

**NASA HEADQUARTERS ORAL HISTORY PROJECT  
EDITED ORAL HISTORY TRANSCRIPT**

MELANIE W. SAUNDERS  
INTERVIEWED BY SANDRA JOHNSON  
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JOHNSON: Today is November 4<sup>th</sup>, 2021. This interview with Melanie Saunders is being conducted for the NASA Headquarters Oral History Project. Ms. Saunders is talking to me today over Microsoft Teams. The interviewer is Sandra Johnson and we're both in Houston, Texas. I appreciate you talking to me today for this project.

SAUNDERS: It's my pleasure.

JOHNSON: I know in 2015 we had an oral history interview with you, and we covered your early work at JSC [Johnson Space Center, Houston, Texas] between 1994 through about 2009 for the ISS [International Space Station] Program. But I wanted to start today by talking about before you came to NASA, and why or how you chose to work at NASA, especially considering your educational background. You're more of a humanities person than a STEM [Science, Technology, Engineering, Math] person.

SAUNDERS: Okay, so sure, I started out. I went straight from college to law school, and after law school I started out working in commercial litigation, mostly banking, insurance defense, other civil noncriminal litigation. I really did not enjoy it very much, it was not very fulfilling, I didn't feel like I was making the world a better place. I was helping people, but most of the people I was helping were banks and insurance companies rather than actual people.

I decided I was either going to pursue a career change or I was going to pursue a different area of the law, so I took some time off, and had originally thought I was going to maybe go into being a prosecutor. There was a hiring freeze at the time, and so I was delayed a little bit in pursuing that. In the meantime I went and got just a fun job, just because I'd been busy going straight through college and law school and never did anything like a gap year, so I got a job working in retail sales and management. I loved it. I felt like I was helping people. It wasn't as big as some of the things in the law, but I really enjoyed it, and at that point I was thinking either do the law thing or maybe I'll go pursue a career in the retail industry, like be a buyer or some sort of other manager.

I was at a crossroads in my career. I knew what I had been doing so far was not fulfilling and was not the right thing for me, and I had a desire to be part of something bigger. At the time I ended up having a family friend who had left a career in the Navy, retired from the Navy, and gone to work for NASA. He went to work in the [International] Space Station Program and started talking to me about this. This was also somebody who was very frustrated with me that I had a law degree and he just didn't feel like I was using my education, so he asked if I'd be interested in pursuing a career with NASA. I said, "Of course." When I was in law school, I actually took international law, I actually took space law, which at the time some of my friends teased me about. They were like, "Well, I'm taking banking law, or I'm taking securities law, what are you going to do with space law?"

But it was really interesting to me, and at the time the Space Station Program had almost been canceled, it had survived in Congress in 1993 by one vote. It had almost been canceled, and NASA was sent to add the Russians to the program, which was a foreign policy objective of the [President William J. "Bill"] Clinton administration at the time, because this was shortly after

the fall of the Soviet Union, so this is the fall of 1993. The Space Station Freedom Program had been going on for a long time. It was grossly over budget; there was a lot that needed to be improved about it.

With that direction, the Space Station Program was sent to do a redesign of the Space Station, downsize it to an affordable configuration, and bring the Russians with their heavy lift power and tremendous logistics capability into the program. The big focus of that, and the benefit for the United States, was Russia was at a crossroads. It was trying to decide if it was going to lean east and go more into business with China or some of the less friendly countries in the Middle East, Iran for example, or lean west and go along with Western Europe and the United States and Canada and its allies.

That was designed to draw them into the western set of allies, and so that was something that I thought was very interesting and really important for the country and for the world. I had this opportunity to come interview for a job in the International Office in the Space Station Program, and I took it, and I was hired and never looked back.

I moved to Houston. I started in February 1994, right in the middle of the redesign with the program still hanging in the balance, moved to Houston, bought a house, all before the vote came through. The vote came through, and the Space Station Program survived, and off we went. I was able to spend about the next five years, I was the Space Station Program representative to the negotiations to bring the Russians in and redo all of the agreements with Europe, Japan, Canada, etc. What a tremendous opportunity that was.

After the government and agency-level agreements were done, we had a next series of agreements where the partners were paying us for launching their elements or doing more than our fair share of common ops [operations] to cover them, things like transporting the crew to and

from orbit on the Shuttle, launching their elements on the Shuttle, other things where NASA was performing beyond its share. The agreements required them to pay us for those services, and they chose to pay in barter; governments don't like to write each other checks.

I spent the next probably three or four years working on those agreements and some other ancillary agreements, implementing the Space Station agreements, things like the crew code of conduct. We had Shuttle regulations that covered everything when NASA launched and returned the crew. There's no issue over getting jurisdiction over anybody that caused a problem on the Space Station, but it's a little different when people are landing in Kazakhstan and going to Russia, and we don't actually have that physical jurisdiction over them.

Lots of interesting opportunities, and after that I continued in the Space Station Program. I worked a number of commercialization initiatives. There was an earlier heyday for commercial development of LEO [low-Earth orbit] back around 2000, and I spent a lot of time working on that.

In 2001, my husband and I started our family, and were fortunate enough to end up with triplets, which kind of put a damper on my international career at least temporarily in terms of having the ability to travel and do a lot of international work. I at that point started to pursue options in management, and that's when I became a manager in Space Station. I started out as the Deputy Manager of the External Relations Department in Station, then moved from there to be the Associate Program Manager.

Then from there at the end of 2008, beginning of 2009 I was asked by Mike [Michael L. ] Coats to become the Associate Center Director Management, which was the number three person at JSC at the time. There was Associate Center Director Technical also at that time. I did that,

and later the technical Associate Center Director position was eliminated, I became just the Associate Center Director.

I remained in that position for a number of years, almost 10 years. In the last six months, when Ellen [L.] Ochoa was preparing to depart, I did a rotation as the Acting Deputy Center Director for six months while Mark [S.] Geyer was at [NASA] Headquarters [Washington, DC] working for Bill [William H.] Gerstenmaier as his Deputy on a rotation. Vanessa [E.] Wyche and I both took a turn being the Acting Deputy Center Director.

Then while I was doing my rotation there Krista [C.] Paquin, who was the Deputy Associate Administrator, she had been working for Robert [M.] Lightfoot, and then when he left the Agency Steve [Stephen G.] Jurczyk took his place, so she was Steve's Deputy, she decided to retire and thought that I would be the ideal candidate for that job. Steve Jurczyk and I met, and he agreed, and so I was offered the job, which I started off as a detail for a few months but became permanent in October 2018. That's when I became the Agency Deputy Associate Administrator.

Jim [James F.] Bridenstine had just arrived at NASA in March or April of 2018, so I went up in June of 2018. Then I think it was the end of that year Jim [James] Morhard, the Deputy Administrator, arrived, and Chief of Staff Janet Karika and some other people. We filled out the team in the A-suite. I've been in that position for three years. I just transitioned. Steve Jurczyk retired in May and Bob [Robert D.] Cabana became the new Associate Administrator, and I've been his Deputy all summer, and I just switched this week to be the Agency Chief Resilience Officer focusing on COVID [Coronavirus Disease 2019] recovery and Future of Work. Future of Work has really been my signature initiative as the Deputy Associate Administrator. For Lesa [B.] Roe it was MAP [Mission Support Future Architecture Program]. For me it was really

Future of Work. COVID, as you might imagine, has turned into a full-time job, managing the Agency's activities in managing the pandemic, recovery from the pandemic, and most recently implementing the administration's vaccine requirement.

JOHNSON: I appreciate the overview. There's a lot of work and a lot of time in that career overview.

SAUNDERS: A whole career.

JOHNSON: I wanted to talk to you about that time before you went to Headquarters, when you first heard that Administrator Bridenstine was being picked by the President [Donald J. Trump] but before he was confirmed, because there was a lot going on. He was picked in September 2017, but like you said he didn't get approved until April of 2018, and there was a contentious approval process going on. A little more than normal for a NASA Administrator, I think.

But if you don't mind, just talk about that time period and what your first impressions were and how you felt about the potential of him becoming the Administrator.

SAUNDERS: Sure. Every time a new Administrator is incoming, if it's not somebody I'm familiar with, I always do the Google thing like everybody. He actually had more space experience than I think most people realized; I don't know how much the news coverage covered it because I don't remember frankly from the time. But he had experience with the space renaissance bill during his tenure in Congress. He ran a space museum in Tulsa [Tulsa Air and Space Museum & Planetarium] after that timeframe. But he wasn't somebody I had known

much about. Mike [Michael D.] Griffin was well known in the space industry from his positions both previously at NASA and with other private companies. Sean O’Keefe was well known from his OMB [Office of Management and Budget] experience and Navy, etc. Charlie [Charles F.] Bolden of course, everybody knew Charlie because he had been an astronaut at JSC. I’d known him forever, since my early career at NASA.

He was somebody relatively unknown I would say to me personally and to a lot of people at NASA, but upon just looking a little bit deeper he certainly had a lot of space experience, so we were curious to see what he was going to be like, he was just a little bit of an unknown factor.

JOHNSON: Yes, he was definitely unknown like you said. But you decided to accept that opportunity at Headquarters as you said in June 2018. I was reading an article that said that you had expected to return to JSC after that appointment relatively quickly, because it was a temporary appointment. You never know when you read articles, so I just wanted to double-check.

SAUNDERS: We started on a detail, which is normal for that sort of job. Steve Jurczyk and I didn’t really know each other very well. I knew of him, and he had an excellent reputation, but he had been at Langley [Research Center] most of his career and I had been at Johnson my entire career. We had some mutual friends and he had a great reputation, but I think for both of our benefits we started out as a detail, but it was converted to permanent in October after a few months of that.

My intention was I was going to turn permanent and stay in that job until I left the Agency. But technically, yes, it started as a detail. At that time when I was offered that job, I

really was focused on trying to become the Deputy Center Director under Mark Geyer. That was what I saw as my next job. Then this came. This kind of came out of the blue.

