NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT
EDITED ORAL HISTORY TRANSCRIPT

MARK S. GEYER
INTERVIEWED BY JENNIFER ROSS-NAZZAL
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ROSS-NAZZAL: Today is May 26th, 2021. This interview with Mark Geyer is being conducted for the JSC Oral History Project in Houston, Texas. The interviewer is Jennifer Ross-Nazzal, assisted by Sandra Johnson. Thanks again for making some time for us today, we appreciate it.

GEYER: Sure. Thank you.

ROSS-NAZZAL: I wanted to start by talking about the transition from the Trump administration to the Biden administration. What was your role in that effort?

GEYER: Two things. Normally the big change is that the political folks that are in Washington, political appointees, they change. That doesn't affect the Center Director job. Though it's a very visible job, it's not a political appointee. There's always a little stress about who's going to be the new person, because it has such a big impact on the work and the workforce, sometimes much more than others.

A couple things I remember about that. The election was weird, to put it mildly.

ROSS-NAZZAL: Yes, that was a good description.

GEYER: Yes, it was over but it wasn't over. Jim [James F.] Bridenstine, who I thought was a great administrator, but I knew once [Donald J.] Trump had lost that Jim would be leaving. It surprised some people, but the administrator is only effective if he has an ear in the White House, so I knew Jim would leave. He announced it early; it kind of slipped out. To me it was like yes, of course, he's going to go do something else. But he did a really nice job in that he did not disengage. He worked right up till the end of December. We had a big event with the Artemis astronauts, with the Space Council, with the vice president. He was working right up to the very end.

I never got a call about my suggestions [for NASA administrator]. I don't really reach out for rumors, because they tend to never be right, so I really had no idea what was going to happen. When I heard [Bill] Nelson's name I was a little surprised, but I thought that actually made a lot of sense, since he knows the president so well. So really I didn't have really any role at all other than we were kind of waiting. Steve [Stephen G.] Jurczyk, he was the highest-ranking civil servant, he did a really nice job in that month. Months. Gosh, I guess it was months, come to think of it, because we just got Bill confirmed right before I left, so it was four months. Steve was acting administrator for four months, so he did a really nice job keeping us on the plan, leading these important meetings, getting ready for launch. Steve did a really nice job.

When [Robert M.] Lightfoot was the acting, I guess it was in between Charlie [Charles F. Bolden] and Jim, Robert had to do it for like a year and four months, sixteen months. Robert did a terrific job, but he had no sway in the White House. He had no link, so we were driven by OMB [Office of Management and Budget] and their priorities. Even though Robert did a really nice job fighting for us and fighting for the right things, he really had no sway. He told me that as soon as they got somebody he would leave. When Jim came in Robert left, and it made sense to me. Once

you've been at the top it's hard to go back down to be the AA [associate administrator] again, and I think that's kind of where Steve was too, although I was a little surprised he left so quick.

Yes, I didn't have much [influence], but I have talked to Bill. I know Bill Nelson from back in '09 and '10 and '11. We had a couple interactions relative to his work with Kay Bailey Hutchison and [Richard] Shelby on saving some part of exploration, and Bill was a big part of that. We had some interactions with him then. I think he'll do a really nice job, and more importantly because he gets along with the president, that's really important. You got to have somebody that when he says, "I need more money or I need this thing to change," the president is going to do something about it. They have so much going on. NASA is not a huge priority for them. They all like NASA, but when it comes time to fight OMB, basically prioritize the budget toward NASA, this is a struggle, because there's so much else that needs money.

Jim did a really nice job his first budget cycle getting the Vice President [Mike Pence] to push for more money, which was the first time I'd seen an administrator succeed like that. But that got harder and harder. Even Jim was not successful the second time really. He kind of said, "Look, you're going to get what you're going to get." We'll see how well Bill does. But I think it's important that he knows the president.

ROSS-NAZZAL: You mentioned suggestions. Do you mean suggestions for someone who would be a good administrator?

GEYER: Yes. There are a few people that calls like that, and they say, "Give me a name, what do you think?" Because there are groups out there that are I wouldn't say official lobbyists, but that have influence. Some of these famous former astronauts, you can imagine who they might be, but

they're often asked. Then there are the big companies. They're asked in a certain way. I hear secondhand from them who they put forward sometimes. I was never asked what I thought, which was fine. In fact, you got to be careful when you're a civil servant not to be in the middle of any of that, because you're making an input as to who your boss should be. Politically it's not a good idea.

I didn't really know till it happened. It was funny though. It happened the day [I decided to make a change]. I had made this deal with Jurczyk where I said, "Okay, look, the doctor says this is not going to go well. You got this time period where you're not in treatment, so you might want to go do something else." He didn't say it like that. It was like, "Oh, that's pretty clear." So I said, "Steve, I need to stop. I need to stop this job, because I've got all this sick leave but I can't take it in this job." You just can't not be at work.

After a year of chemo and radiation I said, "I need to be done." In March he and I worked out a plan with HR [human resources] that I would go ahead and step down on the 3rd and they would give me a [NASA] Headquarters job, which I have now. All the skids were greased. We had the release and how I was going to tell staff, and then Nelson gets confirmed on Friday. It's like, "Oh, okay." Then he had to tell Nelson. It wasn't ever going to really threaten whether I could leave, because I was going to leave regardless. I'll retire if I have to. They were all cool about it, but it's just funny.

I'm confusing things a little bit. When Ellen [Ochoa] left and I interviewed for Ellen's job it took them a while. Robert selected me on a Thursday I think and then Jim was confirmed on a Friday. Robert goes, "Oh, hell, I need to ask Jim if he's okay with you being [Center Director]." I'm like, "Wow, this is exactly what happened to me [before]." I remember I had to go talk to Jim. I've said this in one of these before. I had to go talk to Jim. But he didn't know me, so it took him

some time. Vanessa [E. Wyche] is awesome, so I'm hoping it's just a matter of time that they'll make her permanent. It was like the day before [I was named]. It's crazy. It's like, "Okay, I bet this is going to screw up Monday," and sure enough it did.

