruble on building hardware or a new piece of technology.

And, of course, I was also resting on the very strong assurances that George Abbey had given me that he had worked this all out with the astronaut corps. I know very well that he would never put them at risk in any shape or form. George is such a loyal person to the astronauts, that it would be inconceivable to me that he would truly have done something that would have really jeopardized their safety.

So that's by way of saying that by the time we got out of the car, we had pretty much determined that we were going to move ahead, short of any other serious evidence that there was a problem.

The meeting was actually more or less a signing ceremony, a large event, so to speak, but it was one that was obviously going to be reaching into some very hard winds that would prevent us from really moving forward. That's a rather obtuse way of saying that we were having serious problems with the Russians. They wanted a lot of money for doing these things. They wanted to charge us a lot of money to hook up, and we didn't believe that since this was a government-to-government activity, that money should be appropriately involved, and it was the intention of the two Presidents to put something together that would be funded by their respective governments rather than us trying to fund something for Russian.

There was a luncheon about to take place in the cafeteria area, one of the cafeterias in Energia. There must have been forty, fifty people down there waiting for us. Dan and I went to see Mr. Semenov and Mr. Koptev, and Bob Clark, I believe, from the embassy, was there in the room as well. On their side was Semenov, Koptev, and the Russian cosmonaut Victor Romanov [phonetic], I think his name was. That needs to be corrected. I forgot his actual name. But he's been written about recently as one of the people that went and visited the pad during the last launch and stuff like that, because he was one of the original people.

At that point, Dan had got very upset with the Russians and proceeded to tell them that we were not going to do business with Semenov directly, but our opposite number was Yuri Koptev, and that he ought to start learning how to work with U.S. industry, and that we were not going to pay for this particular activity and we were not going to be blackmailed into paying them, so to speak, and insisted that this be taken off the table and we proceed to find ways of making this happen, not ways to slow it down or charge us for any kind of cooperative activities like this.

There were some issues associated with finishing the commercialization of this docking system, and also whether or not the docking system would actually work on the situation of a Shuttle to a Mir Space Station-type activity, because it wasn't originally designed for it. There was enough engineering

work, though, that when we went down and looked at it, it was pretty clear it would generally work. I think our engineers were pretty much feeling good about it.

Sam Keller, on the other hand, did not find all this stuff particularly good, but we felt we had to continue to move forward, and we went downstairs after this rather lively debate between Mr. Semenov and Dan Goldin on the roles and responsibilities of each other, and proceeded to have a banquet for us at that juncture.

There were a lot of issues associated with it, some of which is written in this book I was talking about, Brian Burrough's [*Dragonfly*: *NASA and the Crisis Aboard the Mir*], I think it was. There were a lot of fights between the staffs, White House staff, and Dan at that time could not really depend upon NASA staff to give him any straight advice or let alone write any paper that would be an MOU [Memorandum of Understanding] which we wanted to sign at the time, and there was literally pulling back and forth, fights up in the Radisson Hotel in Moscow at the Business Center, between Sam Keller and my staff, I think was Liz Prestridge, over the documents themselves and whose documents it was going to be.

So we constantly were in a situation where we had to arbitrate between these people, and we finally, of course, went with the White House staff one. At one particular area when we were doing some tours, Joe Messara was in the back of a limousine writing the final hand-written details of what the MOU was going to look like, which we ultimately signed and it became the basis for, I think, the next visit to Russia, which is that visit I believe that Marty Vega and Larry Gershwin joined us on. We saw some further activities. Frankly, my recollection is pretty vague about all the other issues associated with that. I don't really remember any other headlines or any other major problem areas that we had in trying to establish these relationships.

We became very close in our working relationships with Yuri Koptev during that period. He really was quite a decent individual and later grew his organization to be quite substantial, as it is today, a number of thousands of people involved in the Russian Space Agency, when, in fact, there were only about three at one time. He grew quite a large organization very, very quickly.