JOHNSON: Talk about those first few months when you were there, and working with the new Administrator and his team that he brought with him, and with Jim Morhard, those first few months.

SAUNDERS: Sure. Jim Morhard wasn't there until the end of 2018. But I met Jim Bridenstine in May of 2018, because I met him before Steve offered me the job. Because of my role in Agency continuity management, and the role that JSC plays in Agency continuity of operations, I had gone to Langley and met them to participate as an observer on how it was going when there wasn't a devolution exercise that year. That was my chance to meet him and talk to him. He was really a breath of fresh air. He was very humble, very down-to-earth, a person of very very high integrity. He was soft-spoken, not at all arrogant. He was a very interesting person.

I also pretty quickly realized that he was somebody who learned very quickly, he's a very fast learner. I'm not sure I've seen in my career somebody who was a faster study on learning about something and then being able to explain it to somebody else, which is really proof that somebody has fully internalized and learned a concept. He was pretty clear. He was there, it wasn't about him. It was about trying to enable and position NASA to do big things again and to try and reenergize exploration initiatives.

What was obvious is what he was hearing from the White House was they had an appetite to do big things. They wanted to give NASA that opportunity. He was there to try and help steer what that was going to be and how we were going to play into it. It was very exciting and



inspirational, and he personally was such a breath of fresh air. He's also a very clean-cut individual morally, integrity, just super. He was there to do the right thing. He was somebody who would stand up and do the right thing even if it was personally difficult for him. I was very impressed.

I think there were people that had assumptions about him. I know there were certain communities at NASA who were concerned that somebody who had a reputation as a conservative Christian might be less than friendly to the LGBTQ [lesbian, gay, bisexual, transgender and queer or questioning] community. Not true. He was actually a very fair high integrity open-minded person in my experience. He was just a real breath of fresh air.

Same thing for Gabe Sherman, who was somebody he had brought with him who had worked for him both when he was in Congress and at the museum. Gabe, boy, what a great guy. Super team player. Same as Jim, high integrity, there to do the right thing, it wasn't about him or his ego. Just really really great people. I was very excited about that aspect, that these were part of this new team I was going to be part of. I was really happy to be there, because NASA historically, there can be some really big personalities at NASA, and I was used to that, having lived in the world of human spaceflight since I started at the Agency. But there can be some really big personalities and some really big power struggles. It was so refreshing to be on a team where you have Steve Jurczyk, also very humble and very much a team player, and then to see that from Jim and Gabe was just really exciting.

They would get their initiatives and things from the Agency, but he was excited about reinvigorating NASA and empowering NASA in aeronautics, in science, and STEM education. He didn't just focus on human spaceflight, although he will probably longest be remembered for

his role in Artemis [Program]. But just things like the Artemis generation<sup>1</sup> was a very personal matter for Jim. At the time his daughter was 11 and we were having one of the big Apollo anniversaries of the Moon landing and in 2019 he was struck I think on a personal level that if his daughter had been a work-age person in that timeframe there were no opportunities, she didn't see any people who looked like her in that. He was a driving force in making sure not only that the Artemis crews are more diverse and represent all people and there were opportunities, but on a personal level that he wanted to know that his daughter and other young girls like her would have opportunities in aerospace, and that was a very personal aspect of that for him. Artemis obviously is symbolic of a female name there, so really exciting<sup>2</sup>.

JOHNSON: You mentioned that he could take information in and then recommunicate that information back. I did speak to Gabe Sherman, and he said one of the emphases that they had was trying to communicate with people to make sure that everyone, especially the workforce at NASA, knew what they were doing, and if there was anything anyone had concerns they could ask questions and they'd have town halls for sharing information. Talk about that and his communication, not only with NASA but also with the general public.

SAUNDERS: Sure. Jim has I think just natural tremendous talent as a communicator. But what was really a game changer about him is the communication was such a priority. He set out and put in place resources. NASA PAO [Public Affairs Office] at various points in its history has

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<sup>1</sup> The Artemis generation was a term used by NASA to refer to the women and men selected for the 2021 astronaut class, who represented the diversity of America and the career paths that can lead to a place in America's astronaut corps. This group will be heavily involved in future Artemis missions to the Moon.

<sup>2</sup> The twin sister of Apollo and the goddess of the Moon in Greek mythology.

been criticized for playing defense and they would field inquiries that came in. Whatever the press asked we would respond to and do that.

There were pockets, when Mike [Michael A.] Kincaid was the head of communications at JSC, he tried to take more of a proactive role in that. This is not unlike that. But Jim with Gabe's support totally changed NASA communications in terms of how to use it as a strategic tool, both to communicate with the workforce and to engage the public. First, really effective use of social media on an Agency level. Again, not just responding to inquiries that others made, but to affirmatively decide what is our message, what are we trying to do, and how best should we do that. Super effective engagement in social media and those circles change in a fundamental way the funding level and support and the resources that were needed for OCOMM [NASA Headquarters Office of Communications]. Basically everybody understood that we needed them to chip in, we needed to leverage launch events when they occurred, and that science needed to be closely aligned with aero [aeronautics], with technology, and with human spaceflight. Those weren't four separate things.

Also probably one of the biggest things he did is he recognized that some of the previous attempts at exploration programs to the Moon and beyond had failed because the way they were implemented pitted one community of stakeholders against another. He was very adamant that in pursuing a goal of returning to the Moon and going on to Mars we do not stake the science community against us. He was very forceful on that issue, and he was exactly right. It's the first time you didn't have—there were always people who'd say, "Why don't we cancel Webb [James Webb Space Telescope]? That's over cost." He was like, "Absolutely not."

He understood the benefit of that. He had to form close relationships with all those mission directors. But it really was the first time I saw an Administrator use strategic

communications, have a strategy, insist on the resources, insist on that cohesiveness among the Agency mission leaders, and set out deliberately to use that as an effective tool.

He also was really effective in his engagement with Congress, in doing things like town halls, and understood the strategic importance of not only having the members of Congress see the benefits that NASA provided to their constituents and to the country, but also making sure he did it in a smart way to build alliances. He engaged [U.S. House Speaker] Nancy Pelosi at Ames Research Center [Moffett Field, California] on International Women's Day [2019]. Here it was a very fairly divisive partisan time in United States politics, and here he is, the NASA Administrator under a Republican president who—Nancy Pelosi and the president famously disagreed on many topics. To get her to agree to come to a NASA Center and promote Artemis, it was a stroke of brilliance.

The decision to promote that Artemis would land the first woman on the south pole of the Moon really came from him, and it was brilliant. That was something that caught her imagination and allowed her to bridge that partisan divide at a time that was otherwise contentious in the relationship between Congress and the administration. That was a really cool moment. That was just one of many. But he was tremendously effective in strategically aligning how that all fit together and how you could use communications to build those alliances and have people care. He wanted everybody to see themselves in the Artemis Program and to feel they had a vested interest. He was trying to build basically an unstoppable wave of excitement that would carry it over the transition in administrations.

He understood and recognized that one of the biggest challenges NASA has had historically with exploration programs is it takes a long time to get them going, these are huge huge programs and initiatives, and they would typically not be out of the infant mortality danger

age when there was turnover in administration, and if it was the last person's initiative it could also end up being poisoned by that. I think the reason we saw the continuity of purpose between the last administration and the current one was a result of his efforts strategically to build overwhelming bipartisan and public support. There are certainly many important factors and initiatives right now competing for our tax dollars and revenues, but the way he did that was really important.

JOHNSON: Speaking of Artemis and that public support, Vice President [Michael R.] Pence in March 2019 made the announcement that NASA would put a human on the Moon by 2024. Talk about that announcement and when that happened, because I understand that some people were caught by surprise.

SAUNDERS: All of us.

JOHNSON: Yes. Talk about that moment and why you think they chose to push that quickly and to get that in the public eye.

SAUNDERS: That was really a White House decision, and it was based on that administration's appetite to do something great. It was part of "make America great again." They wanted to ensure America's continued leadership on the world stage in human spaceflight, didn't want to see us be subordinate to China or other countries. It was really I think born out of that.

What I will tell you is we were busy planning for this National Space Council that was part of the reinvigorated strategic level interest on aerospace and human spaceflight in particular.

But it wasn't until I think the night before the Space Council that they got wind of what the vice president was planning to announce, and it was hilarious, because everything we were doing was planned for 2028, that was all the architecture, all the goals, all the schedules, all the funding profiles, etc. I joked about it afterwards, like don't you love it when your boss moves a deadline up by 100 percent, and he basically cut it in half. This is 2019 now, and it went from being 2028, almost a decade away, to 5 years. It went from 10 years to 5 years, and it was just overnight.

I believe the administration's goal there was to try and ensure that if they pushed it that hard, the program would be past that infant mortality danger zone by the time there was an administration change. I think they were betting that the administration change would have come in 2024, not in 2020. But if you looked at the timing, I don't think that was a coincidence that the date was the maximum span of a presidential administration. Even though that was never acknowledged by the White House I think most people assumed that that was the logical explanation. But it was part of make America great again, reassert or ensure continued American leadership in the civil space venue.

They also were busy, remember, forming the [U.S.] Space Force idea to try and assert American leadership also in the national defense realm of space. It was an overall whole of government approach, but it was specifically designed to ensure American leadership in civil space.

They kept that pretty close hold, and like I said, I think Jim found out about it the night before. It's literally one of those like, "Oh, okay." It's one of those great moments in political history. It was exciting, but it took a lot of, "Uh-oh, okay, well, what now?" Then we had to suddenly adjust plans and other things. It was always the uncertainty of that's going to require

the funding profiles for large programs, and they're not flat funded at a level, you have to have a hump up front for investment and then there's a certain sort of ideal shape of funding profile. So the real question became will we get that from Congress and is Congress as on board as we think.

That was an issue. That's been an issue for pretty much every administration. Congress often has a set of interests that might be driven by certain parochial needs or desires, or Congress has ideas and the administration has ideas. Jim was fond of saying, "The last time the president's budget recommend was directly enacted into appropriation law was never," because we have a system of government in the country, and the president proposes, and Congress appropriates. It remained to be seen if we were going to get the funding profile that would enable that goal of the administration.

