

**NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT
EDITED ORAL HISTORY TRANSCRIPT 2**

JANINE C. BOLTON
INTERVIEWED BY JENNIFER ROSS-NAZZAL
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ROSS-NAZZAL: Today is April 12th, 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. Thanks again for coming by this morning. I appreciate it.

BOLTON: Happy to do it.

ROSS-NAZZAL: I wanted to start today, because as you were leaving last week, you talked about UHCL [University of Houston-Clear Lake]. I thought that might be a good place for us to start, talking about the decision to move the books and the journals over to UHCL, to have that partnership. I think there was even interlibrary loan for a while.

BOLTON: That's right. Yes. I should have looked at my notes a little bit. It was probably about 10 years ago, maybe longer. With every new NASA Administrator, they come in with an idea of how to reorganize, streamline [NASA with] their ideas on that. Frequently that will result in an exercise with a framework for each of the Center administrators and management to go through and address and figure out how they could potentially make what the NASA Administrator is suggesting happen.

Sometime in the early 2000s some plan came down the pike from up high to try and streamline different areas. One of the things suggested in this plan was partnering NASA

libraries with university libraries. They weren't saying you had to do it, but they were saying, "Hey, let's look at this. Is there any benefit to this? What can we get out of this?" I think JSC was the only one that went, "Hey, that's a great idea." None of the other Centers.

Frankly, I think JSC was specifically called out. I can't remember. I might have the information. I could go back and look. JSC investigated that idea, and somebody decided it was a good idea. We should do this.

They also for many many years had been eyeing the Library's space [in Building 45]. At that time, space across the Center was an issue. They're looking at all these bookcases and books and thinking, "Hey, if we put cubicles in here, we could get 40 people in here." I think, in my mind, what it really came down to was they wanted the space. And everything's online anyway, right? So who needs it?

At that time, again the early 2000s, while that was fairly true for journals, especially current journals, it was not true of books. Electronic books were starting to come out, but this was early on. I think another major problem was managers seemed to think if it's electronic it's cheaper, or it's free, or I don't know what. When in fact, it frequently is more. The reason it is more from a publisher's standpoint is—especially where journals are concerned—with journal collections, the old way, having print [copies], you had one copy in the library, and only one person could use it at a time. When journals started becoming electronic, that one copy was available to everybody working or every student. All of a sudden it was like you had 12,000 copies of a journal, not 1, and they charged accordingly. Not 12,000, but the price went up exponentially for electronic versus print. I think people not in the library world didn't understand this.

The books were a little bit different. A lot of times with electronic books they were one for one. A library could have an electronic book, but they could only check it out to one person at a time. It worked more like a physical book. We have gotten away from that a little bit. There are some, in particular reference books, where it's sort of like a journal and multiple people can access it at the same time. Usually with those types of books people are just looking at certain things. They're not wanting to check out and read it from cover to cover.

There was misconception at the time that we can get rid of all these books because surely they were all online. What do we need the physical books for? Well, a lot of the physical books at the time were not online, were not available electronically. They certainly weren't giving us a budget to replace the books that we were getting rid of with electronic books. There was no change in our budget. As a matter of fact, I think our budget was cut.

We were told this was happening. The Library staff was told, "This is happening." We weren't consulted about it. We were told it was happening. We tried to fight it. It fell on deaf ears. At the time the supervisor was Jane Hultberg. Jane Hultberg felt so strongly that this was a mistake that she actually wrote a letter to the Center Director and delivered it to his administrator in person. I'm not sure he ever saw it. At the time we had an interim director.

ROSS-NAZZAL: Was that Roy [S.] Estess?

BOLTON: I don't remember. Was there a [Michael L.] Coats?

ROSS-NAZZAL: Mike Coats came in 2005 and before him was "Beak" [Jefferson Davis] Howell. I'm wondering. Was it Howell?

BOLTON: I think Howell. Was he interim?

ROSS-NAZZAL: No, it was Roy Estess because he came over from Stennis [Space Center, Mississippi].

BOLTON: We had somebody who was an interim director, and he was about to leave. I think they had named the permanent replacement. I think he made the decision that he didn't want to make a decision on this. I sort of get where he's coming [from]. I get the idea. It's like, "Well, this should be the incoming person's choice to deal with." I'm never sure it ever got beyond the interim Director. Again, Jane felt so strongly about this, she found another job and resigned. There were many things that we thought were an issue.

At the time UH-Clear Lake, I'm not sure they had any engineering program. They certainly did not have an aerospace engineering program. Why would you want to partner with a university not offering an aerospace engineering degree program? Why would they care about the books that we had to donate? Certainly there were generic science tech books, but obviously we were an aerospace engineering library.

They weren't interested in the collection initially. They said no. They turned it down initially. Then JSC offered them money to take it, and it happened.

ROSS-NAZZAL: Ooh.

BOLTON: Yes.

ROSS-NAZZAL: How much money?

