

NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT

ORAL HISTORY TRANSCRIPT

JANINE C. BOLTON
INTERVIEWED BY JENNIFER ROSS-NAZZAL
HOUSTON, TEXAS – 21 MARCH 2019

ROSS-NAZZAL: Today is March 21st, 2019. This interview with Janine Bolton is being conducted at the Johnson Space Center for the JSC Oral History Project. The interviewer is Jennifer Ross-Nazzal, assisted by Sandra Johnson. Thanks again for coming by and agreeing to sit in the hot seat. I'm teasing.

BOLTON: Sure.

ROSS-NAZZAL: We haven't captured a lot about library services at JSC, but I wanted to start by capturing some basic history about your life. I wondered if you could give us a brief overview of your education and experience before you came here.

BOLTON: I got my undergrad at Chestnut Hill College in Philadelphia [Pennsylvania], which at the time was a small women's Catholic college. They're coed now, which I'm still not sure I'm happy about. While I was going there I was a lit major, and I was trying to figure out, "What's my career going to be?" I didn't think I'd be a writer, and I didn't plan to teach. It was like, "Okay, what am I going to do with the rest of my life?"

I had an experience with one of the librarians, when I was working on my honors thesis, and she just thoroughly impressed me. I thought, "Oh, I'll be a librarian. That's cool." Then I discovered I couldn't just graduate with a bachelor's and be a librarian, I needed a master's. I

don't think a lot of people are aware that to be considered a professional librarian requires a master's in library science [MLS], although now sometimes they call it master's in library and information sciences, MLIS. We were more basic back then.

I went straight from undergrad to my master's program, which was at the time fairly unusual. A lot of library students are returning students who have worked and then decided on a career in librarianship later in their career. I was fairly young compared to my classmates. I did become good friends with another woman in my program, Sharon Halprin. She and I ended up rooming together towards the end of the program. When we graduated she was engaged at the time to somebody who was a chemical engineer, and he had gotten a job in the Houston, Texas, area working at one of the chemical companies, so she moved to Houston, and through word of mouth found a job working as a reference librarian at JSC.

Meanwhile I graduated, and I got a temporary job at Penn State University Harrisburg campus, which was very similar to UH [University of Houston]-Clear Lake [Texas]. It was all upper division graduate students. I had a six-month temporary position there, and my plan was to stay in academic libraries. I wasn't thinking about going into special libraries. My plan was sticking with university libraries.

Since it was temporary, I was looking for another job the entire time I was working there. I went to University of Maryland [College Park] for my graduate degree.

ROSS-NAZZAL: I was going to ask you.

BOLTON: Yes, that's where I got my grad degree. That's the other thing, there aren't a lot of MLS programs across the country. When I graduated college, what was geographically closest:

Drexel University [Philadelphia] had an MLS program, University of Maryland. I think Catholic University [of America, Washington, DC] had an MLS program, University of Pittsburgh [Pennsylvania]. There weren't that many programs right close to where I grew up, which was in the Philadelphia area, Havertown. I knew if I went to Drexel I'd have to live at home, which I didn't want to do.

ROSS-NAZZAL: We all understand that.

BOLTON: I ended up at University of Maryland. The whole time I'm working at Penn State I'm looking for another job. I was coming up on the six months, and they still needed me. They were going to hire, but they hadn't done it yet. For any of you who are familiar with academia, which I like to call macadamia, it takes them forever to hire. It is quite a process.

I was extended, I think, another full six months, and in the first six months I was there I hadn't really gotten much in the way of [interviews]. I think I had done a few telephone interviews for a permanent position, but I don't think I ended up doing any in-person interviews. My time was extended, so I started applying again. Having six months of experience was extremely appealing to a lot of universities looking for an intro librarian.

I actually ended up interviewing at University of Virginia [Charlottesville], University of Pittsburgh, someplace outside of Philadelphia, I can't remember now. Oh, University of North Carolina [UNC]-Chapel Hill. This was in the fall at this point. It was October or something like that. Sharon and I were keeping up with each other. She calls me one night and she's like, "Janine, do you have any interest in working at JSC?"

It was like, “That wasn’t what I was thinking. I was thinking university.” I was like, “Well.” That was back when people had actual money and they would fly you out for interviews, which doesn’t happen anymore. I was like, “Well, it’ll get me a free trip out to see you, so sure, I’ll interview.”

I flew out there. I did all these interviews within like a three-week span. It was just one after another. I was becoming a professional interviewee at this point. When I interviewed at University of Pittsburgh, they thought I had already gotten a job. They told me I was the most relaxed candidate they’d ever seen. I’m like, “It’s only because I’m doing these twice a week.” I interviewed at JSC, and I was waiting to hear back from people. I got a job offer from University of North Carolina and I was talking to them, negotiating with them, and I was really excited about that job.

Academia versus special [libraries]—all my academic interviews were full-day interviews, eight-hour interviews. I had to give presentations to show I could do bibliographic instruction. Do they ever ask their professors to do that? Probably not, but the intro librarian being offered \$24K has to do a presentation to prove you can do instruction.