While we got a lot more than we had, we had a huge budget increase, we didn't get everything we needed to really make '24 a reality. One of the places where there were some gaps was the Human Landing System, some of the things that you had to have to actually put boots on the Moon with people. That's a continuing negotiation between this administration and Congress. I saw that in the [President Barack] Obama, [President William J.] Clinton, all throughout all the administrations that had been in power, [President George W.] Bush administration. Constellation was born and President Bush's exploration vision was born from the assumption that fiscally the Shuttle had to go away, and that stream of money would be redeployed to fund the exploration program, and that was controversial at the time and continues to be controversial in space circles.

JOHNSON: You mentioned a couple things in there, and one of them was the Space Force, another was the National Space Council, and the decisions to start the National Space Council again with the vice president as the head of that. Talk about those decisions, the Space Force being external to NASA, but still possibly having some effects, and the National Space Council and that decision-making body, and if you thought that was a good idea, how it has worked out. Also if you feel like it's going to be continued in a positive way.

SAUNDERS: My understanding throughout the [President Joseph "Joe" R.] Biden administration has been that they do plan to continue the National Space Council. They've named an Executive Secretary for it. Scott [N.] Pace was that person for the Trump administration, and there's a new one named under the Biden administration [Chirag Parikh]. My understanding is yes, they do plan to continue that. That was not the first administration where that structure was in place, it had been done previously, so it was not a new thing. It was just something, you see this often, administrations will borrow structures and forums and programs from previous administrations. So not a totally new thing, but it hadn't been in place in a while.

The Space Force I think was something necessary to reflect the growing national security concerns in space and the potential for harm to U.S. interests, both civil and military, in space that are a result of other countries' maybe less than honorable intentions towards us and towards the environment or things like less than ideal behaviors in terms of creating and managing space debris. It's something that was overdue. I think it is a growing threat and it's something that we can ignore at our peril, and so I think it was timely and important.

Many people immediately assumed that was going to be competing with NASA for things like Artemis. That's not the goal of the Space Force. There's a lot going on in the cyber



world that they are focused on, and it's not just about putting people in space, it's about many other national defense initiatives, and keeping space a friendly place for free countries to operate.

JOHNSON: President Trump also issued several space policy directives during his time, and a National Space Policy. Talk about that, and maybe some of those directives. As you mentioned, the Space Force, but also the streamlining regulations on commercial use of space, or some of those things. Some of them were not very controversial, but sometimes when he would make announcements everything was controversial about it. Maybe just talk about some of those directives.

SAUNDERS: Sure. An example of something that's probably not very controversial is the recognized need to do something about space debris and the risk that poses for all of us from everything from the Space Station itself to many other satellites, communication satellites, other things. That's something the entire world should care about because it's a real problem, and it's something that, like I say, we can ignore at our peril. You're starting to see commercial businesses pop up with a goal of having an effect on improving the environment there and being able to characterize it, mitigate it, etc. That was one thing.

I would say the administration had a very strong focus of probusiness in LEO, in low-Earth orbit, and they did a number of things to try and encourage that, whether it was trying to establish norms of behavior, trying to establish or encourage more investment in low-Earth orbit. We spent time working with FAA [Federal Aviation Administration] and other regulating agencies to try and do things. One thing NASA has tried to do for example is have more certainty in terms and conditions in agreements with private companies so that they can plan

better, that they can have investors know what the risk posture is, and try to get a little bit more advancement on licensing terms.

This is something that is not a new thing, but one of the things that makes it very hard for commercial companies to form and make a business case is if they can't say whether NASA will approve an activity, or whether they'll be able to get adequate commercially available insurance. Having more certainty on liability terms, on NASA oversight, on other oversight, on licensing terms, all of that certainty and predictability is part of creating an environment where commercial ventures can blossom. Being open to things like private astronaut missions that would go to the Space Station was a huge step. It really is more of a willingness to entertain it. I would say when I worked on commercialization activities around 2000, there was everything from sponsorship to trying to do private experiments on the Space Station to having things like CASIS [Center for the Advancement of Science in Space], which was supposed to bring in private investment in LEO. NASA has been trying for a long time to help enable an economy in low-Earth orbit.

But we have been a little bit schizophrenic sometimes on how friendly we are to that. Everything from what we require in terms of intellectual property rights is not always the most commercially friendly terms, and so having to evolve our thinking on that, to what sort of insurance we require, to what sort of risks we're willing to take. All of those things affect whether the environment is feasible for a private company to be able to get investors and to make money. NASA has been on paper very willing to support it but has not always fully committed in the past. This is probably the most business-friendly time I've seen at the Agency.

JOHNSON: Let's talk about what you were doing during that time period, your position specifically. When you took that position you were the second highest-ranking civil servant in the Agency. Talk about what that might entail, what you were concentrating on. Of course I do want to talk about COVID and once that started, but especially in those early months when you first started, before COVID hit, some of the things that you were doing or leading in that position.

SAUNDERS: Sure. One of the things that fell squarely within my job jar was MAP, the Mission Architecture Program, where we were switching from a series of federated independent operating units to an enterprise model of integrated mission support, so having the CFO [Chief Financial Officer] organization oversee all the CFO organizations at the Center and have the funding flow through that, and the people management flow through that, versus going down to the Center and then out to each function. That was a fairly controversial move. I will tell you when that started, I was the Associate Director at Johnson and I was like, "Oh, how's this going to work?" Part of it is I went from getting a Center management and operations budget from Headquarters that I could then deploy across all of the different mission support functions at the Center, and I could redeploy as needed to solve particular short-term problems. Having that local optimization was great for me to be able to do what was best for JSC and its programs and projects. But if every Center is doing that, nothing is really optimized nationally, and so to me there's a continuum there of what's the best thing for the Agency.

As a result we ended up with 10 different Centers having 10 different ways of doing things. The functions were not funded at optimal levels. That balance wasn't optimal across all locations. Some locations had traditions of funding something at a higher level and having a

different service level than the same function at other Centers. But mostly what you're really losing when you have a heavily decentralized function like that is you lose the ability and the incentive for things like why does every Center need its own contract supporting the CFO, why does every Center need its own safety contract, why does every Center need its own construction contract, what benefits are there for the Agency in terms of buying power, to streamline that and save a lot more money on just the management of our contracts and the work, all of which takes time and money and people, to get to a more efficient operating model.

At that point the SSMS [Safety, Security, and Mission Services] budget, had been shrinking for about a decade. All the low-hanging fruit was gone, it was getting really hard to find ways to get more efficient at a local level, and so a national solution was really needed. When I moved to the Agency position, now I'm overseeing all of MAP, it became very clear why Lesa [B.] Roe and Robert [M.] Lightfoot were in favor of this, why they had implemented it, and while I had plenty of pressure on me to stop it, because here I was a recent Center person my whole career, I could see the logic in it and the benefit to the Agency.

I was at a President's Management Council one time a couple years ago and somebody from DoD [Department of Defense] got up and talked about the fact that they had 17 contracts for buying two-by-fours. I was like, "Oh my God, that's NASA." It was us. It was exactly where I saw that opportunity. We had in some cases of 40, 50, 60 engineering support contracts at a given Center. There's no reason everybody needs their own, there's just not. They might want their own. They might have always had their own. But there's no logical business reason why they need their own.

The opportunity is there, because every time you redo one of those contracts if you're going to do a competition, you have to put a source evaluation board in place. You have to put a

procurement requirements development team in place for months before that. You are taking all of those people and locking them up to do a competition, and then if that's protested it's even longer while they're doing that, and then somebody has to manage and administer that contract. It's not an efficient way to work if you have more contracts than you need.

Now there's reasons why contracts need to stay separate, and you want to make sure you're mindful of small business goals, etc. But there is absolutely no logical sense from an Agency perspective why we were so locally optimized. I could see the benefit to the Agency of getting there. The one thing I would say was probably not ideal about it is the Center Directors are highly capable, really skilled leaders, and it did take away a lot of authority and autonomy they had, and I didn't like that about it. But in terms of Agency business and what made sense, there was a lot of good that could come from that.

Long-term it'll be interesting to see if we have a swing back the other way. I do think it's something of a continuum, there's probably a happy balance there. But it's been good to have, I'd like to see the ability for let's say legal. If you're at Marshall [Space Flight Center] your lawyer could be somebody from Florida, it could be somebody from Glenn [Research Center], or somebody who lives not near a NASA Center. It doesn't have to be somebody at that location. But you have to have more specialization. You have to have more integration.

I find it fascinating that in the 2020s NASA, which is supposed to be the organization pushing the frontiers of the future, still has a system that basically your identity in the Agency and your access to many things is defined by a geographical mail stop code. I remember arriving at NASA and I was like, "Code this, code that." I'm like, "What's a code?" Finally, finally, somebody said, "It's a mail code." I got a phone book, a JSC phone book and a Headquarters phone book. Then I could figure out who people were.

But we're still using that. When's the last time you've seen a physical phone book? It took me two years when I got to Headquarters or maybe a year to get my email handle changed from a JSC email address to a Headquarters, an A-suite. Which is hilarious to me. But it was affecting. I would be an outsider on the Headquarters website and couldn't get access to stuff. This is silly. That was one of the things that I found most fascinating. MAP was a big one.

Steve Jurczyk as the AA [Associate Administrator] was very much a collaborative boss and engaged me fully on program and project activities, and so everything from all aspects of leadership, people selection, people management initiatives that we did together, things like trying to change our workforce model from being supply-driven, the Centers say, "I have this many people, I need the missions to cover them," to demand-driven where the missions tell the Centers, "This is the project I have, how many people do you have who can work on it?" That's a fundamental shift of supply and demand across the Agency. That was one of those things we were trying to do that I was able to really push on. I've talked already about some of the procurement streamlining while still meeting our small business goals. But that.