BOLTON: That I couldn't tell you. I wasn't supervisor at the time, and I was in the Medical Library at the time. This was not really affecting the Medical Library. The Medical Library was not part of this.

The Main Library basically was going to pay UHCL to take their print collection. Interlibrary loan services got wrapped up into that and they were going to take over ILL services for customers of the Main Library, which again we thought was a really bad idea. Part of the reason we thought it was a bad idea was—and I think this is probably still true—customers would come to us with a list of items that they needed. Frequently it was a mix of things: government documents, journal articles, conference papers, etc.

By giving them the ILL portion, customers don't know. "Oh, well, we have the government documents"—because we retained our government document collection—but it was the book collection and the print journals that went to UHCL. We'd have to go through the list and be like, "Okay, well, we can get you this, this, and this, but you need to go to UHCL for these things." It used to be a one-stop shop. Now it was getting broken up.

We just felt it was confusing for the customer. We didn't understand. They didn't have an engineering program so they had no vested interest in the collection or keeping up with the collection. As books became outdated, they didn't have any reason to purchase newer editions. Why would they? It's not something that their students would use because they didn't have that kind of a program. It basically became a dead collection in their collection. It was integrated into their collection. It wasn't like there was a separate section that was the JSC books. It all got

integrated into their catalog, into their standing collection. They had the option, I think, of choosing which books they were and weren't going to take, and I think they only wanted single copies of things. I'm pretty sure we went through and did a massive weeding, and if we had multiple copies of something I think we reduced it down to one, because they weren't going to take multiple copies. There was an agreement worked out about what books they would take.

The JSC community was not happy about it. I remember going to an all-hands meeting—and I don't remember if it was a general IRD [Information Resources Directorate] all-hands meeting, but I think it was specifically about what was going on in the Library. People were finding out. The Library staff were telling people what was going to happen. We were not good.

I should have started with this. Take everything I'm saying with a grain of salt. I will tell you straight up right now I thought it was a horrible idea then, and I have not changed my mind, so I obviously have a bias. I'll just make it clear right now, if it hasn't already become clear. I think we were pretty clear with the patrons that we were not happy about the decision, that we had no part of the decision. There was this IRD all-hands, and I think it was about the Library move. People were pissed.

One of the union reps was there and said she was taking it to the union. There were a lot of very unhappy people, but they persisted. They, the decision makers, decided this was happening, and it was happening. "We don't care," generally. I couldn't tell you who the decision makers were. It happened, and it caused a lot of confusion.

A lot of people thought the Library was closing. We weren't closed. We still had the document collection to maintain. We still continued to provide reference and research. We were

still the first stop on figuring out if people needed to go to UH-Clear Lake for something or if it was something that we still had.

That was the other thing too. Again some misconceptions—they wanted us to become virtual. That was their saving grace. “We don’t need the physical collection; you’re going to be virtual.” But like I said, they didn’t increase our budget. As a matter of fact, I think they decreased it to give it to UHCL. They wanted everybody to be able to do their library research from their desktop, which I get. We did have electronic resources at the time, which we continue to have, but it wasn’t a massive amount of electronic resources. It wasn’t a huge budget.

I think they were under the impression that this partnership with UH-Clear Lake would allow employees to have access to UHCL’s e-resources, which they could, if they physically went to UHCL. They couldn’t do it from their desktop. There are licensing agreements. We are not part of University of Houston-Clear Lake. We are not considered students; we are not considered faculty. The only way we can access their electronic resources is to physically go [there]. That ruins your opportunity to do your library work from your desktop. Not only do you no longer have the convenience of a Library maybe the equivalent of a few blocks away. You now actually have to get in your car and drive somewhere.

In my opinion, University of Houston is a public institution, which means it’s a public library. We were paying for them to take our collection. We continued to pay them annually to maintain the partnership, so our customers would have access to a public library, which you don’t have to pay anything for. Anybody can walk into the University of Houston-Clear Lake and use their library resources. Anybody can check out books there. There’s a TexShare Card that you can get that allows you to check out books at any public library across the state.

University of Houston-Clear Lake is a public library. We were paying them for access to a public library. That is why I have always had a major problem with this.

The partnership continued for a couple of years. The money that we were giving them did go towards, I think, paying a librarian there. It was through, I think, a memorandum of understanding. I think there was an MOU in place for this partnership. Either that or it was a Space Act agreement, I'm not sure which.

I think the initial one was maybe for five years or something like that. We went through the full number of years. I think we added on like two years. At a certain point our budget was being cut. It was like why are we paying them for something that's not really getting us anything, so eventually it expired and we did not renew. Interlibrary loan services came back to the Center, so that was that.

Now a lot of people ask did we get the books back. No, we didn't get the books back. Frankly, I'm not sure we would have wanted them, because at this point they were 7 to 10 years older than when UHCL got them, so they probably all had new editions, and because the collection had been incorporated into their collection, not kept separately, that would have been a major undertaking to try and get them back. There was never any talk of that. Nobody among the staff had any expectation that that would happen. We would get asked by customers, but that just wouldn't have made sense.