You’re doing a presentation. You’re meeting with all these different committees and groups, having lunch. It’s just a full-on affair all day. Also you’re meeting people who you will never work with. I remember at University of Virginia, they put you in a room with the law librarians. The law library is not underneath the director of libraries at University of Virginia; it’s under the head of the law school. Same with their business library, but they put you in a room with the business librarians. You’re never going to work with these people. You’re not under the same management structure. Why do you have to interview with them? It was funny,

because I did those sessions. The woman who was escorting me around, she's like, "How was that?"

I was like, "It's all right."

She's like, "We're trying to get rid of that portion, because they don't care how they treat you, because you're never going to work with them."

ROSS-NAZZAL: They're not going to see you again.

BOLTON: I came out here for my interview at JSC. I think tops maybe it was two hours, and that probably included lunch. I met only the Library staff, that's the only people that I met. I also met Bill [William A.] Larsen. I interviewed with Bill Larsen.

ROSS-NAZZAL: How was that?

BOLTON: We weren't under IRD [Information Resources Directorate] at the time. We were under Center Ops [Operations].

ROSS-NAZZAL: That's another question.

BOLTON: Yes. We were under Center Ops. Bill Larsen, I don't know what his position was at the time, I can't remember. He wasn't directly over the libraries. Donna [K.] McAllister was directly over the libraries, and I think Donna reported to Bill. At that time NASA was much more free with their thoughts about who should be hired, who should be fired, which of course

does not happen anymore. Frankly, it didn't happen much longer after I came on board. At the time, NASA was involved in the hiring process even though they should not have been. Yes. Interesting.

ROSS-NAZZAL: That is. What year was that?

BOLTON: I think it was '92, because I think I started working here officially in January of '93. I met with the staff of the Library. I met Bill Larsen. I think we had lunch. Sharon, I think, ended up having to go out of town. I don't even think Sharon was here. I think I got to see her that night, but she wasn't there for the interview process.

I'm used to these all day long, meet everybody and their brother, do a presentation. This thing was just like nothing. I was like, "Oh, wow, all right." I had done the interview. Then shortly after that I got the job offer from the University of North Carolina. I'm talking to them; I hadn't accepted it yet. I get a call that I got the job at JSC.

It was like, "All right, now what?" I decided to go with JSC. Believe it or not, they were offering more money. Not like anything that was going to make me rich, but it was more money, and I had a friend here. If I ended up at University of North Carolina, I didn't know anybody, and it wasn't like I could go home on the weekends. It didn't really matter that North Carolina was closer to Pennsylvania. It still wasn't going to get me home on a regular basis, so it was like why not go where I actually know somebody. That's why I ended up here.

ROSS-NAZZAL: That's a fascinating story.

JOHNSON: It is.

BOLTON: In the meantime, Sharon and her fiance called it kaputs. Sharon and I ended up getting an apartment together. We were both working as reference librarians in the Main Library at JSC.

Shortly after I got here, I don't know, within like two or three months, there was quite a bit of turnover. I think by the fifth month, I was the senior librarian. Sharon had become our TM. Sharon got switched over to NASA and was the Technical Monitor over the Library. She and I were sharing an apartment. That was interesting. The contractor at the time was Hernandez [Engineering]. I felt like I had a glass ceiling because I was rooming with the TM. I think they were convinced I was telling the TM things that were going on, which I was not.

Sharon and I had a year lease. At the end of the year she had met somebody new, I had met my future husband, so we had moved in with our respective people. That's how I ended up here. I ended up staying here because my husband was a Shuttle flight controller. I thought this was going to be a stepping-stone job. I thought I was going to be here for like two years. I thought I'd come in, get some experience underneath me, and move on.

Again, I think I was thinking I would end up in an academic library. Although I have to say, having spent a year at Penn State Harrisburg and then coming here, I much preferred the type of library work I was doing here over what I was doing in an academic library. I thought this was going to be a two-year thing, stepping-stone to something else. Met my husband, he was a Shuttle flight controller. You can only do that in one place, when it existed. Here I am, 26 years later.

ROSS-NAZZAL: You brought up something that I thought was interesting, and that's the fact that you were very interested in academic libraries, but you really enjoyed the type of work you were doing here. I wonder if you could talk about what sort of work you were doing, and how that differed from the type of work you were doing at Penn State and you would have done at UNC.

BOLTON: The big difference is working in a university library, you're really there for instruction. When somebody comes in and they're looking to research something, you don't do the research for them. You show them the tools that are available, you show them how to use those tools, and you send them on their way. You end up just repeating yourself a lot. They might be using different databases. Somebody getting their history degree and somebody getting an engineering degree aren't going to be using the same databases, but databases all operate the same way for the most part, so your day is very repetitive. "Here's how you do this. Here's how you do that. Good luck to you."