We had a lot of fun doing some DEIA [Diversity, Equity, Inclusion, and Accessibility] initiatives trying to improve the workforce demographics, trying to be a more inclusive employer. Then a number of things because Artemis emerged during that time trying to make sure that we were being strategic about how we positioned ourselves to be successful on a greatly reduced timeframe.

A lot of things I ended up with. My job was in charge of running shutdown operations, and that turned out to be quite a big deal in early 2019. I remember being in a meeting with Steve somewhere I think in November 2018, and somebody asked him, I think it was one of the politicals asked him, "Who runs the shutdown?" He goes, "Oh, Melanie will." I was like,

“What? Wait, what?” It was hilarious, I hadn’t realized until then that my position did it. But I got my shutdown team together with CFO, legal, and others, and I ran the shutdown. I happened to have gone back to Houston right before Christmas and that’s right when the shutdowns started, so I will not ever forget that day because I was trying to take off part of the day. I had a hair appointment. My kids had winter formal that night and I was making bouquets and boutonnières for six people and had to be at pictures, which also involves the inevitable “Oh, I can’t find the tie I was going to wear.” I’m like, “Where’d you get those shoes? Where are your new dress socks?” All sorts of teenager drama that’s normal for something like that, and I was having White House meetings and meetings with the Administrator.

I’m like, “Good grief.” That was one of those days where I thought my head might explode. That was a crazy time. But it started and went well, and I managed to run the entire furlough from my home in Houston. We just did everything virtually and had telecons every morning and got into a rhythm and worked through it. But it was really helpful that A, Jim Bridenstine and Jim Morhard trusted me to run that, and Steve trusted me to run that, and then between us he would take over doing the OIC [Official-In-Charge] updates and I would work more on the shutdown team, and work on the things like approvals. It was just a really good team effort.

Those were some of the big things that were going on in that timeframe. Selecting people for jobs, performance management. We had Center Directors and mission directors and other people that we had to appoint and select or compete for. Just general overall managing the Agency.

Jim Bridenstine and Jim Morhard were very focused on the up and out, both the White House, the National Space Council, the communications and working with Congress and

engaging them on various things. That left us to really run the day-to-day running of the Agency. Steve had more focus on the program and project, I had more focus on the institutional side, but we had a lot of overlap between us. Those are the things that come to mind for that timeframe.

JOHNSON: I was reading, one of the things you did during that time was led the Agency in the diversity, equity, inclusion, and accessibility reinvigoration.

SAUNDERS: That was more this year.

JOHNSON: Okay. We can go ahead and talk about that if you want to. In the middle of the pandemic we had a summer of a lot of social unrest. That came to a head in a lot of places in this country. I wanted to talk about your position and exactly how did NASA react to that, and what did you have to do at that point to make people feel comfortable at NASA knowing that basically they can voice their concerns about that time period.

SAUNDERS: One thing I should mention is I was asked to be the Acting CFO when Jeff DeWit departed in February of 2020. This is just before the pandemic started. I did most of that from Houston, from my home, during the pandemic. But I took over a team that was a very diverse team. Especially the NASA Headquarters CFO team, very racially diverse team, and a group of



people for whom the social unrest, the racial injustice, the George Floyd murder<sup>3</sup>, all of those factors hit really hard and really close to home.

While I was not leading Agency initiatives at that point, during that timeframe Cathy [H.] Mangum was acting in my place on a detail while I was the Acting CFO, but I found myself the leader of a tremendously diverse team who was very upset, stressed, concerned. That was just a whole other layer on top of the stress and concern and fear of the pandemic that was already there. It was a time when we weren't seeing each other face to face.

I was really lucky to have a couple people that really stood out in that organization as leaders. Both Steve [Stephen A.] Shinn, who was the Acting Deputy CFO, and Frank [E.] Petersen, who was the head of the Quality Assurance Division, were people who both really stepped up and provided some outstanding leadership and support for our employees. In the pandemic I took on the habit of doing what I called the message from the Acting CFO. I would do this every other week or so. I would just send out an email and I would talk about what was going on in my life, my experience, try to encourage the workforce. I got tremendously positive feedback on that, and all it was, there's no magic solution, it was just telling people that I'm a person too, I hear you, I see this.

I did the same thing when we got to the points of the social unrest, and tried to just acknowledge this is stressful, it's really stressful, it's terrible, if you're feeling upset, stressed, other things, that's okay. We held a lot of listening sessions with our employees to talk about that and let them vent and talk about how things could be different and better. I think at first it was cathartic. I think what I was left with by the end is you get to a point where it's really

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<sup>3</sup> On May 25, 2020, George Floyd, a 46-year-old black man, died in police custody in Minneapolis, Minnesota. Derek Chauvin, a 44-year-old white police officer with the Minneapolis Police Department was charged and found guilty of his murder. His death led to wide-spread protests against police brutality and racism throughout the summer.

important that people know it's okay, it's a safe space to talk and to tell your stories, but people get to a point where that's great, now what are you going to do about it, and that was part of the genesis of the effort this year in January to really start focusing on actions we could take.

That was some of that genesis of the reinvigoration of NASA DEIA efforts, came from that experience as a leader during the summer of social unrest. It grew out of my desire to not just talk and not just be sympathetic, but to show that we cared enough to really take actions. That was mostly the genesis of that. As it happened, we also ended up getting quite a few executive orders that produced, most of the early ones were focused on the external equity efforts, efforts to reach underserved communities to make sure that the federal government and our tax dollars and our resources were not overlooking segments of society. The example they used was everybody from people who had historically been the targets of discrimination on a racial basis or gender bias or other things like discrimination against LGBTQ communities or people that just hadn't been reached because they lived in rural communities and there's not a lot of government services. NASA, while we are not what I would call a public-facing Agency, we're not like the passport service providing service directly to the public, but we are a huge center of inspiration and provide a very important I would say spiritual mission for the country in terms of inspiring people. We play a role in inspiring people to go into STEM careers, which is important for not only our national prominence on the world stage but our economic health and well-being and the future strength of our country.

We have a tremendous obligation to engage and excite people and empower them and show that we can do these incredible things and show the diversity of our team, increase the diversity of our team, and do that and show all the benefits you can have from a great strong team, and it also makes our team stronger.

I held a series of discussions. I formed a steering committee to pull together various officials in charge at the Agency level. Everybody from Mike Kincaid, Director of STEM Engagement, to the CFO because we have travel policy, and we brought in HR for things like employee development, recruiting. Brought in obviously ODEO [Office of Diversity and Equal Opportunity]. Some A-suite folks were hired specifically to work on equity initiatives and lead some of those.

I brought Frank Petersen up on detail from OCFO [Office of Chief Financial Officer] to help with focusing on engaging the ERGs [Employee Resource Groups] directly, getting a direct voice of them into the Agency leadership, and hearing and having listening sessions with each group of ERGs to understand directly from them with no filter in between us what's on your mind, what do you think are the most important actions that Agency leadership can take. That's been tremendously rewarding and successful in doing that.

But I will tell you that the number one thing I learned while I was in the CFO community is people need to be heard, they need their leadership, even if it's not something that's directly on point, when stressful things are going on in their world, in our world, in life, they need to know that we recognize that this is stressful, recognize how it might be affecting them, and offer support, encouragement, and a chance to talk.

While you have to be careful to balance what's appropriate work conversation and topics, you still also need to be ultimately—the pandemic especially provided the opportunity that the most important thing is to be a real person and a leader and show your team you care. That's something that I really found rewarding about that whole experience. I'm sorry that the environment occurred where that was necessary, and I sure hope the world becomes a friendlier place again, but that same sort of leadership also helped us when we had the executive order in

the fall of 2020 where the DEIA and critical race theory training became a very political football and a very controversial issue, and there was a lot of stress after January 6<sup>th</sup>,<sup>4</sup> and about [COVID-19] vaccinations, and other things like that.

All of that, as Jane Datta, our HR [Human Resources] Director, loves to call it, shmurgled together. But all of those things are all different stressors that if you shmurge them all together, all of that was a huge stress on the workforce, and something that threatens us as a team. I think it was just important to try and be a good teammate, and let people know that you matter, your work matters, you're important to the Agency, and we care about you. That's what I've enjoyed the most about that aspect.

Also I think we've made some really good inroads in terms of—that's why future of work is important to me. There's a huge DEIA aspect to future of work. I heard from the individuals with disabilities ERG how important remote work and what a benefit it's been to them. Especially people with hidden disabilities. For somebody with a disability like a missing limb or a paralysis or any number of things, it can be a huge mountain to climb every day just to get to the office, and that's once you assume, which is not always true sadly, that when you get to work there'll be a place to park where you can have a handicapped parking spot and get to your office without going on a huge detour or that doors will be powered appropriately or accessible, and that's not true of all NASA workspaces, and I hate to admit that, but that's true, and the funding is such that it'll take us a while to get there, but that's something that needs to be a higher priority. Things like IT tools are not always available, we've been going through an effort to improve the accessibility of IT tools. But individuals with physical disabilities and

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<sup>4</sup> On January 6, 2021, supporters of former President Donald Trump attacked the United States Capitol in Washington, D.C., in an effort to overturn his defeat in the 2020 presidential election and prevent Congress from counting the electoral votes and formalize Joe Biden's victory.

those with hidden disabilities especially benefited also, because somebody might have a cognitive disability where they're a veteran and they were involved in an explosion during active duty, or something like somebody's in a car accident, has an enduring cognitive disability. That's something that a lot of people may not know about, and so they're going through a hard time or having to need to take a day off, if they call in sick, then the natural reaction of a lot of people is, "Oh, well, you're sick, I'm sorry, I hope you feel better." It's not that type of situation. They don't want to have to explain, "I was having a bad morning, so I needed to take that off but I'm okay this afternoon, I'm not contagious." Just having the space to be able to turn off your camera if that's what it takes or have just a little bit more space and privacy and distance was tremendously valuable to those people in terms of not having to struggle with having to explain more than they wanted to about their personal health circumstances.