As I mentioned at the beginning, this did not affect the Medical Library. The Medical Library's budget, the staffing and the collection, was paid for by Health and Human Performance Directorate, so we continued to operate as we had always operated. It was not affected by the partnership. The Space Station Program Library was also not affected, because that's really more a document repository than it is an actual library, so none of their collection was

considered part of it because it was all government documents. It didn't really affect them or their services. Interlibrary loan has always been provided by the Main Library to end users of the Space Station Library, so I guess you could say interlibrary loan was affected.

I think there was some sort of confusion. The Medical Library also had a partnership with the Texas Medical Center Library in downtown Houston. When that partnership started, it was back in the early '90s, late '80s maybe, when we started that. Of course nothing was really electronic at that point, so basically we would do what we called the courier run. A member of the Library staff would go to the TMC Library every Thursday morning, photocopy articles and check out books for people in the medical sciences group.

This continued for years. Even when things started becoming available electronically, because it was a slow transition that happened over time, we continued to do the courier run every week. We did pay a fee to TMC to be a partner library. They had these partnerships with several medical libraries in the area, so it was not a unique situation for them. It's interesting, because when things started becoming electronic we had access to their electronic collections. That was part of the fee that we paid. I was considered an adjunct faculty member at TMC, so that I could have access to the collection.

ROSS-NAZZAL: Oh, that's how you could do it.

BOLTON: It was limited to the Library staff, so none of our customers could directly access the electronic collections at TMC. But the Library staff could. Basically the physical courier run transitioned to a virtual courier run where we were just accessing their information directly from our desktops. It never became something available to our customers.

When we started this UH-Clear Lake partnership, I brought up the kind of partnership we had with TMC to see if at least the Library staff could access their electronic resources. Again, this was not something they had ever done before. They weren't experienced with it; they didn't feel comfortable with it. They felt like it would affect their license agreements with their publishers, and it very well could have. It was something that was never pursued. As I said before, customers couldn't access UH-Clear Lake's electronic resources from their desktop, and the Library staff also could not do it, whereas we had this other existing partnership through TMC where we could. It lasted for a while, and I think we paid about \$14,000 a year to have access to about a \$3 million collection. It was pretty good; it was a sweet deal.

ROSS-NAZZAL: Yes, that's great, nice.

BOLTON: It went on for a long time and then I think around, I don't know, sometime probably around 2005, the publishers, the licensors, got wise with TMC. They basically didn't allow for the type of thing that we were doing anymore. Well, no, we would continue to have access to some of their collection. When you look to see what you would still have access to, they were all freely available journals, so really it was nothing.

I immediately, as the medical librarian, as the lead for that area, recommended we stop the annual fee. If it was only going to give me access to things I could get for free, what was the point? The only thing we were getting from them out of that partnership was access to peer-reviewed behind-the-firewall electronic journals, and when that became no longer available I didn't see a point in continuing, so we did stop our partnership with them.

At that point, like I said, we had stopped driving there years ago. We had started using interlibrary loan in the Medical Library. Most libraries use a system called OCLC to do interlibrary loans. There's also another utility called DOCLINE that is like the OCLC version of interlibrary loan for medical libraries. It's maintained by the National Library of Medicine [Bethesda, Maryland], and it's a system for medical libraries. When I say medical libraries, I mean all types: hospital libraries, university libraries, special libraries, to do interlibrary loans with each other. One of the other things that's included is the National Library of Medicine. You can request articles from NLM through PubMed, and if you are a federal library they're free. They're extremely responsive. You would order something on PubMed and if it got routed to NLM you usually had it maybe the same day, usually the next day. They were very efficient, and they were free to us. At this point we were using PubMed and when that change happened with TMC, we didn't really see a point. It was so easy to get things through PubMed for free, quickly, that we didn't see the point in continuing the partnership with TMC once we lost access to the majority of their collection. It was nice when we had it because we had immediate access, and it was less work for us.

That's what was going on with the other libraries during this UH-Clear Lake partnership. It came to an end. It was very unfortunate for the libraries. A lot of people were confused about the situation, confused about what it meant, thought it meant the Library was closing. I think we lost a lot of customers through that transition and a lot of potential customers. Maybe more than current customers, but potential customers, because people didn't think we had a Library on site.

There was such an uproar over it, because the Library staff had a bad attitude about it. We were basically told by our NASA management that we were not allowed to talk about it to any of our customers. There was like a gag order.

ROSS-NAZZAL: You couldn't tell anybody you were moving?