It didn't make it really bad, but it did slow some things down. It's just funny that it happened exactly the same way for this position.

ROSS-NAZZAL: Yes. What are the odds?

GEYER: Right.

ROSS-NAZZAL: So tell us about that new position that you're in.

GEYER: It's fairly simple. It's basically supporting the AA, who was Jurczyk. A week after it was Bob [Robert D.] Cabana. Bob calls me on the Saturday after I left and went to this new job. He starts talking to me and I go, "Bob, I think you're my boss now." I think he knew.

It's fundamentally to help the AA with strategic questions and special assignments. It's things relative to workforce, how to work with the Centers, those kind of things, based on my experience. If I go back into chemo I can take sick leave. I just couldn't do it here. That was really part of the deal. If everything's great for a long period of time and the scans are all clean, then I'll be doing a lot of stuff for them. Or I may go do something else, really see how the next few months go. I really feel fortunate that they allowed me to do it. Bob, he's happy to have me. Right now I look at things for him, I review things for him, give him comments. He's very happy to have that at the moment. We'll see how it goes.

ROSS-NAZZAL: That's great.

GEYER: It gives me a lot of flexibility.

ROSS-NAZZAL: I noticed in the headlines that you were moving to a new position. Very curious about that.

GEYER: Yes, not retiring yet.

ROSS-NAZZAL: Were you at Stennis [Space Center, Mississippi] when they did the final Green Run test?

GEYER: No.

ROSS-NAZZAL: No.

GEYER: No, I was at home. I watched it; I tied in to the link. Yes, it was terrific. After all this time actually seeing it run. I tied in to the first one as well. I was not there, but I tied in to the first one, mainly because travel is so heavily restricted. I was in the middle of radiation back then too, so it wasn't a good time to travel.

The first one didn't run the whole time. Knowing something about the rocket, just the start-up is a huge deal. The fact that it went so well, I knew that they were pretty close, and sure enough,

it looks like they tripped a sensor that was set a little too tight. Then the next time it went great. I think they're ready to go. It's exciting that it's at the Cape [Kennedy Space Center, Florida] now. The core is at the Cape. Orion is basically done. They're fueling it up. They're going to start integrating the launch abort system.

I think they can make the end of the year. We'll see. We'll see.

ROSS-NAZZAL: What do you think that means for JSC as a result of all these positive runs?

GEYER: I think the important thing is to get Orion flying. I tell him, "We got to fling that thing to the Moon." We got to push it out there. Exploration Flight Test-1 was a really good test on a lot of things: guidance, heat shield, some of the key internal components, all the software. Everything worked great: parachutes, recovery.

All those we kind of know will work. Now we've got to see. We need to fly it for several days. We need to see how it handles around the Moon. It's the first time for the service module to fly that ESA [European Space Agency] provided. So it'll be a really really big test.

I think, one, people seeing it fly to the Moon, a human-rated capsule, is a huge deal, that we're ready to go back to the Moon. I think for JSC that's really good. It's good for this team, it's good for the Orion team, it's good for the exploration team, to have missions to the Moon.

Then of course we got to get the next one off with people, but they're moving along. They're doing a great job. Once you've done the first one, the second one is quite a bit harder, because of the life support stuff in it that's not on the first one, the seats and everything else that the crew need, so it's quite a bit harder, but they're knocking it out. I expect they'll be on time, and in '23 I look forward to have people flying around the Moon.

That'll be good after all this time, actually flying it will be really really important. I think it shows the world that America has a capability now to go back to the Moon. Now we got to get the Gateway piece up there and then get the lander going. There's a lot of work on the lander to go.

I hope to get to the launch. I hope it's end of this year, early next year. That'll be really cool.

ROSS-NAZZAL: Yes, that'd be exciting.

GEYER: Yes, big rocket. It'll feel totally different. It's enormous. I've seen the static test article. I saw the pictures of it going up in the VAB [Vehicle Assembly Building]. It's crazy big, it's like Saturn V, it's like, "Holy cow, that is a big rocket."

ROSS-NAZZAL: You'll be able to feel that one go off, I bet.

GEYER: Yes, I think so, I think so, the solids and the main engines. Yes. It'll be great. It'll be great. That'll be big I think.

ROSS-NAZZAL: I did want to talk to you about Winter Storm Uri, which happened in February, and wanted you to talk, if you would, about the impact of the storm on the Center and its employees.

GEYER: Yes. It was a very odd storm. It's funny. Our storms are not what they were when I first showed up here, where they were these big hurricanes, and we would close down. People would leave town, then wander back into town, and then slowly get the Center up. [Hurricane] Harvey wasn't that way, and this wasn't that way. I think both of those had such a big impact on the workforce compared to the hurricanes, it's funny. Harvey certainly had a much bigger impact on our total workforce than [Hurricane] Ike just because of the number of people that lost their houses.

Uri was different in that I think we had more people personally impacted. I think 70 percent either no power or no water, but long-term was not a big thing. People had pipes break, there were some that had a lot in their house, but most not. It was just a really weird week. It's funny that it was—

JOHNSON: It was a cold week.

GEYER: It was very cold. It was extremely cold.

ROSS-NAZZAL: Sandra didn't have any power.

GEYER: Oh my gosh.

JOHNSON: I had no electricity and no water.

GEYER: How long?

JOHNSON: For like five days.

GEYER: Oh my gosh.

JOHNSON: Because we're on a well system and it ended up blowing out our heat system. We had to replace that. It wasn't fun.

GEYER: Holy cow. Five days, that's long.