So same thing if people were feeling microaggressions and other things, having that space to feel like it's a friendlier environment was helpful. For people that have small children or other caregiving responsibilities, having the ability to work remotely where suddenly you've taken out a huge commute and if you really have to be somewhere and you have an uncertain commute in someplace like DC or at Ames where the traffic is sort of biblical, you have to carve off way more time than the trip may actually take, which makes you less effective at the office in terms of that, and probably if you're balancing that, you're going to leave a lot of uncertainty about whether you'll, no kidding, be able to arrive at your needed destination in time. That's very stressful for people who are trying to make sure they're home when a kid gets off the bus or have to pick somebody up at school or take somebody to the doctor. All of those things are just stressors that were added on the workforce, but remote work presented the opportunity to let people have some more flexibility and control without being treated like they were part-timers or

for the parents of young children, when I was parent of young children it was called the mommy track, and I was determined never to be on that, but the truth is a lot of people went part-time. I'm like, "You're crazy, you're going to end up working full-time and getting paid for part-time and you'll have the stigma of people thinking that you're not serious about your career." Which is totally unfair and wrong, but it did happen. That's one of the reasons I'm so excited about Future of Work, because I think we've proved to ourselves during the pandemic we can do a lot more than people said we could remotely. Just because you don't see me working every minute of the day doesn't mean I'm not. I actually have been much more worried about burnout and what I call the virtual sweatshop than people not getting enough work done. I see the tremendous benefits and the equity benefits of it for many employees.

JOHNSON: Just on a personal note, I do appreciate all of the work from home because I am one of those hidden disease or disability people. So working from home has been wonderful.

SAUNDERS: Yes, what a stress reliever.

JOHNSON: It is, it really is. I'm thinking well, I can look at retirement in a few years, where before I was thinking I'm going to have to retire earlier than I'm ready.

SAUNDERS: Yes, we always have a certain number of members of the population who are sensitive to colognes and personal products. That's a war we don't need to fight. There's no reason. The truth is most jobs [can work remotely], especially on the mission support side, unless you're the security guard at the gate and looking at people's badges. But imagine if you

were one of the badging clerks. If you're doing travel preparation. My assistant at Johnson Space Center when I was the Associate Director, her husband got transferred to Ohio, and she was getting ready to quit. I'm like, "Why? You can work from there." We worked out a system. We joked about getting a fathead, a cardboard cutout of her, but she would text me when one of the other assistants would let her know that somebody was there to see me, and she would text me and say, "Are you almost done? Because your ten o'clock is here." But we did travel and all sorts of stuff. She came in when she needed to for various things. But she came to JSC a couple times a year, but we did that for two or three years, and it was fine. I was like, "If my executive assistant can live somewhere else and do her job, a lot more people than we're letting have that freedom can do that." I'm very excited about it.

I will tell you I had opportunities at Headquarters before that Deputy Associate Administrator job. I had one in particular when my kids were in seventh grade, and at that point my husband was working in downtown Houston, and so he was gone from early until late and the kid logistics were up to me. My kids were not old enough to drive. They did sports and my daughter would not have been able to play basketball and my sons wouldn't have been able to play soccer if I wasn't there to drive them around after school and pick them up and do other things.

For me to take that job would have been great for my career, but really unfair to my family. I would have had to foreclose off a lot of opportunities for my kids or be a complete mooch on my friends, which I was also not willing to do, or it would have impacted my husband's career. None of those were palatable options and so like a lot of working mothers especially, this happens to some working fathers, but my career languished a little bit there when I was ready to move up and move on. But I wasn't willing to make the personal sacrifices.

When I went to Headquarters my kids were all driving, they had turned 16 the previous November, they were all driving and able to be somewhat self-sufficient.

JOHNSON: That self-sufficiency definitely makes a difference. We've been dancing around COVID. Let's talk about when the COVID pandemic first impacted NASA. In March 2020 it seemed like everything just—I think we knew it was coming January, February-ish, but March was when everything changed for everybody. Let's go back to that time period, and just talk about what you were doing and what you did to help prepare for this completely different way of working.

SAUNDERS: First, we had been pushing for the previous year to roll out Microsoft Office 365, and the reason we cared so much about it is because it brought some important cybersecurity features and security benefits to the Agency, and it brought some added capabilities. At that point I had honestly never even heard of [Microsoft] Teams [audio/video conferencing software]. I didn't know anything about it. I'd never had a Teams meeting. I'd had plenty of Webex, and I routinely teleworked on Fridays, but I did so from a series of telecons because Steve Jurczyk and I both had an Agency telecon number and we had the same executive assistant, Adrienne [M.] Ross, and she would literally alternate the phone numbers on our meetings so we'd have back-to-back meetings on Fridays, so we could alternate the meeting numbers. We would just work; I'd be on the phone all day Friday. I sat at my computer in my home office and did that. But that was my experience there.

I remember I went to the CFO organization late February of that year. When COVID really started to spin up Cathy Mangum was acting for me, and so she was more heavily involved



in those early days, but this was also one of those all-hands-on-deck, and so I played a role also with her. I spent, oh, gosh, a lot of late nights on the phone with her and Steve, going through and deciding what was mission-critical work at each location. We had what Centers had submitted, and we had to decide how we were going to handle that. I also took on some special projects like making sure that we could pay the contractors, that we wouldn't have to have massive layoffs. Because at that point we all stupidly and optimistically, I guess, thought it would be a few months. That was what people thought. I remember somebody saying like July. I was like, "July, are you kidding? No way, I hope not." I look back on that now and just laugh because I'm like, "Oh my gosh, we were so naive."

But nobody knew, this is new. I was involved in things like making sure, so I worked on a couple of those procurement things trying to figure out how we could legally continue to pay contractors. I worked on that, I led a team that worked on that with procurement, CFO, legal, etc., and then how we could also see if we could pay grantees, exchange employees. The exchange ones are the only one we could never figure out how to do that, the capability wasn't there. But procurement, we were thrilled because we found out through the combination of provisions that were in to deal with things like hurricanes where there were closures of Centers. We had provisions in a lot of our contracts where we could pay somebody if the Center was closed because of a hurricane or inclement weather, so we used safety and weather leave at first. But then we also figured out we had denial of access. There's clauses where you can pay the contractor if they are denied their access to the Center. There are various things where there were local community shutdowns. But literally in the space of about a week, so I'll never forget this, I flew down to Houston on I think it was Thursday March 12<sup>th</sup>, and when I landed in Houston Steve Jurczyk was calling me, and he said, "Okay, we're just going to start teleworking,

we think that's the right thing for the health and safety of the employees, I want to start teleworking, we're not going to advertise it, so quietly call your CFO team and tell them just starting tomorrow just telework."

I did call my whole leadership team, we did that. Then they called the Center Directors and mission directors and told them the same things. NASA just quietly went into telework mode. The White House was not quite ready to admit that the whole world was going to need to do that. We were trying to not get ourselves in trouble, but we were trying to do the right thing for our workforce.

I came home Thursday March 12<sup>th</sup>, and I will tell you the first time I went back was in May of this year and I felt like I was in the Disney *Sleeping Beauty* movie, when the prince comes back and all the vines are overgrown. I had literally a printed calendar from March 13<sup>th</sup>, and everything was set to March of 2020, the calendar, the clocks had stopped, the calendars on the wall were there, the mail and the paper memos and stuff were all from March 2020. It's like time had stopped, and it was just really weird.

But we pretty much started teleworking there, and within a week that we were working on that, they were working on that framework of the stages, and within a week it had gone from everybody being normal to people going to telework to Centers were closed because of local lockdowns. Within less than a week JPL [Jet Propulsion Laboratory, Pasadena, California] and Ames were both totally closed because of COVID lockdowns in their counties and cities where they were resident, and that was amazing.

I can tell you we were busy where we had an extended shutdown not long before this, so we used the same structure for running this, which worked very well. But what was interesting is I think nobody predicted how fast we'd go from totally normal to completely shut down, and

that was really interesting and took a lot of late nights of well, what do we do about this, well, what about that, and what is okay to continue and what provisions, what protections should we have in place. People like J.D. Polk and Vince [Vincent] Michaud have just been godsend to have that medical infrastructure within the Agency, and teams of doctors at every Center, and OCC [Occupational] Health and all the experts that we are so fortunate to have at NASA have just been, good grief, just saved our bacon. It was just really unbelievable.

But nobody predicted how fast we'd go from totally normal to totally shut down. Then after that it was just one week at a time, figuring out what we could do. I had my first Teams meeting within a week. Somebody figured out what you could do with that link. Then the chat started. Show me how to do that, how do I do this, how do I do that? We all got up to speed on that. We used Webex too sometimes. But what I found in leading in that environment is it was great. Part of the problem when you get more and more senior in the Agency is you don't always know the names of people who are several levels removed from you in the Agency. I'm not personally a great name rememberer, so that's something I struggle with. But when I'm having a Teams meeting, I can see what the person's name is, I can see their organization. I might see them, and I know that person, I think they're a Science Directorate person but I'm not sure. I can see their organizational affiliation. It has their name and that mail code that we still love to use was on there.

When I was chairing a big Agency council meeting, I just loved it because I could have the chat up. I could be going through the agenda. I could have the chat up and I could see what's bubbling through the participants, what are they worried about, what's not clear, what do I maybe need to clarify, who has a question. I can see when somebody has a question, they can raise their hand. All that, and then with the addition of ever-increasing capability I just loved it.

If you're paying attention and somebody attends Agency council meetings, we're still doing all the councils totally virtual because it's a more effective way for the chair to be able to run it for all the reasons I just articulated. It really works well. For the first time with the Teams meetings, we used Webex a lot, but Webex you don't get the picture, and we would do our council meetings at Headquarters in 8Q40, and huge conference room, everybody's around the perimeter of the room, I can see the speaker. If I'm tied in from a NASA Center, I can see the picture of the speaker, then I can alternate with pictures of the room where I might see the charts. But I can't see people's expressions. On Teams for the first time, it's like we're sitting in the same room, and that provided a lot of benefits, when people really needed that interaction, for example to have a virtual happy hour.