What I loved about here was people would come in and ask for help, and we would do the research for them. It's changed a lot from when I started. At the time that I started, the databases that existed, especially for NASA documents, were extremely difficult to use. They were all command-driven. Unless a customer wanted to learn the commands, it was not worth their time. We knew the commands; we knew how to use the database. We would do a reference interview, figure out what they needed, and then we would do the research for them, provide results for them to pick and choose from. It was always interesting because it was always changing. I eventually moved over into the Medical Library, and I really enjoyed doing the research over there, found that really fascinating.

You also know that the work that you're doing is going towards actual work. When you're helping a student, they're working on a paper. Nobody's life is probably going to be changed over their term paper. I remember I got a request one time. I think this was when we were first starting to build the Space Station. They had a solar array that would not unfurl. It was stuck on some type of wire or something like that. They needed to know what kind of metal their tool needed to be made of to be able to cut this wire. We did the research and figured it out and gave it to them. You know the work you're doing has real-world—out of this world—results, which is really cool.

I really liked the fact that we were doing the research for people. When I started in librarianship there were electronic databases. Most of them were on CD-ROM.

ROSS-NAZZAL: I was going to ask you about that.

BOLTON: Actually they might even have been disk, and then CD-ROM, and then online. There was still a lot of print indexes getting used at the time. As we've gotten further and further into the digital age, they've made the databases and tools easier and easier for the end user to use. The database system I used for NASA research when I started was called RECON. Like I said, it was command-driven.

It's been updated many many times since I've been here, and of course now you can just search it from your desktop. They've made it very user-friendly, sort of. It's actually kind of awful now. That's the interesting thing for me as a librarian. I would much rather be able to search by command. I have much more control over the searching. In their attempts to make

systems easier for the end user—when they started developing systems easier for the end user, usually the command system was still available.

ROSS-NAZZAL: Can you explain what you mean by command system? I'm not really sure what that means.

BOLTON: When you would search on subject terms you would use the word S for search. Then you would have your subject terms. I can't remember if you could use or, and, and not, or you had to use plus signs or minus signs. Then you would create sets. You would search a term. It would come back, and it would label it set one. Then you'd search something else, and it would label it set two. Then you could start combining your sets. You'd be like SS set one set two. You would be in a blank screen.

Whereas now when you're in a database there's always a keyword search box and then maybe there's some stuff on the side that's like, "choose your publication year, choose your language." There's things all over the screen for you to enter your search terms, for you to refine your search. Back then you were just looking at a blank screen, and you were typing in what fields you wanted to search.

If you wanted to search for something in the title it'd be like S and then you'd put in a word slash TI, meaning you wanted to search the title field. Each field had a different code that you would use to indicate that's the field you wanted to look in.

What's really interesting to me, a piece of NASA history, RECON was developed sometime in the '60s. I think it was probably one of the first indexing systems for documents for research. Through technology transfer, a company called DIALOG took the software behind

RECON and developed a system called DIALOG. I took an entire semester in library school on how to use DIALOG, to learn the commands. DIALOG was command-driven, because it was based on RECON.

When I started working here, because I knew DIALOG, I knew how to use RECON. It's just interesting. DIALOG was huge. When I was in library school that was the tool for librarians. Typically, because things were on disk or things were on CDs, you could only search one database at a time. With DIALOG, it was an online system, command-driven, and you could search up to 20 databases at the same time. It was a very unique tool at the time. It was a class everybody took getting their master's in library sciences in the early '90s probably through the mid '90s. It was a major library tool. It all came from NASA.

ROSS-NAZZAL: Wow. I did not know that.

BOLTON: It still exists. DIALOG still exists. It's not the powerhouse it was at one time, because again they've gotten away from the command stuff. They want to give the end user the opportunity to do their own searching. Even DIALOG has gotten away from command searching. My heart still hurts that I can't use commands in what RECON is now called, NTRS. That's the current version of it, NASA Technical Reports Server. It is not command-driven at all. There's no way for you to do it with commands.

JOHNSON: It sounds like it was DOS [disk operating systems]-based because of the command structure. Like you said, NTRS is GUI [graphical user] interface. That's what it looks like, it's the difference.

BOLTON: Probably, yes.

JOHNSON: Because the commands, that's typical with DOS.

BOLTON: Yes, a lot of the databases now, you still can do command searching, but it's hidden.

ROSS-NAZZAL: I had no idea. I've never heard of such a thing as command.

BOLTON: Yes. It's different in each one. Knowing what the different commands are for each one is a challenge. Because we've made it easier and easier for the end user, over time now we don't get people coming to the Library asking us to do research anymore. It's very rare, but when I started that was all we did. It was continuous, all the time. It was like that up until probably the end of the '90s.

It's sort of a chicken-and-the-egg thing. Our budget has been cut over time. It's like, "All right, are we getting less requests for research?" [But it's] not just budget cuts. When they moved us, when we did that whole UH-Clear Lake partnership, a lot of people thought the Library closed and there wasn't a Library anymore. So it's kind of like, "All right, are we not seeing people because they're doing their own research?" That's definitely part of it for sure. "Are we not seeing people because they don't realize that the Library is still here? Are they unaware that there's a librarian who can do research for them?" So it's definitely changed a lot over time.