I think the policy was quite successful at the end of the day in making sure that we had the appropriate point of contact for these kinds of discussions and cooperation. That said, I guess, in retrospect, one of the things that should maybe have been adjusted in this process was how we distributed the money, rather than send the money through the Russian Space Agency. It would have been better to have sent the money through the factories themselves, because what was happening, or what we've observed, is that the Russian Space Agency and the government, I think, more specifically, was taking the

money and not readily flowing it down to buy Space Station elements of this activity.

Wright: How did you learn that that's what was happening?

Dailey: Well, I think over the last, I'd say, since [19]'94 to today, we've constantly seen this problem crop up. I think Congressman Sensenbrenner, in particular, has highlighted this as an issue, that all these Russian companies are complaining they're not getting any money, that money just goes over there to the Russian Government's bank account, and there is really no flow-through of that particular account to these Russian companies to pay for the hardware that was going to be built or was under contract.

We had some discussions, by the way, I might add, leading up to the election point, because we pretty much finalized everything around September, October. By that time the election didn't look very good for Bush, and so we had to think that potentially we may not be able to implement in the second administration many of these things. So we put into place a process that would continue to keep this on line and allow, if the case may be, any new administration that came in, the chance to think about whether or not they wanted to do it or not, but there would be enough momentum that it could go forward until they had a chance to get a policy position on what they wanted to do in Russia, and nothing would fall through the cracks.

At the same time, it could also be turned off if the decision was not to do it, because anybody that knows going into a new administration, particularly one in which their party had been out of power for over twelve years, that they would have to really think through all their policy issues. And knowing that that takes six to twelve months, we want them to have something in place that will continue this, short of a decision to the contrary by them.

This continued to proceed, and after the election, of course, during the transition team we continued to work with the new transition team on this issue, and it looked pretty apparent that they wanted to continue it, and, of course, ultimately led to something that I actually disagreed with, which was to bring them as heavily into the Space Station as we did. I even told Dan after that, after we left office, that I didn't think that was a very good idea, when I knew it was being debated by the administration. It wasn't that they shouldn't be in it. My problem with it was that they were not the—how do you put it—the supplement to the Space Station; they became the backbone to the Space Station. They became the key driver. Without them, you really could not build the Space Station if they decided they wanted to leave. So [unclear].

Also I think it was important to [unclear] that this whole thing on the Shuttle-Mir, which was to lead up to even bigger and better cooperation, which I think George Abbey, in particular, thought was important, he thought that it would be important to expand it beyond it. Of course, we hadn't even gotten that far yet. We only had, I think, one or two main initiatives, and it was almost quickly, within a year, expanded in the next administration to something beyond that. So it was a much more aggressive program over time, but certainly the whole basis of what became the Russian cooperative program between the United States and Russia in space was founded in the Bush administration.

Wright: Was the entire 40 million [dollars] that you had determined was to go, was it going to be all used for this one effort, or did you have specific amounts going for different segments of the project? How was the money divided up?

Dailey: Well, I don't remember all the details of it, but it wasn't all to go for that. There was a piece of it that was going for the docking mechanism, and other parts that would go for adjustments and other types of technology development associated with making sure that they were able to make out.

I think later what happened is, to some degree, they did succeed—the Russians, that is—did succeed in getting some money paid for each of the trips up to the Space Station, so it was a bit of a problem in the sense that over time they succeeded in getting what they wanted. I didn't know about it at the time, but it was clear, not at the time, but subsequent to my leaving the White House January 20, 1993, that they ultimately got some money. The Russians are famous for using new people as a way to change the terms of the arrangement, and they did.

We also had a number of other things we were working with the Russians on at the time, most notably missile technology control. That was a big issue for us. In Khrunichev at the time, which is later the Proton partner that I was referring to, was doing some business, overtly so, with Indian, in selling rocket engine technology or stages of rockets to India. We had a number of things we had to do in that area.

Dailey: On the second trip we went to Russia. Frank Weisner [phonetic], who at the time was Under Secretary of State succeeding Reginald Bartholomew, joined us on one of these trips, and that became one of the key items, was to bring the Russians into the missile technology control regime. We had to attend a number of Foreign Ministry meetings, me representing the White House, Dan representing NASA. I think

I had to deal more with it than Dan did, but it became a White House policy that they had to join the MTCR [Missile Technology Control Regime] before we could proceed much further in the area of further space cooperation.