We worked through, everybody was working through, the whole world was working through at the same time all the etiquette stuff. I laugh sometimes because there would be people presenting to an Agency council that I was chairing and it'd be usually somebody earlier in their career and they're wearing a suit, and I'm like, "Okay, you should wear whatever makes you feel awesome, and professional, and confident. That is all good. But if you're dressing up for my benefit, I'm wearing a nice top, yoga pants, and no shoes, so don't do it for me. Everybody should wear what makes them happy and I'm totally supportive of that."

But I feel like if we could evolve, if I could use Future of Work as an excuse to get us to evolve into a smart casual Agency-wide dress code, I think that would be great for a lot of people. It'd be an economic benefit for people. I am too old to wear uncomfortable shoes. But I see a lot of women wearing those high heels, and if you want to wear them and they make you feel good, knock yourself out. Totally for it. But if you're wearing those and are uncomfortable all day and have bunions and other foot disorders because you think that's what a professional

woman needs to wear to be a professional woman, then I don't want to impose that on people. I really feel like there's no reason we couldn't go to a lot more low-key. For guys, I don't think a coat and tie is required. Most of the time I wish people would wear a polo shirt, collared shirt. I'm not suggesting somebody wear a T-shirt with holes that's 20 years old and a swimsuit. But there's a really happy medium there in comfortable casual professional-looking clothing, and that's just a lot more, it's not the traditional coat and tie or for women a dress or a suit and heels and hose.

JOHNSON: Yes, I agree, it has allowed people to be a lot more comfortable at work, that's for sure. Working in Building 1 at JSC, having temperature control is a big thing for me. Freezing to death all the time.

SAUNDERS: Oh yes, oh, and just the whole—we tried to turn off the controls, the AC and the air handling, at six o'clock to get people to go home, send that message subliminally, hey, we're going to save some money here, and maybe it's time for you to go home and go for a walk or have dinner, watch some TV, or do something. I think there's a lot of benefits to that. But it's nice for people to control their environment. If I like it hot in my house, I can wear a short-sleeve shirt and keep it warm. If I'm somebody who's always cold I can wear a sweater and I'm not subject to the whims of somebody else's preferences.

JOHNSON: I want to talk about some of the more recent stuff that you're doing, but first I want to go back to Administrator Bridenstine's time. Based on your experience with NASA and working with different Center Directors as well as Administrators in your different positions,

before and after his tenure, you worked a lot with a lot of different people, but what do you think the lessons learned from his specific time at NASA would be?

SAUNDERS: Jim always saw the long game and had a national view in terms of understanding that there's always going to be partisan politics, but trying to stay as bipartisan as possible in your approach and making sure it's clear to everybody that NASA has and always has had bipartisan support, a bipartisan mission, not letting partisan politics and the divisive potential of those get in the way of NASA reaching its potential. He was really strong on that. There were times when that was harder than others for him to have to do and navigate because sometimes there are always individuals who feel like if you're not with them you must be against them. He tried very hard to have NASA be a unifying force in the nation, not a divisive force in the nation. He worked hard to build coalitions and support with all members of Congress and the Senate and the public and industry. The whole thing about having everybody see themselves in the Artemis mission and the potential that brought for support. I really think his efforts on both the bipartisan support and the public support and the inclusive nature of Artemis and that whole message. I think that he personally really was responsible for positioning Artemis to survive an administration change, which is really unprecedented. I think it was really him and that whole approach.

I also think he saw so many opportunities to make NASA part of people's lives on an everyday basis and to generate excitement. Now we were lucky also. The pandemic certainly provided a situation where people were starving for that sort of exciting happy news. The social unrest, all of that presented potential for NASA to be the one bright spot in people's lives. Some of that probably contributed to an environment where that was able to really thrive.

But in times when there was no good news having the first launch of commercial crew mission [SpaceX Crew Dragon DM-2, May 30, 2020] was hugely exciting. His patriotic take on how to present that, the focus on red, white, and blue, the focus on building the excitement through telling the individual stories of the crew members, and all of that really led to Bob [Robert L. Behnken] and Doug [Douglas G. Hurley] got to be household names. The cool story of the fact that both of them were married to astronauts and just getting to know a little bit more about that, the fact that it was a commercial mission and leveraging SpaceX's excitement and their ability to drive excitement. That was a huge deal. He really enabled us to capitalize that.

He built excitement for everything from James Webb to InSight [Mars Lander] landing on Mars to all of these things that he built excitement about. He just really put NASA out there into everyday life through his engagement on social media in a way that nobody had before.

During the '60s I was a child; I drank Tang every morning because that's what the astronauts drank. I get it that that was a time when there was a previous heyday. But I really saw for the first time in my long NASA career, in the past year or so, I saw us being a part of the story of daily life in the national stage in a way that we really hadn't been. We would get five minutes when the Shuttle landed or launched but most of the time those weren't even on CNN live. Other than you're always going to have that right after. After [Space Shuttle] *Columbia* [accident, STS-107], etc. But other than that you would think that we didn't have—I remember going to a local high school. The school district was having a NASA night at a high school football game. Here we are, probably, gosh, a couple miles as the crow flies from the Johnson Space Center. Ron [Ronald J.] Garan went with me, and he was somebody who'd just recently come back from an expedition on the Space Station. The local official introduced him as Ron Garan, fresh back from the Moon. I was kind of stunned. You think you're communicating; you

think you're telling people what's going on, and here in our backyard, literally we had people that thought Johnson Space Center closed after the Shuttle retired, we had people calling. I remember people calling the Center asking if NASA was closed. It was just fascinating to me.

Mike Coats one time, who was a former Center Director, my former boss, he had an experience where somebody very senior in Congress, this is decades ago, asked him, he was an astronaut at the time, what it was like to land the Shuttle on the Moon. This was somebody who was very powerful in an appropriations type of setting. He was sort of nonplussed. He was like, "Uh, uh, uh." He's thinking furiously how do I answer this without telling the guy that the Shuttle never went to the Moon, it was after, and there was quite a gap after the Moon landings before the Shuttle. You think you're communicating, and we just weren't there.

But I saw us really become present in people's lives in the national conversation in a way that I had not seen throughout my entire career. That was one example maybe from the '80s, the Mike Coats one, to something in the mid-20 somethings for the Space Station and JSC. But the point is no matter how great we were, it was these little spikes of interest, and NASA was not present in a constant national conversation in the way that Jim really, his personal efforts and the skill of people like Gabe Sherman, Bettina Inclán, and other people who were really influential in that really made us present in that conversation.

He also had a couple of really skilled people. Matt [Matthew M.] Rydin was the social media expert, and other people. He engaged a filmmaker to make some of the films. My favorite quote from somebody when I started at NASA is only NASA can make space look boring. We have this tradition of these we call them talking head videos where we make a video and you have a guy in a suit standing there and talking about the mission. It may be really



interesting and exciting what they're saying, but that's only going to be so effective and engaging as an engagement tool with the public.

He had some professional filmmaker who was a little bit more skilled at making it exciting, at drawing that excitement, and building that excitement in the audience. I think what he did there was really tremendous. I will always admire him for that.

JOHNSON: Do you feel like that lesson was learned to continue at NASA and continue that type of communication and keeping us in front of the public eye? Because like you, I lived through the '60s and the '70s all the way through, and yes, it's definitely dipped. It's always been frustrating to us because we also field those questions of people that don't believe we landed on the Moon; sometimes those silly questions come to the History Office. It's frustrating because we think why can't NASA do a better job at telling people what NASA does. We do what we can with history but obviously you need someone out front there.

SAUNDERS: I think the current leadership has a little bit different focus, they're not quite as communication-focused in that same respect. That happened to be something that was just Jim's particular legacy as Administrator and his style. But they are plenty focused on communication and understanding that. But I think there was some muscle memory and some teams and expertise that was established within OCOMM that is there, and so I'm hopeful that even if we don't do the same level that Jim drove personally, I think we'll still see enhanced presence, and I think we learned a lot about how to do certain things, how to fund certain things. Certainly just having a higher funding level for OCOMM and the better engagement between the missions and OCOMM will certainly be something that enables that to continue close to the same level.

But it's not quite the same. That was his particular thing as the Administrator. It's not going to be the particular legacy or drive or focus of every single Administrator.

JOHNSON: One of the things I wanted to ask you about, and you personally, you mentioned it early on. But you've had a lot of challenges in your time at NASA, beginning with the beginning of your career, and international partners and negotiations. But I read part of an interview that you gave. You were still at JSC at the time. You were asked about your advice on how to approach a challenge. The quote was, "Figure it out. Don't spend a lot of time worrying about the challenge." You also mentioned in that article that men tend to apply for jobs they'd be qualified for once they get the job, whereas women don't. They apply for what they're already qualified for. I was thinking about your career. As you said, you went to law school. That's basically a humanities degree. But you ended up in a STEM organization. Talk about being a woman in this STEM organization with that type of background. What do you feel your background, and other similar humanities people, their backgrounds, might bring to this organization? Plus how do you feel about being a role model for other women that are trying to do that work-life balance?

SAUNDERS: What I can tell you is when I started at NASA, because of the nature of my work in the Space Station Program and my close working relationship with the Legal Office at JSC and the fact that I was a licensed attorney, not in Texas but in Florida and California, I at various times considered whether my next move should be to go to the Legal Office. I thought about that, and one of the JSC chief counsels gave me some really good advice. He said, "I got to tell you. I would love you to come work for me. But you may need to consider whether there's

some benefit to you in being the minority skill set.” It was a really good point. It’s the same argument for having diversity of teams. If everybody has the same background or expertise, you’re going to be more likely to get into groupthink. You’re going to be more likely to see the same problems, to see the same solutions. You miss that different perspective that somebody will have.

It’s not that I ever tried to solve technical problems as a nonengineer. I wasn’t trying to solve technical problems. But an awful lot of what somebody might characterize as a technical problem is very often a people problem, it’s a team problem, it’s team dynamics, it’s interpersonal skills, it’s soft skills. That’s something I jokingly call people engineering.