ROSS-NAZZAL: Are you benchmarking against the other Field Centers to see if there are similarities? [NASA] Glenn [Research Center, Cleveland, Ohio], they have that beautiful new Library that they put all that money into.

BOLTON: Oh, it's [NASA] Goddard [Space Flight Center, Greenbelt, Maryland].

ROSS-NAZZAL: Is it Goddard?

BOLTON: Yes.

ROSS-NAZZAL: I thought Glenn also had a new Library.

BOLTON: I think Glenn does too, but Goddard's is getting a lot of kudos. That's really interesting, because frankly they were going to kind of like they did with us, get rid of the physical collection and be virtual. Goddard is a Research Center with a capital R. A lot of their scientists were extremely unhappy, but it was moving forward. They had weeded huge portions of their book collection. They had a huge book collection. Then they did an assessment of the building.

Part of the reason they wanted to do this [was] because—like they did with us—they wanted to take the Library space. They discovered part of the reason that building was built was for the Library. There were other things in Goddard's Library, but part of the reason that building was built was for the Library. The shelving in the Library was actually support for the building. You could not take the shelving out.

ROSS-NAZZAL: It's like the Library is fighting back.

BOLTON: Exactly. So they're like, "All right, well, we can't get rid of the space because we can't use it for anything else." They had done all this massive weeding. They had to bring it back even after they had deleted the records out of the catalog. They still don't have as much shelf space as they had before, because there were sections of the Library that had regular freestanding shelving that was gone. They reimaged the space, made it a collaboration space, but they still had shelving because they couldn't take it out.

They also discovered the way the floors were, that space was meant to be used as a library. You were never meant to have a whole lot of people for a long period of time. If you had set up cubicles and you had tons of people and they were there eight hours a day, the floor loads for the Library could not handle that. So again, they couldn't use it for staffing. It was meant to have tables. It was meant to have carrels where people would come in and they'd go. It wasn't meant to be used as office space. Their architecture saved them.

JOHNSON: You'd think somebody would have researched that before they started getting rid of stuff.

ROSS-NAZZAL: You would think.

BOLTON: Yes, we're very much in touch with the other libraries across the Agency. There was an organization called Unilibrary that existed among the Research Center libraries, again with a capital R, like Glenn Research Center, those groups.

I think around '98, they opened up Unilibrary to all the Center libraries, not just the research libraries. JSC at that time joined the Unilibrary group. At some point a couple years after we changed the name to NISA, which stands for the NASA Information Services Alliance. At the time that we did that we were basically told that NASA managers did not want to hear library. That was just no good. We came up with NISA, didn't have the word library in it, because that was considered archaic, it was considered physical spaces. There were all these problems associated with the term library, so we got away from that.

I've been involved in NISA since '98. We have monthly telecon ViTS [video teleconferencing services]. Once a year we get together for a face-to-face meeting. Different Centers will host it. We keep up with each other, we can benchmark, we do share statistics. We share a lot of information with each other. We have been trying for a very long time now—the libraries are kind of unusual. We don't belong to a program at NASA. Some of the libraries are in Center Ops, some are in IRD.

There is nobody at high management level that oversees all the libraries at NASA. If something is going wrong, if they want to get rid of the physical collection of the Goddard Library, there's nobody at a high Agency level who can work on our behalf when these kinds of decisions are made. When budget cuts are made to the libraries, that's something handled in house at each individual Center. There is no overarching program that is keeping an eye on that and has any concern about that.

NISA as an organization has been trying for years to get what we've called a champion, some organization that would adopt us. We finally met with success last year and Bob [Robert S.] Sherouse, who is at [NASA] Headquarters [Washington, DC] and is in [the Office of Strategic Infrastructure], he is now the program manager for the Agency libraries. They have changed our name, we're no longer NISA. I can't remember what we're called. I haven't adjusted to it. It's only been a couple months. Library is back in it again.

It was funny because there's a working group, and the working group consists of a couple of the civil servant librarians. There's not that many civil servant librarians across the Agency. It includes a couple of the civil servant librarians, and it also includes a representative from, I think, the NASA Engineering Network and the Chief Scientist's Office, which I'm really excited about. I'm really happy about [it]. These budget cut decisions get made by the library's home organization, but the home organization is frequently not a library customer. They can make these cuts without any outcry, because the customers don't know it's happening until after it's happened. Having the Chief Scientist involved in what's going on at the libraries at an Agency level, having the engineering group involved, I think is very positive. I'm hoping it turns out to be very positive. This is all very new.

Bob has been our program manager for a year. We had our face-to-face last April. We were told on the first day of the face-to-face that this had happened, this decision had been made, and Bob was at the face-to-face. None of us had ever heard of him before. We had no idea this was happening. It was interesting. He does not have a library background, but he's very willing to learn. I know he's been taking in a lot of information, and it'll be interesting to see what happens. So we're back to being a library organization.

JOHNSON: Twenty years later.

BOLTON: I forget how we got started on this conversation.