BOLTON: Yes, which again contributed to misinformation, misunderstanding. I will take ownership on behalf of staff for part of that, because if we'd had a better attitude about it the transition might have gone better and we might not have been in such a situation where people misunderstood so much about it. I would say for future people out there—if a decision like this has been made, you fight the fight with the management, and they still decide they're moving forward, it is best for you to buck up and take the hit and maybe not be positive about it but not be negative about it with customers. Be factual and explain what's happening and be neutral I guess is the word. Be neutral about what's happening and be factual and just give people the information that they need so that they're aware of what is happening and what is still available to them.

ROSS-NAZZAL: It must have been hard. There were a lot of people working at that Library. Did you see a decrease in staffing levels as a result too?

BOLTON: Yes. I'm trying to remember if anybody was actually laid off, or it was more an attrition situation. The Library staff has definitely been reduced over the years. When I was supervisor in 1998, there were three libraries: the Medical Library, Space Station Library, and the Main Library. There were 18 people working for me. Here we are, it's 2019, I'm the supervisor over these three libraries, two repositories, and the History Office. I have 18 people. I will tell you the majority of them are not in the Library.

ROSS-NAZZAL: Right.

BOLTON: No. As far as Library staff is concerned, there's two people in the Space Station Library. There's one and a half people in the Main Library, if you don't include me as supervisor, but I do support the Main Library. I am the only librarian in the Main Library, so one and a half people there, and the equivalent of one person in the Medical Library so four and a half people. It went from 18 people to 4.5 people between 1998 and 2019.

ROSS-NAZZAL: Ouch.

BOLTON: Yes. There have definitely been layoffs. How many layoffs actually happened during that transition period, that I'm unsure of. But there have definitely been layoffs over the years. Attrition where areas didn't get backfilled.

When I started working here there were three full-time librarians in the Main Library, and now I am the only librarian in the Library. I am the supervisor over six areas, and I don't really have time to do library work.

ROSS-NAZZAL: Yes. You're in meetings and doing other supervisor things.

BOLTON: Yes. After I became supervisor four years ago we had a cut, and I had to lay off our remaining [librarian]. Actually I think it was an attrition thing, someone had left, and I couldn't backfill the position. That was really hard for me. We had a Library without a librarian. I

remember too when the books got moved to UH-Clear Lake—and I was the medical librarian at the time—I had come over to Building 45. I think all the bookshelves had been removed, but they hadn't set up the cubicles yet. Maybe the bookshelves were still standing, but the books were all gone, and I remember standing there—I wanted to cry. “I cannot believe that this has happened.” Just awful. You can take all that I've stated with a grain of salt. It was not a decision that any of us were happy with, and frankly in my opinion it failed.

ROSS-NAZZAL: Did you alert the ALA [American Library Association] or any advocacy groups about what was happening?

BOLTON: No. Again, this goes back to what I mentioned the last time we talked. Our NISA [NASA Information Services Alliance] group, our Agency librarian group, we were keeping them informed of what was going on. But they had no power either. The libraries at the Agency were not part of a program. We had nobody who could stand up at an Agency high level and say, “This is not a good idea.” I remember to a certain extent being frustrated with the NISA group because I kept thinking to myself, “If they do it to us, they are going to do it to you. You just wait.”

ROSS-NAZZAL: It's contagion.

BOLTON: They're going to say, “This worked; it saved them money.” I'm using quotes here, air quotes, which frankly I don't think it did. Maybe it did eventually, at the end of the partnership. That's I think when they started saving the money because like I said I think they cut the Main

Library budget to give the money to UH-Clear Lake. I remember too I heard from—maybe it was one of the library supervisors at the time when they were talking to UH-Clear Lake about ending the partnership. They said something about, “Well, we’re going to have to lay off people.”

We’re like, “Well, I’m so sorry. We’ve already done that.” You know what I mean? I can’t really have sympathy for you because this basically ruined us. I’m really having a hard time dredging up sympathy at you possibly having to lay off people because we’ve been giving you money for the past couple years for no reason. Good Lord, I’m saying all this on tape.

ROSS-NAZZAL: You get a chance to edit. We can also hold it. Seriously. If you want to hold it.

BOLTON: I forget where I had started with this. It happened; it wasn’t a good thing.

ROSS-NAZZAL: Did NASA Watch report on this? I remember when the MRC [Media Resource Center] was getting ready to close they were talking about that. I think I remember at Ames [Research Center, Moffett Field, California] they found out people were throwing books in dumpsters, so they tried to call attention to things that were happening, like isn’t this horrible.

BOLTON: There’s always that danger. Poor libraries, we can’t keep everything; we have to weed. We’re thoughtful about it. We usually have policies that we use. I’m using we generically. All libraries have to weed. We cannot physically keep everything, forever. Libraries would have to keep adding on space. Weeding has to happen.

People—they see books in a dumpster and [say], “Aaah!” It’s hard for a librarian to weed, but we understand that it has to happen. Trust me, if you find books in a dumpster outside a library there’s a reason that they’re there. You may not appreciate and think, “This is my taxpayer money.” I get that. I do. Librarians only put things in dumpster in the middle of the night. There’s been enough of this that happened that they probably do it in the middle of the night when they know the trash people are coming at 5:00 a.m. the next day.