Ukraine was the real sticking point on it, because we did not want to extend to Ukraine the same rights and privileges that the Russians wanted to get in MTCR themselves as a signature power. The idea was that Ukraine ought to just forego any interest in developing missiles like this and kind of renounce their position or production in the future. I can tell you that the Ukrainians did not accept that very easy when we went down there. They were very upset by that policy, thought it was discriminatory. Of course, they had lots of production capability that would prove that they knew how to build this and they didn't need any help from anybody else, that they could do it on their own.

That became a sticking point, and the State Department at the time had ordered me to convey the message since they were driving this as a policy issue, primarily, to convey the message that we did not see them nor want them to be part of the missile technology control regime. So that became a bit of an impediment and a contentious issue at the time.

Wright: The National Space Council, I'm sure, has had many focuses. What was its main reason as a council that they wanted to move this forward with Russia? You mentioned earlier about the military alternatives. Of course, we've heard the rumors that this was just to get Bush reelected. But what was the Council's stand? Why was it so important for them to work with the White House to get this done?

Dailey: Well, at the time, Brent Scrowcroft, who was national security advisor, and one that, I think, if you were to interview today, would talk about the belief that—and I think rightly so, a very legitimate believe—that if we did not do something in this time of social chaos, so to speak, in Russia, in the changing of the kind of government, the move from Communism to quasi-democracy at the time, that there would be potentially a hemorrhaging of technology and technology knowledge to countries who may not have a more peaceful intention behind the use of those technologies.

If you take it from the other side, as I mentioned earlier, the Nunn-Lugar activities, this was a very deeply held policy debate going on, strong concerns, certainly good indications in the intelligence circles that there was some real worries of what was going to happen with these key engineers and key technologies being leaked to rogue countries, so to speak, because everybody was very poor. I mean, these were situations in which when we walked on the streets of Russia, particularly Moscow, there were

people lining up on the street up till midnight, in the middle of winter in some cases, trying to sell anything they had. If they had a piece of sausage, they were trying to sell it. If they had a bottle of vodka, they'd try to sell it. If they had a bar of soap, they'd try to sell it. It was real tough and go as to the status of the society, had no job, no identity. Communism was going away. We had to really think through, as a government, ways to find some peaceful applications of this knowledge that would enhance stability rather than undermine stability in Russia itself.

So the Council's focus was, what is the best way to do that? And NASA became an obvious example of that, an obvious vehicle for that. But even in the military side, later on the CIA, in particular, in the National Reconnaissance Office, more specifically, began even cooperating with the Russian Government in many areas, intelligence cooperation and in the area of space as well, be it early warning systems that would be used together, space-based early warning systems, to help bring crisis stability into play so that no one would be devoid of any particular knowledge. They would share these kind of early warning satellite information systems with everybody.

So there were a lot of things that were going on at the time, but the Council's motivation was to find as many of these kinds of things, cooperative things, that were possible. Commercial commerce was certainly one. You also needed it on the space side.

I remember one executive from, at the time, Lockheed Corporation coming in to see me—it must have been in August of 1992—saying that he was about to go over to Russia, and he was visiting all the various agencies, including Capitol Hill, because Bill Perry had pointed them in the direction of Khrunichev, and they put this deal together and gave the Russians some amount of money, that they could get into an exclusive arrangement with Russia to, in this case, market launch vehicles for commercial satellite launches. Everybody, in his opinion, was giving him pretty good signs that they needed to continue to cooperate with these companies, and the interesting thing was, of course, that the issue was how much money would it take to secure such an exclusive arrangement.

He told me how much he was going to offer. I had just come back from Russia, of course, and I said, "I think if you offered them half that much, they would accept it, they're so desperate," because they had 25,000 people that they needed to find work for. Everything just completely dried up in the government. I think my exact words were, "I think they'd accept half of that in a New York second," and he came back and he said, "You're only wrong in one area. It took three seconds, not one." They accepted the deal, and that's what formed later the partnership between Lockheed Corporation and Khrunichev later leading to, of course, this continuing relationship that we have.