ROSS-NAZZAL: That's okay, it's all good information. Your comments spawned a whole bunch of questions for me. One being, so no library. One thing that I find that's very interesting, you mentioned of course information science at the beginning, but you're not really always referred to as a library, you're the Scientific and Technical Information Center. I wonder if you would talk about that and where the name came from and how that works with the Library. We call you the Library, because we know you as the Library, but that's not what you're referred to. You're referred to as the STIC.

BOLTON: STI Center, Scientific and Technical Information Center. When I started working here in '93, I don't know when the decision was made to start calling the Library the STI Center. I don't think it was too long before I started working in the Library. It's always been a source of confusion, because you would try answering the phone and saying, "Hi, this is Janine, STI Center."

"Oh, I was trying to reach the Library."

"Okay, yes, you've reached the Library."

People know what a library is. They don't necessarily know what the STI Center is. I think that was a management choice to use that term, so we tried. Day in, day out, we refer to ourselves as the Library.

It's also gotten very confusing because there is a Scientific and Technical Information Program. There is an STI Program with a capital P. This organization is responsible for capturing NASA's knowledge in terms of papers, technical memos, special publications. The STI Program is responsible for trying to capture publications written by NASA workers, contractors, grantees. There's a process that people go through—the DAA [document availability authorization] process—which is supposed to clear the papers for general consumption. They get put into NTRS. The STI Program was responsible for RECON. They're responsible for NTRS. They're the ones that maintain it, update it. That's where you find NASA formal series documents.

The libraries work hand in hand with the STI Program because the STI Program is taking in the information, and the libraries are the ones who are turning around and making sure customers know where they can go to get the information. You would think the libraries would fall under the STI Program, but they do not. There is an STI manager at JSC. She is also in IRD but she is in a different office. I'm in IC [mail code for Customer Engagement and Multimedia Services Office], and she's in IB [mail code for the Management Integration Office] I think. So we're not even under the same hierarchy. Yes, we're both in IRD, but we're in separate parts of IRD. Because we use the term STI Center, sometimes that gets confusing. "You're part of the STI Program?"

"No."

Here's my take on it. Here's the way I try to see it to make sense for at least me. I consider the STI Center at JSC to include all of the JSC libraries, because there's a Main Library, there's a Medical Library, and there is also an ISS Program Library. As far as I'm concerned the STI Center includes all three of those libraries, our two multimedia repositories, which is the

Still Imagery Repository and the Moving Imagery Repository, and the History Office. I'm the supervisor over all those areas. So I have decided that is what—

ROSS-NAZZAL: That's your domain.

BOLTON: Yes. That is what the STI Center is. I frequently will answer the phone and say, "Library." I don't answer the phone and say, "STI Center," but my signature on my e-mail says STI Center supervisor. I don't use it a lot. I do not use that phrase a lot. It's very confusing for people. They understand what a library is. They understand what a history office is. I'm guessing they sort of understand what a repository is, although I'm sure sometimes people are like, "What's the difference between a library and a repository?" Frankly I'm not sure I totally understand. I sort of do.

I don't know the exact history. I do think it started shortly before I started working there. I don't think it's something that's ever really taken hold.

ROSS-NAZZAL: It's just interesting to me to have that title, and I don't know if it's because NASA is so technologically focused that that's something that they thought, "Ooh, instead of library what we really need [is]," and they love acronyms.

BOLTON: Exactly.

JOHNSON: Maybe people think they can go read novels or something in there.

BOLTON: Yes.

ROSS-NAZZAL: You also mentioned something that I was thinking about earlier. JSC is an Ops Center. You mentioned all the Research Centers that banded together and then allowed you to come in a little bit later. Are there differences in terms of the libraries as a result?

BOLTON: My feeling is, generally speaking, the research libraries are better funded than the libraries at the Operational Centers. Now I say that with an asterisk. Some are better funded than others. But generally speaking the Research Centers, their libraries tend to get more funding than the Operational Centers, which I find aggravating to a certain degree. There's a lot of research that goes on here. No, we are not considered a Research Center with capital R. But when you look at Space and Life [Sciences]—well, they were Space and Life Sciences when I was over there forever. I forget what they're called now, but anyway SA [current mail code for Human Health and Performance Directorate]. There is a ton of research going on at SA, and it's real peer-reviewed grant-moneyed research. They are the ones who are responsible for the health of the astronaut corps. They're almost like academia, publish or perish kind of thing, bringing in grant money, writing articles.

We have an Engineering Directorate, and they're doing research too. They have to figure out how to get these people into space. We may not have research in the name of our institution, but we certainly do research. I think [NASA] Kennedy [Space Center, Florida, KSC] fares even worse than JSC does in terms of funding and being seen as an Operational Center and not a Research Center.

ROSS-NAZZAL: Before we turned on the recorder you said that you were a supervisor at the Medical Library in '98. So you worked your way up pretty quickly.