JOHNSON: It was a long cold five days.

GEYER: Yes. We lost power for 36 hours and then 12 hours, so it was weird. We had power in the middle, so I had power during the coldest snap but not the rest of the time. Just like most people, it's just weird. I count on this thing that is no longer here, and now it is really cold. For me it never got dangerously cold. It maybe got down to 45 or something inside. I was worried about the pipes. The weird thing was as far as work went, I couldn't work because once the wireless went out my cell phone was worthless. The cell towers were garbage. I had to go to a friend's house who had power and Wi-Fi to work. I almost came into work, but we were still trying to keep people from coming to work.

What was interesting was we were already remote because of COVID, so in some sense if you had power and Wi-Fi we were telling people, "Well, you should continue to work." Why not? Unless it's unsafe. Unless you can't. There was a little emotion around that. For Harvey we brought a bunch of people into Gilruth. Then we realized we can't really do that because how are

we going to do the social distancing thing? We can't. So then we thought about well, what about just showers and then what about water. We figured out ways to get water and showers. But by then most people had an option, because it didn't last real long.

I guess the strangest thing was it was different again. Hurricanes we were used to. Harvey was different. This was different again. The tools that we had were not as effective as before. But I did think that this team, the way we pulled together for Harvey and the way we pulled together for the furlough, where we did all those events out at Gilruth with the food bank and everything else, the team was ready. The teams were trying to take care of each other. If they knew someone else was out of power within their organization, they were doing a really good job. The problem was it was so widespread. There were so many people affected. It was harder to reach out and help somebody else.

It's funny. We stayed at home and worked through it, which was weird, but we were safe. We went to a friend's house because I had to work, and they had power and Wi-Fi. They were just down the street, literally two blocks from me. They only lost power for like 3 hours total. We went to their house and then they said, "Why don't you sleep here?" Then we said, "Great." We'd just got our stuff there and their power went out.

ROSS-NAZZAL: Of course.

GEYER: It was weird. It was weird. My daughter had the same thing. They came over to our house and then we lost power the first time, because she was out of power and she was in Middlebrook. It was just a weird unstable feeling. I can't go somewhere and get power. It was very disconcerting.

It was a little frustrating. Like I said, we tried several things, the water and the showers, to give people an opportunity. We put out that notice. "Hey, if you want to come into work or get warm, do so. Don't worry about it. Just work with your supervisor. But you can't stay overnight." We didn't want people sleeping in their offices. Hell, I can understand being warm, I'd rather be there. But we couldn't have people sleeping in their offices. We had to make these different rules. It was weird.

ROSS-NAZZAL: All of our coworkers were talking about how different it was that JSC was always emphasizing the importance of safety and making sure that employees were taken care of, and it didn't seem to come out that way this time during the winter storm.

GEYER: Yes.

ROSS-NAZZAL: It almost seemed like there was a lag.

JOHNSON: Was a disconnect.

GEYER: Yes.

ROSS-NAZZAL: Yes, I just wanted to get your memories on that.

GEYER: It definitely felt that way because we couldn't do the thing in Gilruth and so then just saying, "Well, let's let them come in. But not stay overnight." Yes. We almost struggled with

how could we do it in the midst of COVID. I think because having both of those on top of each other. Even the police wanted to use Gilruth to take showers. We were like, "Well, that sounds cool. Hell, they don't have it at home." But Gilruth was closed. We had nobody hanging out at Gilruth.

We would have had to have somebody there 24 hours [a day] to let these guys in. That doesn't make any sense. It was just because of all these other things that made it a lot harder to do the things that normally we would have done.

ROSS-NAZZAL: Did you do lessons learned after that?

GEYER: Yes. With the Center Ops guys and the emergency response guys. I hope we don't have it on top of a pandemic next time.

ROSS-NAZZAL: That tends to complicate things.

GEYER: Yes. It was funny. I was interacting with my neighbors and things that I would have avoided before. But I don't have any power. Now it's what is the most important thing. I got to get warm, so I'll take my chances.

ROSS-NAZZAL: Right. This spring we lost two legends. Glynn [S.] Lunney passed away and Mike Collins passed away. I know oftentimes the Center Director is called on to make a statement about their passing and what they meant to JSC. I wondered, because they were so big for this

Center especially, if you did anything different for their families. Did you reach out to them? I know you interviewed Mike Collins for what, the fiftieth anniversary?

GEYER: Yes. I did not know Mike well, and he didn't have a lot of interactions with us, at least in my five or six years. But the two times that I met him, which were I think once in 2013 when we dedicated the Kennedy Operations and Checkout Building to Neil [A.] Armstrong, Mike was one of the astronauts that came to look at Orion. We did a big ceremony there, and he was very humorous and gracious. Then we did something here for the fiftieth on the stage. He and Anne [C.] McClain and I.

He was funny. Great stories. What I remember, they gave him a standing ovation, which was terrific, but he gave the audience a standing ovation, really thanking Johnson employees for what they do. I hadn't had an astronaut do that before. That was really nice. I got to meet his daughters at that time, who were really nice. That was my interaction with Mike. When he passed we put that statement together. Hey, this is what I remember about Mike, and he's certainly a hero.

Glynn was different. Glynn was in this neighborhood still, in this region, and I'd interacted with him 50 times probably in the times I'd been working here, but mostly in the last 10 years, especially as a Center Director. Glynn was different than most alumni. Or let me say this, different than most icons, because there are alumni and then there are icons, really famous people who change the world. You're, "Wow." Tom [Thomas P.] Stafford, he'll call me on the phone, it's incredible, this guy who flew Gemini, flew Apollo 10, did all these other things for DoD [Department of Defense]. This guy is calling me on the phone, it's just weird. This famous guy calls me, and he calls me by first name. Sometimes he gets mad at me, but for good reason, for

good reason. He's pushing on me. "You need to do this." "Okay, Tom." Tom is a good example of somebody who is just so passionate about the country and NASA that I take everything he says with that influence, even if I don't agree with him.