We do always try really hard to find other homes, but that’s a lot of work too, which I don’t think people also understand. Weeding has to happen. In addition to the fact that weeding has to happen, trying to find alternative homes for these weeded books is not as easy as it sounds. If your public library is weeding, other public libraries are weeding their collection too.

Over in the Medical Library we were very short on space, and people retire. They come to you, and they’re like, “Oh, I have this bookshelf in my office, you want these books?”

“No. No, I do not.”

“Are you sure?”

“Yes, I am absolutely sure.”

“Well, is there someplace you can send?”

“No, there isn’t.” There really isn’t. When I first started working here the Library of Congress [Washington, DC] would take weeded books from federal libraries.

ROSS-NAZZAL: They would?

BOLTON: Yes, there were a couple things we would do when I first started working here and we would weed. First off, you would usually do a list and potentially offer it to other NASA

Libraries and see if any of them wanted your castoffs. These are castoffs. Maybe they would want a few titles here and there. Of course that means you've got to create the list. You've got to send out the list. People have to look at the list. They have to respond to the list. If they want the books you have to package them and send them. It's not an easy thing.

Library of Congress used to take them. We could weed away, send them to the Library of Congress, and feel good about ourselves and pat ourselves on the back. They weren't thrown in a dumpster somewhere; Library of Congress has them. Eventually Library of Congress was like, "We don't have room for this stuff anymore. Do not send them to us!"

ROSS-NAZZAL: We're full.

BOLTON: Then you're stuck. Maybe you've tried the other NASA libraries. But then what do you do? I know when I was over in the Medical Library there was an organization that would take weeded medical books, and they would try to find good homes for them in the U.S. or overseas, Third World countries. Again that's a business that has to be maintained. It's nonprofit. I'm not even sure they're doing it anymore. It is really hard to weed books. It's hard to do it. Librarians don't like weeding books, and then what do you do with the weeded books?

Occasionally things would end up in dumpsters, because that was the easiest thing to do, and you didn't have staff to really do it right necessarily. We try not to do that. Admittedly it does happen sometimes, but we try to do it in the dark of night.

ROSS-NAZZAL: It makes sense, especially here. Things change. Things don't always remain the same. New technology is discovered and new editions come out, like you said.

BOLTON: Right. I know you were going to get into this. We majorly reduced the Medical Library collection a couple years ago, and we went through Property to weed the books, the onsite Property group, because of course they're government property. The books that we own are government property, and government property is supposed to be disposed of in a particular way. We had the Library of Congress available to us at one point. We had this other organization that would take medical books and then they stopped doing that. We finally went to Property and were like, "Do we go through you?"

Most government property has some type of bar code on them so they can keep track of them. Library books have bar codes, but they're not bar-coded by the government Property custodian people. It's just for within the Library. But they all have a stamp on them that say NASA property. When we did a major weeding of the Medical Library, we went through Property, and they were given to Property. I think maybe somebody at some point was like, "Surely people would want to look through these."

I'm like, "Probably not." A lot of them were outdated. I didn't have much of a book budget available to me in the Medical Library, so many of them were outdated. You have those people there who are librarians in their hearts, and they just can't imagine somebody not finding a good home for the books. But it really is harder than it sounds.

I remember how we got back on UH-Clear Lake. You had asked if we had appealed to ALA or another library organization about what was going on. NISA was aware. This was another example of the challenges of being an organization at the Agency that had no overarching program that was attached to us. There wasn't anybody who at a high level could take the concerns forward and try to at least negotiate.

If nothing else, if we could have retained the interlibrary loan function, that would have made it easier. There wasn't much help to be had. Again, they eventually—we talked about this last time—went to Goddard [Space Flight Center, Greenbelt, Maryland], and told Goddard they had to get rid of their physical collection. They didn't make them partner with anybody. University of Maryland, College Park is right by Goddard, and I know this because I went to University of Maryland, College Park. They did have a very close university nearby. Obviously had full engineering programs.

I would have had less of an issue with it if it had gone to a university that had a robust engineering, including aerospace, program. There might have been more benefit there. It seems like across the Agency the physical spaces of the Library are very much coveted. Administrators/managers see the space and think, "We could stick a ton of people in here. "What are we doing? It's all online. Can't you just Google it?" It's a real problem. I think they were going to do at Goddard like they did at JSC, and they wanted their physical space.

Then it turned out architecturally they could not have it, but the process had started. They were like a year into getting rid of the physical collection when it was determined that the architecture would not be capable of doing what Goddard managers wanted that space to be available for, so it all got reversed.

Fortunately it hasn't happened to a lot of the other Centers, although KSC's [Kennedy Space Center's] collection at one point became closed. They became a closed stacks collection. I think you would find across the Agency over the years shrinking budgets for the libraries, both staff and materials. Again, I think there's this misconception that everything's online. It's like, "Yes. Everything is online, but it's not free. There are license agreements. There's copyright.