BOLTON: Yes, I started in '93. I was over in the Main Library for a year, maybe two. I became the medical librarian, and I was over in the Medical Library again for like a year, something like that. They pulled me back over to the Main Library maybe around '96. Actually this was towards the end of a contract. I don't know if it was the Hernandez contract. It must have been the Hernandez contract.

They pulled me back over. They basically put me over technical services, and Sylvia Hu over the public services. Public services is research and reference. Technical services is cataloging, interlibrary loan. She and I were joint co-supervisors for a very short period of time, a couple months, not very long. When I came on board in '93 Sylvia was out on maternity leave, and she decided she didn't want to come back, so she left.

Eight months later—that's why at four months I was a senior librarian, because Sylvia had resigned. Then Sharon was moved up to TM. This other woman Carol Hoover, who was a reference librarian, got moved over to EDCC [Engineering Drawing Control Center] or someplace else. The next thing you know, I was the senior librarian. I was like, "Oh my God." I was so ignorant of NASA when I came here. It's embarrassing how ignorant I was.

ROSS-NAZZAL: I think everybody in a humanities background [was].

BOLTON: Here I was the senior librarian. Fortunately, Sylvia came back. Thank God. Sylvia came back like eight months after she left, so she was over in the Main Library, and I ended up

going over to the Medical Library. Then we were both back and both jointly overseeing towards the end of the contract. When the contract transitioned to another company, that company decided, rightly, that the Library should only have one supervisor. Sylvia was the right person for that.

Sylvia was supervisor, and a year after she became supervisor, if I remember correctly, she wanted them to guarantee her that she would be retained as supervisor through the next contract transition or something like that. Something you can never guarantee. She wasn't satisfied with that and so she left and took a job with—what was the big company in Houston that Dick Cheney was—

ROSS-NAZZAL: Halliburton?

BOLTON: I think she went to work for Halliburton. I think she was one of the last people out the door because she did records management for them. It was either Halliburton or what was the big financial company that went down the tubes that we had a stadium named after?

JOHNSON: Enron.

BOLTON: I think it was Enron. She was one of the last people out the door. She decided to leave, and here I am. I'm thinking, "Oh, they're going to come to me." I didn't want to be supervisor. My husband and I had been married for a couple years at this point. We were ready to start a family. This was not on my radar. Sure enough, Mike Smith came and wanted me to

be supervisor. I really didn't want to do it. But I knew that if I didn't do it, we would have to hire somebody from outside and I would be training them.

It's like, "Well, at this point let me just do the job." We went through a period where there was a lot of turnover, and again I was the senior librarian. There wasn't anybody there with as much experience. I had been there four, five years at this point, and all the other librarians were fairly new. I took the job as supervisor while I'm trying to get pregnant, thinking, "Well, it could take a long time. It does sometimes."

No. I think I became supervisor in February, and in March I was pregnant. I went along and the whole time thinking to myself, "I am not going to want to do this once I have a child. I still most likely want to work, but I'm just not sure if being supervisor is what I want."

I let management know at some point during the pregnancy that this was my plan. We had two women working in the Library at the time who at that point, with a couple more months, had enough history that they could probably take over at the end of my pregnancy. Mike chose one of them, Jane Hultberg, to be supervisor after I went out on maternity leave.

Part of the reason I didn't want to become supervisor was I wanted to go back to the Medical Library. I loved the Medical Library. At that point the Main Library was transitioning away from you doing the research for people, but the Medical Library, you were still doing the research for people. It was cool stuff, and I wanted to get back there.

I had a master plan. No. It just worked out that when I was pregnant, I went out on maternity leave. At the time the Medical Library, the librarian position was a part-time position. The woman working there, she worked part-time in the Medical Library and the other half in the Main Library, so she split her time between the two. It was perfect after I came back from maternity leave. I also didn't want to work full-time. I became the medical librarian and Jan

was able to be full-time over in the Main Library, which let's face it, it's much easier to be in one place. She went over to the Main Library. I became the medical librarian. I think I was working 30 hours a week, so it wasn't straight-up 20-hour-per-week, but it was perfect as a new mother. I was there. I was at the Medical Library for 15 years and very happy.

Then around that time the supervisor for the STI Center, she moved on to another job. I still didn't want to be supervisor. She even asked me. She was like, "Janine, would you do this?"

I'm like, "No, I don't want to do it."

Part of the reason I was saying no was frankly I was looking for another job. Between the furlough that happened several years ago and also budget cuts in the Medical Library, I was unhappy. My husband and I both worked at NASA, all our eggs were in one basket, and that furlough that went for a whole two and a half weeks, it was just kind of—

JOHNSON: It was long.

BOLTON: Yes, exactly. I was just thinking, "I don't like this. This is not comfortable." For the first time since I had started working there, I looked for another job. I did my resume, was sending it out, doing interviews. I felt really confident about a particular job, so I kept saying, "No, I don't want to be supervisor," because I was really hoping this other job would come through.

The other job didn't come through. Christa [George] was about to leave. I think it was her final two weeks or something when I got notification that I didn't get this other job. It was like, "Here I am in this situation. Christa is about to be gone. We're going to have to hire

somebody from outside. Who's going to have to train them? I'm going to have to train them." I was just like, "All right, here we go again." I agreed to be the supervisor.