But there are others that are more difficult to deal with because I feel like they don't consider that things have changed. They'll tell me things that I need to do that really make no sense in this environment as far as the role of the Center to Headquarters, where Congress is today, where NASA's role in the country is. The things they're telling me to do is like "Well, I could do that, but I would be working here for about 5 minutes."

I have to deal with the context and be the most effective. What I loved about Glynn was he listened to our reality. He listened to how things had changed, and then he would give very good advice which allowed me to put what he asked in the context of my current situation. It was very helpful. He never lectured me. "You need…." He never did that. He was very effective in that way. People are going to react in a certain way. I felt as far as an icon, I consider Glynn one of the legends of this place who really made Apollo happen and Shuttle, he was just, one, extremely smart, extremely gracious, and he really wanted to help me, not lecture me, that's the way I would say it. He was great. Yes, we miss him already. Such a nice guy. I loved running into him. He was also so nice and asked about my family and then asked how work was going. He always had something really wise to say. Yes, I miss him already. He was a great guy.

There's the formal things we do, like we flew a flag. We do that mostly, but for the big guys certainly. Then we try to go to the funeral, which has been harder this last year. Fortunately, things were easing up a little bit. I went to the viewing at Crowder. Norm and I, Norm [Norman D.] Knight, who was the head of Flight Ops, he and I went together and presented Marilyn the flag at the viewing. I got to say some words. It was nice because it was a smaller group; it was less

formal. Then Marilyn got to thank us and said some nice things. That was really nice, more personal. The service itself was more formal, which is cool. Was just more about that than our interaction. But I went to that as well, because yes, there's an official role where you need to show your respect to someone that made a huge difference. I'm glad we were able to go to the viewing too and say some things.

It's happening a lot, more and more it's happening. They're going to run out of room for trees pretty soon over there in the grove.

ROSS-NAZZAL: I was wondering if they're going to have an annex or something somewhere else.

GEYER: Yes. Actually I think there's plenty of room for astronauts. We started moving these. Instead of doing them out there for the employees, we put them out at Gilruth, which I think made more sense. Buzz [Aldrin] is getting up there, and Tom is getting up there. Glynn's was pretty sudden. Mike's was really sudden. But when you're at that age, 85, 90 years old, it doesn't take much, and it's like boom, they're gone. It's like wow. Yes. That's weird. These guys that you saw on TV when you were a kid and you go, "Whoa, that's the guy that walked on the Moon, or that's the guy that flew Apollo 11."

JOHNSON: Since you were talking about the people that give you advice sometimes you don't ask for, and I was just thinking of Mr. Thompson, Bob [Robert F.] Thompson. I know you were on his e-mail list. We've seen a lot of those e-mails. I just wondered. How do you handle that when you have these men who dedicated their lives to NASA and feel like they would still have a buy-

in I guess in what happens, but they're not happy, or they want to tell you? How do you handle that with them?

GEYER: Yes, that's a really good question. I feel like, one, I'm glad that they care enough that they want to make an input. That means a lot to me, especially people like Bob, who made the Shuttle Program happen when it started. I don't know that there'd be a Shuttle in the early phases if Bob hadn't done what he did. I understand also he served in destroyers in World War II. This guy had an incredible life. The fact he cares enough to send me and my predecessors his input is great.

I should be clear. I feel like they should always send inputs. I guess the key with Glynn is he was effective because he also listened. He listened to see what was the truth today so that his inputs were more useful. Sometimes these guys, they talk to me like we're back in the '60s. I say, "That's not going to work." Then they don't want a dialogue, a few of them. Most of them are awesome. There's a few of them that just want to tell me rather than let's talk about what's really happening today.

Some of them have earned the right to tell me whatever they want to tell me. It's like, "Okay, what you tell me, I just may not be able to do it." I want to understand because these are really smart people. So I prefer a dialogue where I go, "Okay, well, hang on, let's talk about what you're saying. Let me tell you what's happening so maybe you can help me." When they don't want to listen to that and they get angry—there are a couple of them—it doesn't help me. There's a limit to how much I will listen. Not that I feel like I'm important. There's some level of it's just not helpful. I don't know whether it's a legacy thing, like their legacy is threatened or something. Sometimes the emotion, I do not understand it. I don't understand it.

I think it's important to be respectful. I appreciate what they did. I appreciate the inputs. If they're willing to talk about it, I can dialogue with them. Tom is awesome, Tom Stafford. He is very direct, he is very passionate, but at times I've said, "Well, hey, Tom, I don't think you're right on this." I would like to walk through let's say the orbital mechanics of this situation. Because this guy, he created rendezvous and docking. Okay, well, it's a little bit different than it was then. Let's talk about it. He'll listen to me. I bring somebody in. He'll ask good questions. That's helpful to me. "Okay. We hadn't thought about that." Or he goes, "Yes, I didn't realize that." He's great, but he can be very animated. I have to hold my phone like [demonstrates] "Okay, Tom," like about an inch from my head or a couple inches from my head, because he is really going at it. If I walk through something with him, he will listen and I'll change my mind, he'll change his mind. He's great.

There are some that are not like that. They don't want to hear what's happening. It's like okay, well, I have a limit to my patience for that at some point, regardless of what they did. I respect what they did. They did things I will never do, and they changed the world. But there's still a limit to professionalism. But again, this is a small group. The vast majority are not that way. They're awesome; they care about the Center.

ROSS-NAZZAL: That brings up another question that I have for you. Has COVID reshaped the way people communicate with the Center Director? I'm thinking we're all at home, or most of us are at home. Did you start getting a lot more e-mails? Did people start picking up the phone more? Not necessarily legends. But younger employees, people feeling like things had changed, so they wanted to reach out?