But the activities themselves all were synergistic. Ultimately, for example, Lockheed Corporation, it led to a contract that Khrunichev wanted to have between us and them on building the FGB module, which later became a Boeing prime contract relationship. They were the prime, of course. Boeing was given that responsibility. We were, as a subcontractor, reporting to Boeing. Well, it was clear Boeing didn't want Lockheed involved, and they were trying to find every way possible to get Lockheed out of the equation and start the relationship directly with Khrunichev. Russians are extremely loyal once they believe that you're their friend, and we certainly demonstrated that we were their friend at Lockheed Corporation.

As a result of that, while we signed the contract amongst ourselves, or at least a tentative contract, terms of reference, so to speak, we did not ultimately consummate the contract because Boeing didn't want to pay us anything. They thought they could do it directly themselves. So this led to ultimately us at Lockheed getting out of it, and that's what led directly to a contract relationship between Boeing and Khrunichev, much, I might add, to the dismay of George Abbey and others who thought we ought to be involved. So the process in Russia had led to different kinds of cooperative activities.

Wright: In the early days when you were speaking with Mr. Abbey and you were putting this plan together, did he have specific expectations that he shared with you, that he would hope that this project would result in?

Dailey: You bet. He wanted to go to Mars. He was very insistent that our key activity was human flight. He was not a big fan of hardware technology cooperation of unmanned vehicle joint programs at all between the two countries. Everything George worked on in the Space Council, and later worked on directly in NASA, working for Dan Goldin after working for me, was to find some way to get humans back into space. Even Space Station, for him, was a mere stepping stone, so to speak, and really what we had to do was go back to the Moon and then on to Mars. That used to become our favorite saying: "Back to the Moon and on to Mars."

We were working on a number of things like that. Certainly our budgets reflected in the Bush administration a more aggressive stance on supporting NASA. I think the budget projections going out when I left were about 14 billion dollars a year, and that was back in 1992. Of course, later the Clinton administration took a number of years to finally conclude this, but decided to put NASA on a steady-state budget of 15.1 billion dollars, which, as you can imagine, over five years, leading up to even today, in real

terms that's a significant decrease from where we were. So many of the types of things that we did out of the President's initiative, Space Exploration Initiative, SEI, which was announced, I believe, on July 20, 1989—yes, I guess it was 1989. It was on the anniversary date, the twentieth-year anniversary. The intention was to make that the key vehicle.

George Abbey felt it was very, very important that the Russians become deeply involved in this, not only because they would share risk with us, and certainly they had some capability they could contribute, but they had a wealth of information on humans in space and what they went through, the physiology and all those activities that they had done many, many years of experiment with by all the Space Station manning activities that they had.

So it was a very big imperative for George, and even to this day George is very protective of the Russian relationship, believing that it's absolutely vital. I can't at all find fault with that. I think it is obvious they are the other major space power in the world, albeit it is rapidly declining in terms of its infrastructure, but in terms of its knowledge and its experience, it certainly had to be into the equation, and you can't do anything, really, at the end of the day without them, as long as you're not having a bipolar world as we experienced during the Cold War, of a Soviet Union and a United States. But that not being on the horizon, at least hopefully not on the horizon, there's no way to do it without them. He was very insistent. If anybody knows George, he's a person who works on you constantly as a way to get his wish. It's like water on a rock; he eventually wears you down.

Wright: What about your expectations? Do you feel what you started back in June of that year, you were able to accomplish or at least see accomplished now that Phase 1 is gone?

Dailey: Well, I obviously believe that we wouldn't be where we are today had we not started that process. Would we be anywhere near it or on the same path? It's unclear. Any new administration, as I said, would have taken quite a long time to have gotten their act together. Again, it's not a fault. It's just the reality of the process that always takes place. Everybody's reexamining everything.