You can't just get a peer-reviewed journal because it's online. They're going to charge you \$30 for it."

ROSS-NAZZAL: I know. It's crazy if you don't belong to an actual university library how expensive it is.

BOLTON: Yes. There's a great deal of misunderstanding, misconception about electronic collections.

ROSS-NAZZAL: Since you brought up Goddard, people were coveting the space over in 45. My understanding is that the Clinic was coveting that space. Even though you had cleared out that main area, you still had and maintained that space with the nice vault.

BOLTON: Yes. The back part of the Library was cleared out and that's where all the books were. That all got cleared out. I think they put in 40 people in that area, but the Library maintained the front part of that area. It included a vault. This is a huge vault, the equivalent of a room that is a vault, where we had our document collection. The document collection is not secret. It's not a government secret collection or anything like that, but we don't want just anybody walking in and out of there. [It's] sensitive but unclassified. We didn't have any classified documents, but that document collection was closed to everybody but the Library staff.

We had some offices up front. I don't know when the decision was made. At a certain point I guess the SA [Human Health and Performance] Directorate—I don't know if they were growing or they just wanted to be able to have the majority of their people in one building. They

were spread out a little bit. They had a Clinic in Building 8 and I think the flight surgeon staff was in Building 8, which makes sense because the Clinic was there. They had Building 37, which is where all the labs were. There was also a test subject facility in Building 37 which sort of operated like a Clinic, because they were seeing patients who were coming in to be part of tests. They had another building where they had some other labs and some other staff, and they were growing. I think they were just looking. For years I know SA was trying to get funding to build a new building.

Building 37, which was their main building, had most of their labs, was an old building. It was one of the first buildings on site. It was the Lunar Receiving Laboratory, so during Apollo the astronauts would come back in quarantine with all the Moon rocks and everything else. There's an actual basement in Building 37, which is highly irregular for the Clear Lake area. For anybody who may be listening to this, it's probably the only basement in the Clear Lake area. That's where the astronauts and the Moon rocks were in quarantine when they came back from their Apollo missions. It was an old building, and with all the labs it was becoming very very difficult to maintain. It had its own separate generator. There's lots of unique piping coming in and out of the building for chemicals and things like that for the labs. When I first started working over there in the mid '90s, they were talking about building a new facility and that went on for a really long time.

Here we are, we're sitting at the front of the old Library space, and SA is growing and trying to figure out how they can consolidate staff. At the time Building 8 consisted of the Clinic and the Flight Surgeons Office, but it also housed the TV operations group for Mission Operations, the Photo Lab. These were very unique spaces with very unique needs. SA initially

wanted all of Building 8. They wanted TV ops and the Photo Lab, and I don't know who else might have been over there, to find someplace else to go.

It was considered, and then cost was looked at. There is all sorts of cabling that goes into Building 8 because they are linked to Mission Control. They are getting downlink video. They got it from Shuttle; they got it from Station. It is just not a simple matter to get rid of TV operations. The Photo Lab was the same way too. They had set it up environmentally safe, and they had piping in and out of that building to deal with photography chemicals at the time before things all went digital. The cost to move TV operations out and move the Photo Lab out was prohibitive.

Then SA decided, "Okay, we need to find someplace else to go. This isn't going to work for us." I guess they put their sights on Building 45. How or why I don't know. They decided they would move the Clinic there. They would move the Flight Surgeons Office, I guess. Yes. They weren't moving the Building 37 people there, because again there was no way to set up labs in Building 45. But where they could consolidate? They were going to consolidate in Building 45.

Then it was determined the Library needed to go. Not only the Library but all the 40 people that they had moved into that building needed to go. They would use what had been the Library space as their Clinic. They were going to totally redo it and put a Clinic in there. This took a long time to get worked out, and it was determined that basically we would swap. The Clinic would move into Building 45, and the Library would move into the old Clinic space in Building 8. In doing that we would also try and become a one-stop shop and move—I forgot to mention this.

One of the groups in Building 8 was the Moving Imagery Repository and the cataloging staff that cataloged downlink video. So we already had one organization under the supervisor in Building 8. We would swap, move the Library in there, so then I would have two organizations in the same building, and we would move Still Imagery to Building 8. It was going to be a larger space, so we could incorporate all three of us and become a one-stop shop.

It wasn't an easy they move out, we move in. We had to move out. They had to totally redo the old Library space to make it a Clinic. We couldn't move directly into their space because it was a Clinic. There were all sorts of small exam rooms and sinks in each of the exam rooms and weird half walls where you could slide things open and talk to the person on the other side.