I think a couple times you've e-mailed me. I couldn't think of another instance where any other Center Director has ever reached out to me either. Usually it's the admin of the Center Director who will contact me or someone in the office. I thought that was unusual.

GEYER: There was a little more of that, I think, because my secretary was not in every day. Now she was online if I needed anything. But it's just a little different when I could just go through the door, "Hey, would you call such and such? Would you get this for me?" I might as well just send a note myself. I think I did a little more of that this last year.

I found it harder to stay connected to people because you had to schedule something to do it. Like just now I walked down to see Willie Lyles, I wanted to give him something, and I ran into his admin and his assistant, which I hadn't seen for months. We checked in, talked, and then I went to see Willie. But if you're on Teams you don't do that. You don't run into people. You don't go, "Hey, oh, hey, oh, I got to look at that transcript." You got to send me a note and I got like 1,000 notes.

I don't know, I think it was harder overall. The town hall experience though was completely new. We decided to set up these town halls because of COVID. There was so much emotion around it, it's not just politicized, but there's fear. Hey, it's dangerous. Now we're not at work. So what's the plan? At the beginning the plan was extremely fluid, changing quickly. That's when we decided to do town halls, because it gave us a chance to really say, "This is what I know, this is what I don't know, this is what Terry knows, this is what Vanessa, this is our plan."

We opened it up to questions, which seemed like a good idea. It was a good idea, was a good idea. I was surprised by the emotion in the questions. When I did the all-hands questions, there were a couple I would get about parking. It was like, "Yes, we need to talk strategy here." I

saw what some people were really focused on, which was fine. It's important. But then these [other questions] were filled with emotion. There was a lot of back-and-forth. I say something. "Well, you're stupid." "No, you're stupid." It's like, "What are you guys, 12?" There was some of this going on.

We even said it in the meetings. "Hey, look, this is inappropriate, I'm going to stop asking you for questions." Eventually I had to. In one sense the normal where I would run into my staff and just have conversations about things went to zero. So that was hard. I was tapped into all this energy, some of it positive, some of it not positive, through these questions, which normally I wouldn't tap into that at my level so directly. So there was good and bad. It was good in general to know, but you could never tell what percentage of the workforce felt this way, even though a lot of people voted for it. At some point it's like, "I wonder if really everybody's thinking this."

But it was weird, it was hard. It was hard.

JOHNSON: I think it surprised all of us, some of those questions.

GEYER: Yes.

ROSS-NAZZAL: I usually clicked on them just to kind of laugh. Then I would read some to my husband because I'm like, "Seriously? Like this is the most important question that we need to deal with?"

JOHNSON: Adult professionals at NASA.

ROSS-NAZZAL: Yes, about Nazis, about the deer. Bizarre questions, in my opinion.

GEYER: No, I'm with you. I had to say, "Okay, okay, deep breath, okay." Vanessa and I both, we would just get together and go, "Okay, let's take this at the best possible meaning."

JOHNSON: It reminded me of social media. People let loose on Twitter or something.

ROSS-NAZZAL: That too, yes.

JOHNSON: Because no one knows who they are.

ROSS-NAZZAL: No, I didn't engage. I would just click the ones that I thought I wanted to know more about. But there were some that I thought, "Really?"

GEYER: Yes, I do think there's an anonymity thing which gives people, allows them to behave in a way. I even said that in one of the meetings. "Would you say this in [a face-to-face meeting]?" It didn't help. On the one hand, I am really glad that we did it because we opened it up and we gave people a chance. After a while it's like, "Okay, this has run its course."

But to your point I think the town halls were a way to reach as many people as we could, and being open and honest about what we knew and what we didn't know, without being able to run into people in the hall. But I feel like relative to the people I worked with, COVID was harder to stay connected. We had meetings. We had Teams meetings. I feel like we really lived off of the relationships we built up over the years, that we benefited from that—because I knew these

people. I'd worked with them, but it was harder for new people. It was harder for the people that we just moved into new positions because they didn't know their team very well, and that's still been a struggle. I'm not sure that answered your question. There was a lot there.

ROSS-NAZZAL: What do you think looking back over your tenure as Center Director was your biggest challenge?

GEYER: Yes, I think it has to have been this last year with COVID. I think it has to be. Just how to operate in this environment, how to make people know that we're trying to be safe and still execute the mission and explaining that. I think that was the biggest challenge I had in my three years. I think it worked all right. I think it went okay. I think Vanessa did a great job organizing this effort, and then I think we were really blessed that we had a lot of medical experts. Human Health and Performance, we have surgeons, we have doctors, and we're used to listening to them. The doctors, when they're talking about the medical stuff, that's who we listen to. When Terry [Terrence A. Taddeo] stepped up, and I thought he did a terrific job explaining things, and I felt like we're grounded in the truth of what Terry is saying, and that's what we're going to do. "Like in a hurricane," I said, "we listen to the Weather Service. For this we're going to listen to the CDC [Centers for Disease Control] and Terry and Headquarters." So having that really helped us I think justify why we did and why we were comfortable on both sides.

I had people thought we were reckless, and I had people thought we were stupid. It was great to have Terry to say, "Well, no, here's the data. I've read it." It was great; it was great. I don't know how companies that didn't have that, how they did it. I don't know. We were really lucky. That was the biggest challenge as a Center Director.

I think the other was getting to Commercial Crew certification, which also happened in the middle of COVID frankly. The flight readiness really for Demo-2 was right on top of COVID starting and going crazy. Getting Engineering, Safety, the crew, everybody feeling like they had enough insight, feeling like the issues had been worked, feeling like we could fly with SpaceX I thought was the other challenge, because when I first came in I felt like we had a lot to do to get there. I didn't think the program was connected with Engineering very well, the Engineering Division. They had a chief engineer, and that guy was comfortable, but I didn't think they were connected with the division, and we were going to have a problem.