Knowing the current Vice President, [Albert] Gore, as I did, because he was on the Armed Services Committee when I was there, and I got to know him very well and I certainly had a lot of respect for him. As an intellect, he was a tremendous individual. I knew that he would have a strong proclivity for wanting to continue with these sorts of things, but it would really be one of those items that could get easily lost. He had a very strong commitment to Russia itself, as well. The two things came together for

him. He believed in the importance of space, but he also believed in the importance of ensuring stability in Russia. He knew he would continue it on.

I think it would have been terrible had we not done what we've done under the Bush administration. I do not think we would be where we are today. Now, some people could argue maybe that would have been better not to have, but it has turned out that space is one of the things I believe you can point to that has been the key success of building our relationship with the Russians. The Gore-[unclear] process that evolved during the Clinton administration, I think was instrumental in laying the foundations for dialogue between the two countries. The hallmark issue for all that had been space. The Shuttle-Mir activities were two key elements. Those systems were two key elements of what allowed them to have a dialogue of substance, rather than a dialogue of theory. In this case, I think the substance and theory paid off dramatically. Certainly Russian space industry would be in worse shape than it currently is.

But at the same time, I mean, the critics of this process, like Congressman Sensenbrenner, certainly could find a lot of cannon fodder for arguing that the Russians have taken us for a ride to some extent. As I reflected upon earlier, there may be some legitimacy to the issue of whether or not we should have put money through the government versus money directly into the government facilities or to the private facilities, however the case may be, because I think if we made sure the money got to them directly, that there would have been more product produced and certainly on time. Russians are very, very good about producing all this kind of stuff in a very efficient and timely manner. So I think there is some concern on my part that had we not done it, we'd be much worse off today than not.

Did we achieve George Abbey's objective and my objective and Dan Goldin's objective of getting ourselves better placed to move off into space in a much more aggressive way and on a better cycle than we are today? Maybe not. But certainly it's contributed to a working relationship in some of the development, like Space Station, that will be the stepping stone to moving on to human exploration beyond just a circular orbit around the Earth. I think it is a key objective and we should continue to pursue it.

Wright: You spent six months directly on this project as part of that. Was there a time that just felt it wasn't going to happen?

Dailey: Oh, yeah. I felt that during the first two weeks of my tenure there, arguing with Reginald Bartholomew over this issue, that it wasn't going to happen. He was pretty adamant that he was not going

to let this thing happen. He did not want to see this completed, because, again, I think they saw this as the purview of the State Department. "They come up with ideas, not us." Or in the case of the way we did it on paper, anyway, came from NASA, and NASA should have worked with State Department on the issue.

Reginald was leaving, though. I think he left around the July time frame or shortly after the summit, and his successor, Frank Weisner, was a far more reasonable individual in terms of getting some of this thing nailed down. That's not to really be critical of Reginald Bartholomew. He was an extremely effective individual. He knew the process well. He's obviously a well-respected Foreign Service officer today, serving in the government. I think that he was just a formidable foe. But as circumstance would have it, maybe had I not met Kathy Sawyer that night and managed to get in the paper and get to the President's front page of his press clippings, maybe something would have been different. I don't know. It's hard to say.

Wright: Did you always feel that you had President Bush and Vice President Quayle's support in this effort?

Dailey: I can't speak to President Bush. I never really got much of a chance to get—and certainly not in my first two weeks. It's one of those things that while I was officer of the White House, working on paper for the President, I knew I was working for Vice President Quayle. He was the chairman of the National Space Council and the President's representative on it. So I considered myself his employee.

I can tell you that Vice President Quayle was certainly a big supporter and did everything he can to help facilitate this activity. He was a person who believed very heavily in his responsibilities to the National Space Council and the need to be aggressive and certainly finding ways to change the space program to fit the new age we were coming into, the new era, the post-Cold War era situation. That meant we had to rethink everything we did and how we ran things. Certainly without the Cold War as the way to constantly get the threat of someone beating us, therefore translated into money, we had to think of new ways to justify our existence. Certainly at NASA we had to do that, because without the Cold War, sort of why do we need to pursue it at such an aggressive pace? There's always going to be a justification to pursue a space program, and I think always legitimate, in my opinion, but, nonetheless, not at the robust funding levels that we were talking about.