We had to go someplace temporarily. We had to move out so they could work on building the new Clinic, and then we had to wait for them to move out so we could redo the old Clinic for the Library and Still Imagery. They moved us into a much smaller space in Building 30, and we farmed out some of the collection a little bit. We did actually still have some of a collection. We still had a small reference collection that we moved over to the Medical Library because we didn't have room for it in our temporary space. We also had NASA special publications, which are books. They're history books, basically is what they are. We had a huge collection of NASA SPs because we got every one that was ever published, and we moved those over to the Space Station Library, because we didn't have room for them.

There was another collection of *SAE Transactions*, which are kind of conference papers, that didn't get sent to UHCL because we used them so frequently. They weren't available electronically. They probably are available electronically, but we didn't want to pay to replace the print with the electronic, so we had these *SAE Transactions*, which took up an entire

bookcase. They also got sent over to the Medical Library. We farmed out what little we had left and used the new space strictly for the JSC document collection and staff. I think we were supposed to be there for four years.

ROSS-NAZZAL: How long have you been there?

BOLTON: I've been supervisor for over four years, and the move to Building 30 happened before I became supervisor. So we've probably been there for about seven years at this point. When I became supervisor, I was getting asked to respond to a lot of data needs to move the Library. It was very actively being pursued for us to move into Building 8 when I became supervisor.

There's a lot going on at the Center level in terms of tearing down old [buildings]. They'd been building some new buildings, and the way the federal government works is if you build a new building you have to get rid of the equivalent space in other buildings. A lot of the buildings on site are out of date, not maintainable. It's hard to keep them up.

There was a building, 227, that they determined was going to get torn down, for lack of a better word, and all of a sudden the people that were in 227, which were graphics, the print shop, some things of that nature, they were going to move into Building 8. The Library was no longer going to move into Building 8. Okay, fine, I'm all right with that. I learned my lesson from the whole UHCL partnership. I'm neutral, okay? "Whatever you want us to do, that's what we'll do. We're staying put? That's a lot less work for me. All right, fine."

That held for a while, and sometime later they came back again and said, "No, no, no, we're going to have room for you. We are going to move you." Okay, fine. I responded to a couple of data requests.

Then, “No, this other group wants to move in. You’re not going to move.”

“Okay, fine, all right.”

Then a couple months pass, and I walk into the Library after a meeting, and there are three levels of NASA managers in the Library with tape measures. One of them said to me, “Well, now don’t get excited, but it looks like the move is going to happen.”

I just looked at him and said, “I have no response to that,” and I didn’t. “Okay, sure. We’ll see.” Here we go again starting up with data calls and me having to respond to questions about a move.

I think nothing happened for a while, and frankly, the nothing might have happened for a while because of Hurricane Harvey. There was a lot of displacement around the Center because of that, and Center Operations was very busy with other things across the Center, dealing with roofs that needed to be patched and replaced and just all kinds of damage that happened. Things were quiet for a while, but it was still kind of a back burner, “this will happen,” but nobody knew when.

I guess last summer the gears started moving again, and they were coming back to me and asking questions, and data calls, and showing floor plans, and talking about WADs [Work Authorization Document]. It’s like a work request for Center Operations to do stuff to a space. Things were truly in motion. When they start submitting WADs, things are in motion, and I’m seeing architectural diagrams and that sort of thing. I’m thinking, “Okay, this really might be it. I’m not going to believe it until it actually happens, but this might really be happening. It seems like it really is happening.” We’ve been working out office space. They’ve done a lot of construction over in the Clinic area. They removed all the walls, because of course it was like a den of rooms, because it was all these exam rooms. They all needed to go. We needed an open

space for bookcases for the documents. Walls were being taken out. Lots of plumbing was being taken out, because of course each of the exam rooms had a sink.

I was just over there earlier this week. It's been painted. I know that they want to move us by the end of FY '19 and we're here in April, so that only gives us a couple months. I've been providing information about Lan drops and where we need outlets and who's going into what space. I think this really will happen. But I'm still of the opinion I won't believe it until I've seen it. Am I excited about it? I have mixed emotions about it. It's going to be a lot of work.

ROSS-NAZZAL: Moving that whole collection, yes.

BOLTON: Yes, which I'm not particularly looking forward to. Not that I'm going to be moving it myself, but there's just a lot of questions that have to be answered and a lot of coordination that has to go on. I'm not looking forward to it. I am very excited; for the first time in my 26 years of working here, I will have an office with a window.

ROSS-NAZZAL: All right. Yay!

BOLTON: Yes. With a really nice view too. I'm excited about that. I'm excited to be in the same space with the Moving Imagery Repository. I spend a lot of time over in Building 8 at meetings. I'm excited that the Still Imagery staff [will be nearby]; now their collection will remain in place. There's not enough room for their collection to come with them. When I'm talking about Still Imagery I'm talking about negatives.

Obviously for many years now we've gone away from cameras with film; it's all digital. For the past several years all the imagery that we receive is digital. The collection that they have in their current building, 424, is basically a historical collection. They do still have Space Station. When Space Station started, a lot of the cameras were still your standard cameras, so there is Space Station negatives over there. It's not going to be completely easy for them to be in a different building than their collection. However, the Moving Imagery Repository has operated like that for many years. There isn't room in Building 8 for all of Moving Imagery's collection. They have collections spread out all around the Center.