That's where Julie [Kramer White] and Kevin [Window came in]. "You got to figure out what's going on, you got to tell me what's disconnected, [what] we got to fix." They did that, they did that, and we got to a point where we were comfortable. That helped the crew. If they know Engineering is comfortable, it makes a big difference.

That was the other big challenge when I came in. I said, "I don't think we're ready to fly. I don't think we're ready to sign certification for flight readiness. I don't think the culture is ready yet." That took a little bit of time. That was what I thought was going to be the biggest challenge, and it's funny they ended up on top of each other. The first flight of people on SpaceX—I traveled to Florida. I was at Florida for FRR [Flight Readiness Review] for the launch and masks were just starting, and hell, no one in Cocoa Beach was wearing a mask. I remember we went out to eat and it was like, "Am I on a different planet here? Am I going to get sick?" That was a weird time, right on top of everything. It was a great launch. It was a great launch, it went great.

Funny, when you think about how we were learning how to behave differently—Bob and Doug get to Station so we're going to have a big event in MCC [Mission Control Center]. Jim comes. [U.S. Senator Ted] Cruz, [U.S. Congressman Brian] Babin. I think Babin was there. I

can't remember. I know Cruz was there. We're all on the floor of MCC. There's the crew, and we're passing this phone around. I'm in the middle of it going, "Hmm. Is that a good idea?" It was fun though. I was like, "Hey, what are you guys going to do to make sure Bob and Doug stay a long time?"

It was fun. But then we got a question at town hall. It's like, "What the hell are you guys [thinking]?" It was like, "Oh yes, well, I guess we're learning new habits." That's just funny. You think about that transition and how at the beginning of COVID we had no idea what it was going to look like. We wouldn't have done things then like we would in November or August even.

ROSS-NAZZAL: Yes, things have definitely changed, that's for sure.

GEYER: Yes.

ROSS-NAZZAL: Is there one thing that you wish you had known before you became Center Director that you think is invaluable?

GEYER: That's a good question, something I didn't know. I think I knew it, but I think I would work harder on creating a workforce strategy for the long term. I don't just mean numbers of people, but how will our people continue to be experts in what NASA needs to know in the future. These new commercial models are not going to create the kind of expertise that we got from Shuttle or Orion. They create different experiences, which are very helpful, but they don't have the depth. I knew that.

I kind of wish I'd have started that earlier, but it's hard to find an advocate in Headquarters that understands that because that doesn't happen for free. That usually costs money to do that. You have to get programs and the mission directorates to agree so that they can emphasize the work in a way that creates those skills.

I wish I'd have worked that harder earlier. I think we're doing better now. I think Kathy [Kathryn K.] Lueders, she absolutely understands, and I think she's going to help us, but that's the big challenge in my mind. We have great skills and you think of the people, the technical experts that made Commercial Crew were these people that gained their experience on Station or Shuttle or Orion. Where are those people going to be in 10 years, I don't know. We've been working on sending some of our people to those companies so they get out there and they see what it's like, pulling some of those people from those companies into NASA, certain technology and other small programs that give people experience. But you need a strategy. Used to be there was so much money and so much work in Shuttle that it kind of happened. Now it has to be much more targeted. You have to really think hard about how to do it, but it can be done. It'll be fine, but we just need a plan. I wish we'd have worked that a little bit harder. Although it was a weird year, it was hard to do anything this last year. It was almost just keeping things going was hard enough.

ROSS-NAZZAL: I feel like we're coming out of it now because I keep getting pinged a lot more about things. It's like there's pent-up demand now for NASA all of a sudden. People are coming out of the woodwork.

GEYER: Yes. I think people said, "I think we held the schedules," kind of. On the big things, the big obvious things, sure. But there was a lot that did not get done. Yes, we're going to have to

prioritize that too. We can't just suddenly go do 200 percent of what we didn't do last year. That's not going to happen. I think it's going to be really hard.

Vanessa and the team here are going to be challenged. This coming back to work plan is going to be a lot harder than a leaving work plan, because leaving work it was a crisis, we got to take care of everybody, and it was the right focus. Now coming back to work, if it's not a medical crisis anymore—although you guys brought up a great point. Some people still have kids. What do you do about that? Even with that piece aside there's people that just don't want to come back. Now you're going to go, "What do you mean you don't want to come back?" Or okay, how do we work that? Clearly we know we can do a lot remotely, which I never would have believed until it actually happened. But there's a lot of things that weren't as good. For example, the workdays were longer. There was less human connection and interaction which makes it hard to create the culture that we rely on. I think there's going to be a lot more emotion about coming back. That's going to be a really interesting dialogue, what works.

ROSS-NAZZAL: Yes. We're having some of that right now on our contract.

JOHNSON: We keep getting surveys on do you want to come back and how much percentage time do you want to spend. It's interesting. In fact I was going to ask you, and then you just mentioned it, that you were surprised by maybe how well people did telework. I think a lot of people were surprised, for whatever reason. Obviously there are jobs that you just can't do if you're remote. Because we're contractors, I know they're talking about it, and there's probably a cost saving for contractors. For NASA or JSC civil servant employees do you see that becoming more normal going forward, that there's always going to be a percentage that are teleworking at this point?

GEYER: Yes, I think there will be more flexibility. We don't have a real estate problem, this is not expensive real estate, it's not like California. The commutes are not bad. I know some people like to live downtown. Most people have a pretty short commute compared to Headquarters [Washington, DC]. I don't see that as a big driver. Yes, it's a matter about how effective it is. On Space Station back in '93, '94 we had to work with the Russians, and we had a videocon once a week which was grainy. I have a picture of the graininess. I can kind of see you. All these telecons but you still need to get face to face to finish the deal.