Of course, coming out of that, too, was the concern that Space Station was starting to go over

budget, seriously over budget, and we had to think of new ways to do it. We were actually on the verge of doing that, and I think it would have been interesting to see how we would have evolved probably differently on that than how the Clinton administration has evolved.

There are three studies plus a final report to the President that I think is always useful to read in the context of all this discussion we just had. The National Space Council, despite, I might add, the headlines during the White House reductions back in [19]'93, '94 time period, which is sort of the Space Council cut about 300 of its staff, we never had even close to that. We had approximately twelve people, but we had all these unpaid advisors. It amused me when I read in the paper, when they announced the cutback on the White House, they rolled up all those 300 advisors, unpaid, as employees of the White House, and made it sound like the National Space Council was drastically cut and there were some bloated bureaucracy. It was far from that. It was literally just twelve people, twelve billets.

We used these consultants, though, on working groups, unpaid consultants, and we did those three studies I was referring to, one on the future of the launch business, one on technology, space technology and cooperation for the future. Gosh, I forgot what the last one was. I think it was on space commerce and what we need to do. I have the three studies. I should probably give them to you. And then the final report to the President was a very detailed outline of all these.

You'll find a lot more detail in there about where we were going to go, and the objective, of course, at the time, harkening back again to my view that we did all these things believing that we were going to be there for a second term automatically, we wanted to have the blueprints in place from where we were going to take the administration.

Wright: Did you decide to leave this challenging position after six months because of a different offer?

Dailey: Oh, no. I was a political appointee. Again, I was an officer of the White House. I was an appointee of the President. Despite the fact I knew the Vice President well, they'd been out of office twelve years. They were not going to have holdovers. Now you start to see Republicans coming in, as it is typically in any administration, just like Democrats came in under the [President Ronald] Reagan administration at the end of the day. They wanted to write their own, and they should have. That's the way our system runs. I never even suggested or offered or anything like that. I knew it was my place to leave, and I did.

Wright: Were you able to make an impact on this project in other ways?

Dailey: After?

Wright: Yes, after you left your official position. Were you involved in any other matters?

Dailey: Well, certainly kept close to George Abbey and Dan Goldin. We act as sounding boards. All of us are friends. It's not political in any way. It's just common sense, it's logical, "What do you think are the ramifications?" Again, as I told you, Dan and I were talking about the potential restructuring of Space Station and how much he was going to use the Russians as a critical path. I had a strong disagreement with him on it. I thought it was the wrong thing to do, that you can't put them in the path of being the critical element. They had to be something different than that. Again, as an adjunct to it, not as the main driver. So constantly I worked those kinds of issues.

National Space Council-type things, particularly those associated with civil space activities, are not really partisan. There are Democrats and Republicans who are always for them, and Democrats and Republicans who are against them, and luckily the "for" is always outweighing the minority bipartisan coalition that's opposed to it. So the nice thing for us was that you never really saw the kind of politics that we get into often with these things. It wasn't So-and-so was doing this to undercut another party from the opposite side, because I think most people believed that this was one of the few areas that was a sort of bipartisan approach, even today. In fact, we had a lot of speculation that Gore was going to make Quayle's tenure as chairman of the National Space Council some political item, and it basically never really came up. I think there was only one instance where it did at all.

I must tell you, though, that there was a momentum that gathered on the part of the NASA bureaucracy that started to believe that Dan and I were short-timers, and it got worse and worse. I remember the very first day I joined the White House, Dan and I had to go see the President, who was visiting Goddard and giving a speech to the employees there. We went there, and John [M.] Klineberg and Len [Lennard A.] Fisk, Len Fisk being the chief scientist, John Klineberg being the Center director, was purposely treating us very poorly, and put Dan and me in a room, locked up, while he and Len Fisk were taking the President around to show him the hardware. And, boy, Dan was so furious with him. It was that type of mischief that we found a lot of, constantly.