Especially as you get to the more senior ranks of the Agency that becomes a bigger and bigger portion of your time. Trying to figure out who requires more supervision, who requires less, who requires more support, who is focused on the right things, who is having a blind spot with either a relationship or a particular project or strategic direction whether it’s coming from the White House or Congress or what.

But a lot of that becomes more and more a part of your daily job and so at that point as you get further up in the ranks the difference in background or the nontechnical background becomes less and less of an issue.

I will say that yes, so starting out as a new person at NASA it was hard. I had challenges establishing my credibility. Actually ironically one of the toughest people I encountered was one of the Russians on their negotiation team. It was somebody who was in charge of crew training. I was the program person because I was able to take what the technical team wanted to have happen and what they wanted to enable through how the agreement was written and put that—I called myself an English-to-English translator—I could put that into how does the agreement

need to read to enable the things they want to have happen and protect against the things they're worried about, usually circling around loss of control or power balance, etc.

I would make presentations of how we wanted to do something, how we wanted the agreement to read. This guy would sit back, and he would literally look off into the distance, look out the window, look everywhere but at me the whole time I'm talking. I just kept going. I just ignored it. Finally over time he started to engage more. Part of the problem was I don't know if he knew I wasn't an engineer, I don't even think he did. But I was a woman and I was about 30 years younger than him, and to him I assumed based on how he was acting that those were terminal flaws and I was just never going to get through to him.

What was fascinating is I saw him shortly after we had signed the agreements, and he was in Houston for some meetings. I ran into him at some sort of dinner that the ISS Program was having. The second I saw him he came up and said, "Melanie," gave me a huge hug. I about fell over; I couldn't believe it. At that point I realized what I had taken as dismissiveness was just negotiating posture. He thought that's how people negotiated. Ever since then, friendly, "Oh, how are the kids, how are you?" He was a wonderful colleague after that. He had tremendous respect for me. I think in that situation I thought some of the stereotypical things about how an older Russian man might treat a younger American woman. I thought it was that. I think in the end looking back on it, I misread the situation, and I may have let some of my insecurities color what I inferred to be his motives, and it was just negotiation.

It was absolutely fascinating to me. Now that's not to say that I didn't really encounter some of those things. But I was fortunate to have a team that backed me up fully. I had Space Station Program Managers and managers in the International Office in Space Station who said, "Whatever she said goes." They backed me up, and so I was fortunate to have bosses that

backed me up. I did my homework. I never picked a fight that I didn't know had full, full support. I was careful and judicious in how I approached things, and I always looked for win-win solutions, which also helped.

But that was something I also had to get support within the Agency and within the programs. One of the things that I think I did well in that timeframe is also because I had a different perspective, NASA engineers are such can-do people, you give them a problem, they're like, "Oh, we'll solve that." They didn't ever stop and think about should I be solving this problem or should the Russians or another partner be solving this problem. If you have a problem, they will solve it. I would stop and say, "Should you be doing that, or should they be doing it?"

They would stop and they'd look at me like, "What?"

I'm like, "Is this your problem to solve?"

They'd think about it, they go, "It's not."

"Let them solve it, or let them at least try, and then you can help them if they need help."

But if you take on everybody else's problems you're not going to have time to focus on solving the ones that we really do have to solve because they really are our problems. Just by having a different perspective I was able to do that.

I also found that because of my background if the lawyers were worried about something, I could usually see what it was and figure out how to navigate around that concern. Typically a lot of the technical teams would be like, "Oh, the lawyers are going to slow us down."

I'm like, "Can you sign the agreement without them?"

They're like, "No."

If you make a bunch of progress on this agreement and they're not in there, and they come back and make you undo it, you haven't won anything, you're not making progress. That progress you think you're making on the agreement is illusory. What you need to do is bring them in early, engage them, and they will help you solve problems if you let them in early. When you bring them a fait accompli and there's some real problem there you're not going to have any choice but to back up, and that's going to irritate everybody, and it'll hurt your credibility with the international partner. A lot of things like that, I think, were very helpful that I was able to see things from a different perspective. But it's the basic argument for diversity of thought and background and perspective on any team, you get some benefits by having people who see things differently. I was that person, and I did get better opportunities within the program than I would have gotten by going to legal, which had a much more, I would say regimented grade structure. Part of the reason I never went is I kept getting promoted in the program. It was because I was able to solve problems.

In terms of people focusing on just solving a problem, Tommy [W.] Holloway, who was a Space Shuttle Program Manager and Space Station Program Manager, was known for having this saying. You solve a problem like you'd eat an elephant. You have to cut it on up into little pieces. So what I was really trying to say with that quote is when presented with something that can seem insurmountable, you can spend a lot of time thinking about it, worrying about it, when that's not actually productive time. There are times when I would be problem-solving, and I'd call it productive rumination or thinking about stuff. But I really think that it is helpful if you don't spend too much time worrying about it and dwelling on it. Start in and you will find your way along the way. That's what I was really trying to say. You can spend a month and you're

not even started, versus if you just start to try and chop it up into little pieces or start in, sometimes you'll find your way most of the time just by being active and starting the process.

In terms of the women and the men that is absolutely true, and I have found it more and more to be true the longer I've gone in my career. I've mentored a number of people. Because of being well known as a working mother of school age children I often was sought by people, women, also working mothers of school age children, who would ask my advice.

Again and again what I found is they would be saying, "Well, I'm not sure if I should apply for this." Here's what's happening. Let's say that you don't and your closest colleague same grade level, pretty much same job, you guys are right now peers, you're like this. Now if you don't apply for the job and he does, now let's say he gets it. Then he moves up, and now you haven't. Then that can happen. If you still think you need a couple years of run time, let's say that he thinks as long as I'm able to do it about a year after I get the job, I'm good, and he applies for another one. Now he's two levels up. You will never catch that person again. That person went from being a peer to probably being your future boss just because they were more aggressive. They trust that they won't get picked for the job or that they'll figure it out. You need to have the same faith of betting on and trusting your potential, and trust yourself that you will figure it out or you will find somebody to help you figure it out, or that you will grow into the job on the job.

I saw again and again they'd be like, "I'm not sure I should apply for that because it said I should have this qualification and that qualification." I'm like, "Stop." Let somebody else stop you from getting the job by not selecting you. But do ask them, "What did you think the gaps were in my experience or my resume?" Or if there's a job you really care about getting, go to that person and say, "Here's my resume, this is my experience and qualifications. If I were to

apply for this job today you would say, ‘You’re a great strong candidate except you’ve never,’ what, managed a budget, developed hardware, led a group of people. What is the gap?’ And then that should inform either a rotation or your next job so that you can become competitive. That’s another way to approach that. But other people can decide not to advance you by selecting you for something. But don’t stop yourself.

Robert Lightfoot used to say, “Run until apprehended,” and I always liked that. That’s what I decided at some point I was going to do because I would say my last several jobs I’d been like, “Really? Me?” I had the same things that other people had, which is okay, at some point they’re going to figure out I’m no way qualified for this. But I had the good sense to say, “Well, let them tell me that, or let them tell me if I’m missing something. I will try my hardest to learn fast and do the right thing. If I’m in over my head, I guess we’ll find out soon enough.” But typically what happened is I was able to grow into the responsibilities. I am blessed with the ability to be a fast learner and I try hard. But I have all the same doubts and things that everybody else has about whether I’m qualified for something or what on Earth are they thinking. But I didn’t get in my own way. That’s the main message I’m trying to send people. Somebody else can stop you but you shouldn’t stop yourself.

JOHNSON: Yes, those are good lessons because I think we all tend to do that, we tend to stop ourselves.

I just want to touch on a couple of other things. I saw the Digital Transformation Project on your resume.



SAUNDERS: That's a broader effort to make sure that we are adopting new tools and ways of doing business to stay current with industry, to stay on the cutting edge. Everything from model-based system engineering to how we use data, how we capture and manipulate data. I used to joke about every time—I worked export control for a while. Every time we did some sort of new technical database I used to—I remember there was this one. I'm like, "Well, our data is safe. I'm not worried about export control at all. I can't get to it; I am positive nobody unauthorized is going to get to it." But as a NASA executive at the time I should have been able to get to it.

We tend to have this series of custom-made stand-alone data systems, all of which cost a fortune to build. We could have gotten a lot better interoperability and even within the Agency, within Centers this is a problem, if we'd just used some off-the-shelf capabilities. But that's not the NASA tradition. It's more we want to do something. Mission control actually did that when they revamped mission control a while back and went to a much more off-the-shelf approach, more interchangeable. It makes it easier to update it. You know there's some basic structures you need, a certain number of spaces within the room to set up a console. But we went from the one-of-a-kind custom-built Apollo infrastructure to a much more commodity-based approach. I would say some of what Digital Transformation is doing is getting us to go to a little bit more of that. But it's also how to be more interoperable, how to use advanced techniques, digital twins, and other things for doing modeling and simulation and testing and design, without having to physically build everything out first. Some of it is just bringing us into the twenty-first century.

The thing is the whole world is going this way. You think about in your personal life I think probably the single most crippling thing is when the Internet is out. I experienced that this year when I was working from my home in Houston. The power went out, during the big freeze, and guess what, so did everybody's Wi-Fi. Which meant that you couldn't make a cell phone

call because everybody who was normally on Wi-Fi checking the news, doing their work, checking Facebook or whatever it is or Twitter, was suddenly on cell service. The congestion was so bad that the Internet service was practically speaking gone. I had cellular service; it was not usable.

I finally ended up going over to JSC to work because I couldn't get enough bandwidth to have Teams calls. I was stuck. It was like in the old days when the power went out. But that's something. Just the way we work and the way we run our personal lives has changed and evolved, and we need to make sure that our work tools are doing the same thing.

I think it was Dava [J.] Newman who used the great example of I wake up in the morning and I have my Alexa or whatever your choice of personal assistant tool is, I get the weather, I get the traffic, I get the morning news, some of the highlights and stuff. Then I check in on my phone, reading the paper, doing this, that, and the other thing. Then I do all this, and I come into the building and now I've got a desk phone and an executive assistant who's sitting there asking me about things. She said, "I go from being this twenty-first century operator to being somebody who could have been doing the same thing in the 1980s and the 1970s and the 1960s and the 1990s. Especially working at NASA you shouldn't have to step back in time technologically to do your work."