Fundamentally that's an example that a lot can be done, and you work across NASA and a lot of these people are different places. So a lot can be done. But everybody being off-site, that did surprise me, that for even the hard stuff we were able to do it. I think talented people can work either way, but I think we missed a lot. I think there's a lot that we don't even recognize we did not get done or the stress was higher.

But, of course. I come from that generation where I feel like we value being together. As a boss, I got to get a feel for my folks. Not that I need to see them every [day]—I'm not watching the parking lot. I heard one Center Director used to watch the parking lot. I never did that.

I got to recognize that I'm biased toward that's how we felt like you should work, you should come to work. The pandemic taught me that you can. Even I could. I don't want to work from home. I'm just so easily distracted. When I'm home I like to be home. Because my commute was so short I would even come in on a Saturday. I would come to work, because I like to separate the two. Now I had to learn how not to separate the two. Eventually I got okay; I can do it now. I know it can be done.

We got to find this flexibility point. Probably big meetings, FRR, control boards, people should be there so we can look at them. That would be my bias. Even though we're still going to have some people remote. You absolutely will. We did before. Can you work 16 hours a week from home? I don't know why not, or more, depending on the job. As long as a supervisor feels like they're getting the work done.

I know my youngest, my two boys, they like being remote, because they can do a lot of stuff. They can live where they want to, they can hang out with their friends at night, and then work during the day. The work values them so that works. Now they don't really want to come back to work. Their preference would be: I would like flexibility. They're going to do what they need to do. I think we got to find that mix. Think it would be good to find that mix.

JOHNSON: I was wondering since you mentioned that, and like you said you were of that generation, don't you find that it's somewhat generational because there's a lot of younger people coming into JSC, but then there's still a lot of old people like us that are hanging around. Do you think this other generation is just going to push it more?

GEYER: One, if I were still the boss here, I would hold my divisions and they hold their branch chiefs responsible for getting the work done. So I'd go, "What do you think will work? You got to know your team. Can you get the work done if they're not at work? Well, let's talk about it." I don't feel like I'm smart enough to tell them that all their people need to be in 49 percent of the week. I don't know how to do that. But I think more of us are, yes, in that older age. I think we're going to be more comfortable coming back. I do think those younger folks don't realize the benefit or the part about learning how to be part of a culture that does mean you come in. You meet people

face to face. You do things together that create something you don't get online. I think some of them don't recognize or value that as much. I think some of that will have to happen. It's going to be really really interesting, and I don't know the answer.

When I co-opped at McDonnell Douglas in '79 I was in this room. It was a huge room, and we all had these green metal desks. There must have been 100 of them. There'd like be five people and the boss, five people and the boss, and then behind him was the boss's boss, and then at the very end was the guy who ran the whole group. He could see everybody all day long. I remember that, feeling like "I got to get there right at eight o'clock, I got to be sitting in my seat, I can't be dozing off." That's the way it used to be. "Darn it, I want to see you sitting in your desk, I'm going to watch you." It's not that way anymore. That wasn't really that effective. So it's not that way.

In the end the supervisor has to have the flexibility to say, "I feel like you personally are getting your work done remotely, and if you can do that, great. But person Y, you're not doing your job, so I need you to come in, because I don't know what's going on." They have to have that flexibility to say this is a privilege to be able to work from home and I'll give it to you as long as you're showing me you're doing the work. If you're not you got to come in, I don't know what's going on.

I think we've got to have that ability for the supervisor to do that, so you can earn the privilege of having that flexibility, seems to me. But anyway, Vanessa has got a really hard job.

JOHNSON: Yes, she does.

GEYER: I know she'll do a great job.

JOHNSON: Should be interesting going forward.

GEYER: Yes.

ROSS-NAZZAL: I just had one other question, and that's is there something you can point to that you think is your greatest accomplishment, being Center Director.

GEYER: I don't know, I don't know.

ROSS-NAZZAL: I know it's a team effort at NASA, so sometimes it's hard to pick that one thing that you are responsible for.

GEYER: Yes, I don't know that I could. I hope that the vision, the dare, unite, explore vision, was a way for people to envision a new future, where we are still doing the nation's space business but in a different way, and that we can let go of things that don't help us achieve that bigger goal and embrace those things that do. That was my hope. That's the reason we created that vision, to really raise our eyes above our day-to-day work and think about why are we here, why do we work in this place.

Because the Center is going to have to change, and it's not a bad thing. If we don't change then somebody else is going to do it, and I think that's a disservice to the country. I think there's things at Johnson that we have that no one else has, and we should leverage that for the future. I think part of that is letting go of things and focusing on the things that are important.

That was the hope. It never really picked up. COVID kind of hurt it a little bit. I thought Ryan [L. Prouty] did a really nice job trying to keep the energy up. But, the COVID priority really hurt that I think. That's okay. Now we're coming out of it. Vanessa has to make it her own, what she decides she thinks resonates with the workforce.

That's the thing I'm the most proud of in that no one's going to tell you to do that. No one's going to give you a formula for how to do that. You got to go, "I see it's a problem, and we're going to go out with this direction. We're going to talk about it in this way to get the team to lift their eyes up and focus on this new future." So I'm proud about that because again it's not something somebody's going to tell you to do. Headquarters isn't going to send you an NPD [NASA Policy Directive] saying, "You need to go do this." You got to decide does that make sense and find something that resonates with the workforce.

Hopefully it will accomplish those things and help the Center move in the future. That's probably what I'd say.

ROSS-NAZZAL: Can you give an example or two of what you mean by letting go of things that aren't really helpful?

GEYER: Yes. Let's take spacecraft. NASA has never built the spacecraft. Even the first one was built by McDonnell Aircraft, Mercury, and every one since then has been built by someone else. But NASA has been heavily involved in the design from the very beginning, even driving the design.