As the election polling showed more and more that Clinton was the likely winner, around the

August, September, October time frame, the bureaucracy became even more recalcitrant. As a result of that, no one wanted to move anything. Luckily, we had done all this work in July and August on Russian activities that had developed its own momentum, because had we not done that, I don't think it would have lasted, the weak support that we saw from the bureaucracy, believing that Dan Goldin was going to be a short-term administrator. And certainly to all those people the worst nightmare for them came true, because he's now going to end up being probably the longest serving administrator in the history of NASA.

I don't think NASA would have survived in terms of budgetary support and political support had it not been for Dan Goldin. I think he was absolutely instrumental. People can argue a lot about his management style and all this, but I'll tell you, you won't meet anybody more creative and some one more energetic to change something around that needed to be changed than him. Had they not done it, had they sort of kept on the typical momentum of what NASA was doing during that time frame in '93, '94, not even touched Space Station, didn't want to pursue any cooperation with the Russians because of whatever elements of NASA didn't want to do it, that resisted, I think they just would have found themselves totally irrelevant, marginalized, so to speak, because you had to redefine yourself.

Dan was extremely proactive and creative in redefining what the organization was all about at the end of the day. If it weren't for him, I don't think it would have the strong support it does, nor would they be doing exploration to Mars and having the success of what they had with the faster, cheaper, better approaches that we started in the Bush administration.

Wright: It might have been a brief time period, but it was definitely one that has long-lasting impacts.

Dailey: Well, I'd like to think so. You never know. Certainly we did a lot. It was seven months for me. Did a lot in seven months. Those three reports and one final report to the President, then this initiative, I think did set a course of positive momentum for NASA and certainly helped pave the way for cooperation in a much more expansive way with Russia and other countries. So it was an interesting time.

Wright: Many of the folks that we've talked to that began at the beginning of this project and are still working with it talk about the changes in Russia due to this program. Have you had a chance to be back in Russia to see the impact?

Dailey: I've been to Russia about forty times. [Laughter] I probably know the Russians better than anybody. In fact, most of the people from government still call me today. The White House calls me and the Pentagon calls me for advice on how to work an issue or not work an issue. So I've seen a lot of the change.

When I was in charge of the Proton activity later on, the world back then was a lot different. It took us quite a while to understand Russia. We made a few mistakes that luckily weren't instrumental mistakes, particularly on the relationship with Khrunichev. At the time when we signed the deal, we signed the deal with a production facility, which was called Khrunichev. There was another organization, the Design Bureau, and they held all the plans and drawings. They were critical. You couldn't really launch a launch vehicle without the support of the Design Bureau in one form. That organization was run by Boris Pelukin [phonetic], who kept reminding us that we really hadn't signed an exclusive arrangement, since we'd only signed it with [Khrunichev], we'd never signed it with him, and therefore he was free to go market Russian launch vehicles to anybody.

Strangely enough, Mr. Pelukin died in June of 1993, and Yeltsin brought the two organizations together and we dodged a bullet, because had Pelukin lived and continued this fight, I think we would have never have been as successful as we have been with the venture for International Launch Services. So there's a lot of serendipitous events that take place that you never really plan on.

Indeed, just like the time we brought Koptev to the table, that really helped reinforce in Yeltsin's mind that we wanted him to be that point of contact, because we had heard he was teetering. He could go into a fall or he could go on to a rise. It was still unclear. But I think that Yeltsin saw that we asked—in this case, Dan specifically asked if we could bring him to the table because we liked doing business with him, it garnered a lot of political support. Today it would probably be a kiss of death in Russia, but it garnered a lot of political support.

But things have matured, and I think, unfortunately, some parts of the maturity chain have taken a worst step with the attitude of the parliamentarians and their more nationalistic line towards the United States, and certainly some of our policies have not helped that at all. Certainly some inconsistencies of that policy have not helped us at all.

I think we're going through a very bad stage in that relationship today, and the economics of Russia and how it stands is one thing that is very disturbing, and certainly one I can't quite figure out, in the sense that Russians are funny in that they think very short term. They don't think very long term. I know that sounds odd because so much of what's been considered sort of an Occidental mentality on the part of

Russians, but from the Russian individual standpoint, when they look at a mortality rate of 57 and a half years, they don't think that they're going to live beyond, so they always try to cut the short term, make the money and run. That's what's caused so many of these bad relationships. I think to some degree it's had an effect on Space Station as well.