There are a lot of amazing things that private companies, and some of them our contractors, are doing to really promote digital transformation. We have not really gotten to that point where we have probably enough investment in it. Private companies are putting a lot more investment into this than we are. But we either need to figure that out or we're going to find ourselves using the typewriter when somebody else is using a MacBook Air. That's something that still needs to be worked on quite a bit.

There's a lot more we could do to be more interoperable, to be more efficient in how we design, simulate, test, model everything from design to testing units. Our data is still in these pockets of noninteroperable ways. This is part of also just the transformation of NASA looking at itself and operating more as one enterprise across multiple geographic locations versus being all locally optimized where there's a team and person. You should have the ability to do collaboration real-time across different sites, whether it's something 10 miles away between an off-site contractor and an on-site civil servant or contractor, or whether it's working with another Center or another international partner thousands of miles away.

JOHNSON: I want to ask about your new position as Chief Resilience Officer. Talk about what you're looking forward to in that position.

SAUNDERS: Sure. When I went back to my job after I was Acting CFO, when I went back to my job as Deputy Associate Administrator, going back to the day-to-day helping Steve run the Agency, that became, I would say, especially demanding during the transition period, because we had from January 20<sup>th</sup> till May when we got [Administrator] Bill Nelson on board and sworn in, and then Pam [Deputy Administrator Pamela A. Melroy] a couple months later. But we went through a position where we were busy doing all of that. One of the things that really started to ramp up and take more and more of my time in the fall of 2020 was getting our team vaccinated.

I spent an awful lot of time working with the Agency COVID response team. I was the leader of that team when I went back to my regular job. But Cathy Mangum kept it on until close to Thanksgiving of last year, but at that point I took it over, and that was right when vaccinations were rolling out. We were trying to figure out how to get the vaccines, who we

should vaccinate first, who we were going to get the vaccines from, whether it was the government. Had tons of meetings with OMB [Office of Management and Budget] on this topic. They were meeting with all the agencies.

It was just a tremendous amount of work. I started spending more and more of my time on that throughout the year trying to get to that end of the pandemic, which kept seeming like it was just over the horizon and then just kept spreading out more and more. I told you in the spring I thought the summer was going to be a lot more normal than it was. Then Delta [variant] flared up and that slowed everything down. But there was more and more work in terms of just the whole vaccine thing I mentioned with the previous administration.

When the new administration came on, they immediately formed a task force and had a whole bunch of requirements on how [federal] agencies should be reacting to COVID. I was absolutely fascinated to find out there were agencies who didn't have an agencywide website that all the employees and contractors could access to find out information about COVID. They didn't have an agencywide masking plan. They didn't even have mask requirements in place or requirements for social distancing or hand sanitizing even or any protocols.

It was absolutely stunning to me. We were getting questions that all agencies were getting, like when will you have a public-facing website up and running providing your employees with information on COVID protocols. We're like, "March 2020."

They're like, "Well, no, when will it be ready?"

I'm like, "We've had it since March of 2020." It was just the way NASA operates.

But I was amazed at how far ahead of some agencies NASA was, which is not surprising in terms of NASA having both a good reputation as being fairly forward-leaning, but also in keeping with our priority of the workforce safety and health that's part of the reason we've been

the best place to work in the federal government among the large agencies for almost a decade. So I guess it shouldn't have been surprising to me, but just the differential of where we were as an agency, as a team with some other teams across the federal government was kind of startling.

Over the course of the year it kept taking up more and more of my time. I would say recently with the implementation of the vaccine requirement it's become pretty much full-time job. This change of position somewhat reflects that, just adapting my job description to reality. I've been spending more and more of my time because there were a whole bunch of requirements to add more people back or lift some of the reduced occupancy restrictions due to COVID and monitoring local conditions. There's been more leadership engagement. Then when you add the vaccine requirement that was a whole other layer of just Agency leadership and work on how are we going to do this and working through the process and the plan and communication, etc.

The other thing I'm really going to focus on as a key aspect of this job is Future of Work. Now some of that ties in to COVID. But Future of Work, I've talked a little bit already about how important that is to me personally, how much I see that as something that I hope to leave behind as a legacy of my career at NASA in terms of providing employees with more say over how they do their work. I think the time is right. The technological tools are right. The national and international environment in work both inside and outside of the government is right. The administration has been tremendously supportive of this goal. Frankly it's very self-serving for all of us to be very focused on this, because if we want to remain an employer of choice, and we do, to be able to attract and retain the best talent and the people with the highest potential we have to offer what the going rate is on how you can do your work.

The entire world is much more accepting of remote work. The workplace has changed. It's changed across corporate America. If the government is very color-blind and decides we're not going to do that, we're just going to end up with a different share of the workforce. It's going to be hard to recruit and retain people. We're not going to get the same caliber of individuals because given the choice, people have been pretty clear in surveys and private research companies like Gartner [technology research and consulting company] and others have done. It's the new expectation of the American worker at least, and we need to be sensitive to that or we're going to lose people especially in some of the early and mid-career demographics, which we're always struggling to make sure that we don't lose ground there.

I think there will be an appetite for people to see people and to have the freedom to do what they want for a while, but it's not going to take very long to realize that wow, it really wasn't fun to commute if you're living in DC, especially when Metro is not totally operational. The traffic is horrendous every single day and the cost of commuting is real and expensive. Offer a transit subsidy, which helps somewhat, but people are having to basically slug, which is basically organized hitchhiking, or ride the Metro until their subsidy ran out and then slug, or sit in hours of traffic. You have to carve off more of your time to be sure you can make it to that first morning meeting, or to make it home for an event, or to pick up a child at day care, or whatever your restriction is. It's just not necessarily good use of your time.

If you work from home you can often be even more productive, work longer if that's your choice and that's your need, and still have more free time. People will remember "Gosh, it was sure nice when I got up in the morning and I just had to go sit down at my desk and grab my cup of coffee. I didn't have to pack my lunch, I didn't have to figure out what I was going to wear, I didn't have to make sure that I got an errand done on the weekend because I can't

possibly take the 15 minutes it would take me to do it from my house today.” There are a lot of things that were just extra work that people have been able to cut out during the pandemic, and while I completely understand and feel that there will be that desire for that “little bit more normal” for a while, I think it won’t take people long to go, “Wow, this is a lot more work and I’m getting less done and I’m less productive.”

It’s just you can be a lot more effective in a lot of cases working from home or wherever you want to work. My point is not that everybody has to telework by any means. It’s just that I think it’s time to recognize that employees’ preferences should play a role in this and those preferences may change over the course of their career depending on their life circumstances. But employee preferences should play into this, not just assumptions that if you’re not in here in person you’re not working. Those assumptions and those preferences, and just like I don’t think everybody should have to wear a coat and tie or a suit to work to be a respected professional person. I think that we need to stay with the times. NASA especially of all agencies and of all employers should be looking to the future and staying current on how do people work now.

That’s why Digital Transformation is important. That’s why Future of Work is important. I’ve already talked a little bit about some of the ancillary benefits of Future of Work, like things related to hidden disabilities and equity for working parents or people with caregiving responsibilities. I also would like to see Future of Work evolve not just from telework, which is on a more significant level within the immediate commuting distance of a NASA Center, but I would like to break this iron rod between what job people have and where they live. I feel like people should have more flexibility in where they choose to live their life and what work they do.

That's one thing I liked about MAP. If you're an HR person at the Armstrong Flight Research Center [Edwards, California], there's a very small pool of jobs that are available to you if you advance in your career. You have to be lucky on who's ahead of you and are they moving on at the right time when you're ready to advance. If you're under the MAP approach you might have your next job in your discipline of human resources might be supporting Glenn or Langley or Johnson or Headquarters. There's no reason you can't advance in your discipline and continue living your life. You shouldn't have to have your entire family move across country and maybe you've got a parent who's moved to that location and now you don't want to relocate them. Maybe you have disability network supporting you if you're somebody with a disability. Maybe you don't want to start over with that entire—it would have taken me five years to recover from a move with my three kids. Just to get the carpools, the network, the understanding, local knowledge of schools, sports clubs, people, how to do things. The whole “it takes a village.” It really does, and it would have taken me a good five years to really recover from a move, which is part of the reason I never did it.

But I don't think we always realize people have these ideas of well, people should move around because people in the military do it. You know what? Military pays for their move. NASA doesn't necessarily do that anymore, not necessarily can afford that. And the whole system is set up around supporting that, and they provide base housing and other resources to support people who are doing that. We are a civilian agency; we don't have those same support mechanisms in place. I find that that sort of mandate, and they had one of those at NASA at one point, which is the time I came closest to leaving the Agency, they put in place a new requirement that to become an SES [Senior Executive Services candidate] you had to have done a rotation in another Center.



Here I was, a very senior [GS-]15, really getting on to that time to move to really try and get my SES. I had newborn triplets, my mom had moved from California to Texas, I had a husband with a career here in Houston. I'm like, "Now I'm supposed to pick up and move and go do a rotation in another Center to get the promotion that I'm ready for? No way." I was so disgusted. Fortunately that didn't last very long. But I would have left the Agency over that because it was absolutely a brick ceiling put above me for no good reason other than somebody who had come from the military thought that was a good idea. I get that you want people to have a variety of experiences. But they can do that in other respects other than geographical base. I felt like I had been able to do that by working in another industry before I came to the government, by working heavily with international partners, by working heavily with Headquarters. But it was an arbitrary requirement that for me could have been a brick ceiling and I would have left. I don't want to lose people because of stuff like that.

JOHNSON: As you said NASA needs to lead that. That's part of the work we should be doing.

I appreciate your time, and I'm going to go ahead and stop the recording, but I appreciate you talking to me today.

SAUNDERS: Sure, no problem.

[End of interview]