Now you look at SpaceX and Boeing for Commercial Crew. We gave that overall design and day-to-day emphasis to the contractor, so NASA is not saying, "Well, I think that shape should

be this. Or you're not working this risk as well as you should. You need to change it." Our role has been different. To a point of going, "Well, SpaceX's design is safe and we can put our astronauts on it." That's really our role now.

That also includes if they have a real problem. We knew the chutes weren't going to work. We had to tell them, "Your chutes are not going to work, so if you want to fly, fine, but you're not putting our astronauts on there." You have to be smart enough to do that. It's still a difficult job but it's a different job.

I would say we had a more traditional role in Orion, really down in the details. As we go forward, I think our role is going to be closer to what we did with SpaceX and Boeing on CST-100 and Dragon. Even for the lander I think our role is going to be more of, "Okay, well, you have the requirement set. You go ahead and drive the design however you want, but I need to know your risk. I need to know the things that we're worried about, and then we'll work on those together."

That's basically doing the job in a different way. But in the end—and we've seen this with SpaceX—in the end our goal is to fly people in space, not be the person driving design. Who cares? As long as we're flying people in space and it's safe, that's what NASA wants. So you're saying, "Okay, don't worry about what we're not doing. Think about the fact that we are actually executing these missions now."

We found things that SpaceX needed our help on, and actually we needed to know to keep our crew safe today, what are those things in 20 years that we're going to need to know. It'll be different. That's what dare, unite, explore is about; let's think about those things. What do I have to do today so in 20 years I have the people and the expertise to help the companies do these

missions and also keep our astronauts safe? I need them to think about that, not about what they're giving up.

You're going to see the same thing in operations. Today SpaceX does launch and landing for Dragon. We do that for Boeing for CST-100, and we do it for Orion here. We don't probably need to do that forever, but we need to be the operations integrators, tying all these vehicles together. And we better be darn smart about how to do operations, because we have told SpaceX a few times, "You guys are messing up. This is how it's done." So we still need the expertise.

That's going to transition too. I don't know on SpaceX's lunar lander whether we're going to do the ops from lunar orbit to the ground. I don't know. They're still talking about that. I don't know that we have to, as long as we understand how they're doing it and we're comfortable and when they come up with challenges we can help them work through those challenges and have smart enough people to know that's not going to work, or that's going to be great. So ops is going through the same thing.

But what is our goal? Is our goal to be the guy sending the command? Or is our goal I'm flying people to the Moon and to Mars and we're enabling that, making it happen? That's what this is about. It's like okay, don't get so afraid about letting go of this thing, what am I going to do.

Most people don't realize that what we do today is entirely different than what the guys did on Mercury. Our roles are very different now. And yet we've done incredible things. It's still going to be true in the future, but you got to let go of some stuff in order to enable the other things. That's really what that's about.

ROSS-NAZZAL: Job security, I think, is probably people wondering what role they have in the future if they don't have that seat in Mission Control or that role as a spacecraft designer.

GEYER: I think that's some of it. There are some people I think that worry about their job. But I think a lot of it is they feel like this is NASA's function. If NASA lets go of that function what will happen? I think that's the part we need to go, "Okay, hang on. What is our job again?" We were built to get people on the Moon by '69. They didn't say, "Oh yes, and I want you to do this, and I want you to do this, and I want you to be the guy that tells them how to do a pyro." They didn't say that. "Get people on the Moon by '69." We did it the way it had to be done, but now things are different. We can do it in a different way.

We've been flying people in space in low Earth orbit for 50 years, 60 years. A company should be able to figure that out. Let's just help them. But also the way we define the requirements, we let them innovate within that box in a sense. We're finding at least with SpaceX, their innovations are very very helpful, because they have their own motivation. We give them the freedom to do that. Okay, how does that look at the Moon?

It's complicated, but this country will always need NASA because the nation has a space program. Architecting that and enabling that and working the big technical things that no company has a way to figure out, that's what we're going to be doing forever. But we need to be focused on that. I'm very encouraged. It's a smart group. They'll figure it out. I think the fact that we've got a newer wave coming in helps too. They can learn, but also it'll be easier for them to let go of some things.

JOHNSON: Just real quickly because you mentioned keeping that expertise in the workforce. Do you think these other companies, they have a more shiny object out there for people to go toward because they are getting a lot of that work? Or maybe there's different types of benefits? Or it's harder for people to actually get a government job these days as a civil servant? Do you think sometimes that pulls a lot of that expertise away from NASA?

GEYER: I've seen both. I've seen these companies work with us and then they see someone on the NASA side that they really like and they'll pull them. I've seen that happen a few times. Not as many times as you might think. But it does happen. I've seen people leave those companies though after a while. I wouldn't say burned out, but there's something that you're willing to do when you're 22 that you wouldn't be willing to do when you're 42.

JOHNSON: Looking for security?

GEYER: Yes, or a balance maybe. I'm not saying that that's the only reason you would come here. There's a different kind of a role here. I think NASA is more of a strategic place. It's more of a what's the big picture place. Why are we doing these things? How do we deal with the political realities? Because that is a reality of getting money from the government. I think that's NASA's role too.

I think there's people on both sides that could go either way. I just think we can't lose sight of that [fact]—we do need people who are grounded in having built stuff, not all of us. But there needs to be a section of JSC that has been grounded in actually building something and

actually operating something. Then it's easier for them to then judge, make decisions, because they've done it. Hey, I know. I know what helps and what hurts these companies.

ROSS-NAZZAL: We're a little over time. We will wrap up, but thank you very much for your time today, we appreciate it.

GEYER: Sure. Thanks for listening, appreciate it.

ROSS-NAZZAL: If at any point you want to talk again just let us know.

GEYER: Okay, all right.

[End of interview]