Wright: To close, you were able to accomplish so much in such a short amount of time. Is there a significant event that you feel, if you hadn't been there, that maybe it hadn't happened, that you really feel like this was the one thing you were able to do to make this project a success for everyone?

Dailey: Certainly had the summit not happened and certainly had George Abbey and I not decided to really take a proactive line, and I think the constellation of stars, so to speak, was very good. Dan Goldin was there. It was a very trusting relationship between the three of us—George, myself, and Dan. And, of course, people that worked on the Council as well.

It was interesting. It's a funny point you make, because one of the things that Dan and I did is we held a reception for Yuri Koptev when he came to town for the summit, and in our small world of the space business we held the reception in both Dan's name and my name, which after two to three years of fighting that was going on between Dick Truly and Mark Albrecht, people were just astounded that the same names of the National Space Council and NASA could appear on one invitation, really shocked everybody. In fact, everybody that came to the reception to see Yuri Koptev and to meet him—I think it was in the Indian treaty—were just commenting, all the industry people, how happy they were to see that we were finally cooperating, and looked like there was going to be a positive working relationship rather than the internecine relationship that had developed under the prior tenure of Dick Truly.

I came from a military space background. I didn't really see the dynamics of the Truly events too much, but, again, I knew Dan from his military space days. For us it was a no-brainer, but obviously from standard politics, what was going on, it wasn't the same thing. So I would say that part is one of the key reasons and a willingness not to take no for an answer. It's easy to go on to those jobs and just simply follow whatever is the easiest path, the path of least resistance. Personally, I'm just not like that. You won't find me capable of taking no for an answer. As long as I think it's kind of a dumb answer. I mean, if no is a smart answer, I live with that. But this was just simply a "Not Invented Here" answer, and that's not a good answer at the end of the day. And we had to adjust to the rapid changes that were going on in the world, and if we sort of took the slow-poke approach, we would have never have been as successful, I

think, in where we've gotten. That's a long-winded answer to your question.

Wright: A very complete one, and we thank you. Is there anything else that you would like to add about your experiences of that time period that we could share with others, that you feel is important?

Dailey: No, I don't think there is. I guess I maybe should have gone over a bunch of documents that would have jarred my memory. Maybe if I do and see something, I'll give you a call and do a part two. I think I pretty much covered all the headlines, all the most salient points here.

Wright: Considering that you had one long day when you started your job that didn't finish for about seven months later, it sounds like it's kind of hard to know when one event stopped and another one began.

Dailey: It was also interesting to have been able to have done that part from the government side, and then as I got into Lockheed Corporation, to see how they were continuing on some of these. I had many other responsibilities besides this Proton thing, but it kept me still involved in the whole Russian activity, to the point where in Russia one of the things they get very upset about is people change. They like to see the same person over and over. Any changes or perturbations to the relationship, through one person leaving, to them is grounds for almost terminating it. That's why I think from the standpoint of what makes Yuri Koptev comfortable, what makes it still successful today, is the bond that Dan Goldin has with Yuri Koptev, and likewise that George Abbey has with Yuri Koptev. Had we made changes there, I don't think we would have been successful.

For me, it's the relationship I built up with Anatoly Keselev [phonetic] at Khrunichev and to some degree even Yuri Semenov. He's on our board of directors since Energia is still a partner in this business relationship we have. It wasn't, I guess, more than a year ago, maybe a year and a half ago, he stood up to toast, and he hardly knew anybody in the room, but he knew me from our shouting match—not mine, but Dan Goldin's shouting match with them in his office. He stood up and said, "Glad to see a familiar face, a person who was so instrumental in putting all this relationship together with Russia." And it's that kind of thing that they just remember. They don't have time for people who are tourists.

Wright: True.

Dailey: And come through and are only there for a part-time visit.

Wright: This long-lasting effort is going to affect all of us for many, many years ahead. We certainly wish you luck in all your ventures. We plan on keeping in touch and maybe you can share more with us in the future. Thanks.

Dailey: Thank you very much.

[End of interview]