Both times, it was with great reluctance. Didn't stick the first time, which I was okay with, which was my choice. Even at the time Mike Smith offered to allow me to continue to be supervisor part-time, and I was just like, "I can't do that, that's not fair. I can't have all these people working full-time, and here I am just coming in and out whenever the heck I feel like it. That's not right." I did have the opportunity to stay on as supervisor back in '98, but I just didn't feel like that was the right thing to do. So 2015 is when I became supervisor for the second time, reluctantly, and here I am four years later. I'm surprised, because I continued to look for a job, in all honesty.

I gave it up for a while, because I wouldn't have felt right if I had gotten a job. I had said I would do this, and I wouldn't have felt right. But I thought I need to at least keep my foot wet. When you haven't interviewed for a job in like 20 years it's really nerve-racking. It was like, "I need to stay on top of this just for my own career, my own personal growth." But I haven't interviewed. I haven't sent out a resume in a very long time. I think I'm here till the end.

ROSS-NAZZAL: I think we're all sort of here till the end. I feel like I'm hanging on like that little kitty cat poster.

JOHNSON: Hanging on like the cat.

ROSS-NAZZAL: Yes, exactly.

BOLTON: There's a lot of great things about working here, and those things are more important to me than other things. There's a lot of flexibility in the schedule, which I really appreciate. My husband, he works out here. It's an easy commute. He spends a lot of time going to KSC. I can go with him sometimes, because I can telecommute. It's not something I can do all the time but it's certainly something I can do sometimes. They allow for it.

It's NASA, and, well, people think it's cool. Sometimes you remember it's cool. It has its moments.

JOHNSON: It does.

ROSS-NAZZAL: It does. I usually think about that when I have visitors or when the tram comes by and everybody's waving at me, and they're so excited. This is really cool to be here.

JOHNSON: Think about the people you've actually met. It's amazing.

ROSS-NAZZAL: Yes, there's a lot. It is.

BOLTON: I was teaching my son to drive, and I thought well, bring him out here on a weekend.

ROSS-NAZZAL: Oh, that's a great idea.

BOLTON: It was perfect, because you've got regular streets. You've got stop signs. You've got streetlights, but there's nobody here. It's a very safe environment. I brought him out here a

couple times when he was learning how to drive. The trams of course are still going. He's like, "What's it like to work someplace where people visit?" It's cool sometimes.

ROSS-NAZZAL: It is cool when you think about it. I've had so many people tell me that they want my job. I'm like, "Well, I'm not giving it up."

JOHNSON: There's one. No.

ROSS-NAZZAL: Exactly, better come up with a new job.

BOLTON: New career plan.

ROSS-NAZZAL: Exactly, I'll let you know when I'm done.

JOHNSON: When I'm through you can have it.

ROSS-NAZZAL: We've hardly hit on any of the topics, but I did want to ask you one question. Then I guess we'll meet with John [Uri]. That's becoming a medical librarian, because that is such a very specific career. Were you reading medical journals, or did you just pick it up the way you picked up NASA things around here?

BOLTON: Yes, I technically don't have a medical background. My mother is nurse, but that's like saying I slept in a Holiday Inn last night. That doesn't mean I really know anything. I did

work in a hospital when I was in college. I was what they called at the time a unit clerk, which was basically the secretary for a floor.

Of course clinical medical hospital settings can be very different than a research setting. I'd like to say I was familiar with some of the terminology, and some of that is kind of true. I know oncology is cancer. But yes, I pretty much just picked it up on the job. I found it interesting, which always helps, not having any kind of science or engineering background.

What's important for me as a librarian is that I understand the databases that are appropriate for the subject. That I knew from my schooling, from working, how a database works. Most databases, they may work differently, but you know what they're capable of. I know I can search by title. Let me figure out how to do it in this one. It might be different than in another one. Or wildcards, okay, this one is a question mark, sometimes it's an asterisk. But you know you can truncate. It's just a matter of going into the help and figuring out what symbol you're going to use to truncate. I know how to search a database. I know what databases to search. I know how to conduct a reference interview.

What I've always found helpful, especially for areas that I'm finding difficult finding information in, is if I can find anything and give it to the customer and be like, "Is there something in here that stands out that's like, 'That's exactly what I need'?" Because I can take that and look at the subject headings and change my search based on it. If I can find them just one thing that works that helps me expand.

It's funny. You do start to learn the terminology. Someone will come to me and want to know how vision is affected in weightlessness. They don't realize how many different terms there are for weightless and not just terms. You would use weightlessness. You would use

microgravity. You would use Space Shuttle, because the Space Shuttle happens in weightlessness.

They understand what they need, and sure, they can do a Google search or something like that, but they're probably going to find a very [small number of publications]. They may not realize that maybe instead of weightlessness they really should be using microgravity or vice versa, depending on which system you're searching.

You learn these things on the job. No medical background. Haven't studied up on it. Just pick it up. If I'm having trouble finding anything I can say to the customer, "Look, do you have a paper on this topic that's really what you're looking for?" Again, I can take that. I can look at the subject headings. I can look at all the fields and figure out how to try and get the search going.

ROSS-NAZZAL: Do you want to ask Janine a question? We've got about five minutes.

JOHNSON: Yes. One thing, it's a quick answer probably. Do you know if the other libraries at the other NASA Centers or librarians or managers, however you want to think of yourself, do they have archives or the repositories and like you have us, and then the different repositories and the multiple libraries? Do they have that kind of situation too? Or is this something that JSC is kind of unique in?

BOLTON: I think JSC is pretty unique that way. I do think at Glenn there's something associated with the Library. It's the Education Center or something like that, I think, but I don't know if the manager is over that. We all do wear a lot of hats generally speaking.

I do know some of the other Centers have more than one library. But I don't think there's many of them. [NASA] Ames [Research Center, Moffett Field, California] has a Life Sciences Library. KSC used to have a Medical Library in addition to their Main Library but they don't have it anymore. I don't know when that went away.

I think I'm the only one that's involved in multimedia. As a matter of fact, I'm pretty sure I'm the only one who's involved in multimedia. Now I think at Goddard the Archives is under the library manager. Here it is not. The Archives is separate. There is some odd structuring at the different Centers. I think I'm the only supervisor that has as many organizations.

JOHNSON: It is different. The other thing, the Library or what you work with, how does it work with groups like under SMA [Safety and Mission Assurance] now? They are collecting all the knowledge. They're putting everything into Goldfire. Do you have a relationship with them when they're doing that? I'm sure there's other areas, like everybody here seems like they want to collect their own stuff and they want to keep it, so that they decide on what database type interface they want. Do you have access to all of those so that you can help with that? Or how is that relationship?

BOLTON: We used to have a better relationship with the Knowledge Management group because at one time the taxonomist was also under the STI Center supervisor. When the taxonomist was part of the Library, I think we were more connected to the Knowledge Management group, all the Goldfire stuff.

Based on that previous relationship I know people in Knowledge Management like David Meza. I haven't seen anything lately. Any time I would see something going on I would try to be involved. David has come to me in the past. When the Goldfire reps came before they agreed to license with them, David involved me in that.

We're not as connected with them. It would probably be better if we were more connected with them, but I think it's hard because we're in separate organizations. I think we both respect each other's areas and have interest in each other's areas—[it's an] out of sight out of mind sort of situation. I don't think there's anything intentional there. Yes, that's always a relationship that I would like to better develop. But I'm one person, and I've got a lot of areas I'm responsible for.

We were part of a telecon yesterday, the NISA group, with some database system that basically—the Knowledge Management, they're kind of interested in numerical data capture. This system is more about capturing the research, the paper research. It's a system. I don't remember what it was called. The Glenn librarians work with it, use it. The Glenn librarians have a really interesting relationship with the small business, the SBIR [Small Business Innovation Research], the business outreach group at Glenn. They work very closely with them trying to help them find industry that would benefit from Glenn products and also industries that could potentially help partner with Glenn for products. They're using this tool a lot with that, because it helps you see relationships, and what universities, what industries are working on. I don't know, 737s not exploding. The libraries just found out about it yesterday.

This company is obviously talking to a lot of organizations at NASA, because NASA is getting at this point where innovation, partnering with outside universities and industries is very important. This is the kind of tool that would help lead NASA as an organization figure out who

is being innovative, who they should be working with, who's working on the same kind of stuff that we're working on, and how can we work with them.

I wish I could remember the name of the product, but it was a knowledge management, knowledge capture: analyzing, figuring out who to work with. I thought of David when I was listening to this. I was like, "I wonder if he'd be interested in this." Yes, he does cross my mind and there are times when I'm thinking, "Oh, he might find this interesting." I hope he thinks the same thing. In the past he has contacted me when he thought something would be useful.

JOHNSON: It just seems like everybody has their own little territory.

BOLTON: We call them silos. Everybody's got their own silo.

JOHNSON: If everything could be connected, it would just make so much more sense.

BOLTON: For decades every once in a while we will hear from down on high that they want a database that would give them everything that NASA has.

ROSS-NAZZAL: The easy button.

BOLTON: Yes. Exactly.

JOHNSON: Good luck with that.

BOLTON: Yes, we've been through this process many many times where we've tried to do this. Everybody has their silos, and it's really hard to break it down. Some of these systems we have control over, other systems we don't have control over. Then you get inundated. It's like, "Okay, well, you got everything now. Now what are you going to do? Because it's way too much." Corporate knowledge, the longer you're here, the more aware you are of people's different silos. You can't get away from the importance of corporate knowledge because so long as those silos exist, you need to have people who know where they are, who knows who's responsible for them, who can help you access them.

ROSS-NAZZAL: Yes, that's very true. We should probably end because I hear John scratching around there. Thank you. I will send you a note and we'll have more time.

BOLTON: Okay.

[End of interview]