Building 424 is way at the back end of the Center. They are completely isolated. As a matter of fact, they're so isolated, that's where they put the prairie chickens. I should probably explain myself.

JSC has a partnership with the Houston Zoo to provide space for prairie chickens, which are native to Texas and were becoming extinct. They had a habitat for them at the Houston Zoo, but apparently they need quiet and privacy to get on with their business. They weren't having much success with increasing the population. They worked it out with JSC to put a prairie chicken habitat. JSC has a lot of unused property, and so the quietest place for them to be, but still be easily accessible to zoo staff, was out by our Still Imagery. That is how removed and quiet the Still Imagery building is.

I'm looking forward to having the staff where I can easily interact with them. I also think it will be really good for the staff, because the Photo Lab is in Building 8, and they work hand in hand together. Having access right there in the same building I think will be beneficial. There are definitely things I'm looking forward to, and I'm sure I'll be very happy when it's over. I'm not very excited about it right now, to be completely honest.

ROSS-NAZZAL: Moving is a pain, it really is.

BOLTON: Yes.

ROSS-NAZZAL: I wanted to ask you—we have a few minutes left—about the JSC document collection, because I know you have a database that is very similar to our history search index and our archive search index. I've always wondered what is in the collection, and how is it different from the history collection. What's the difference between the two? Why does the Library maintain that collection?

BOLTON: Yes. This is really confusing for people. It was confusing for me when I first started working here. This is a horrible name for it. We have what we call the JSC five-digit-numbered collection. Basically what that means is all the documents that we have are given a JSC document number, so it's JSC07700. We have this JSC document collection, so you're thinking okay, it's a NASA document collection. No, not really.

There are NASA documents, and the NASA documents are maintained in NTRS, the NASA Technical Reports Server. These are what are known as NASA formal series documents. I think the basic way I can explain this is NASA formal series documents would be of use to the NASA population at large, potentially to organizations outside of NASA. They have widespread appeal, not to make it sound like they're popular. These are engineering technical documents.

JSC documents are pretty specific to the people that work at JSC. They're really only needed by the people that work at JSC. To give a basic example, when Shuttle was still

operating, all of the Shuttle handbooks, which were all the technical documents that told you how the Shuttle operated, were JSC documents. They were really only available to people at JSC, which makes sense, because nobody else is operating a Shuttle. People might be interested in knowing how a Shuttle operated, but then you get into that whole sensitive but unclassified situation and technology transfer and that sort of thing. JSC documents generally only have interest to people that work at JSC.

Some documents might start as a JSC document and then it becomes clear that it might have broader application and so it could be transitioned to a NASA document and get put into NTRS. We maintain a database called DIS, which is the Document Index System for the JSC documents that we maintain in house. At various times, the STI [Scientific and Technical Information] Program has expressed interest in making our JSC document collection part of NTRS.

That's the other thing too. It's a living collection. Part of the reason we don't make it part of NTRS and the regular NASA document collection is these are generally documents that are being regularly updated and having change notices and page change notices. They're living documents. If we were to send them off to the STI Program to be included in NTRS, they would constantly have to be updated within NTRS. That might be a better way to look at it generally. These are living documents that are constantly going through changes, because they're directly related to hardware that we use, and things change with the hardware and need to be updated, so that's the JSC document collection. I don't know if that [answers your question].

ROSS-NAZZAL: Oh, yes, I've always been curious about what that contains. A lot of times I will go out to DIS just looking for stuff. I'm not really sure what it is that's there. I've always been curious about it. There's always a mystique about it.

BOLTON: On top of that, you have this JSC document five-digit collection. These are IDed documents, but you also have internal organization documents. The Engineering Directorate might have a memo or something with technical information in it, but that never becomes a JSC document. It would not be unusual back in the day to get somebody to come to you with a document request, and you'd look at it. You'd look at the number, because pretty much they all have numbers, you'd look at it, and you'd go, "No, it's not a formal JSC document that would have ended up in our collection. This is clearly an internal document to that organization." It usually would have the mail code of the organization in the number, EC-354-92. EC would be the organization that created the document, a document number, and then the year it was released.

As a new librarian at JSC this is really hard, but you get a couple months in, you start to be able to recognize document numbers. You know what database you need to go to, and you know, "Okay, this is going to be in NTRS. No, this one is going to be in DIS. All right, this one over here I'm going to have to call this organization and ask them for it, because it didn't go outside their organization." You learn the different numbering systems. Government documents in general have numbering systems. The Department of Energy, you might see a document with DOE and a number and you know, "Okay, that's a Department of Energy document, I need to go to them." You start recognizing how these numbering systems work. It does get a little confusing.

You're like, "Well, it's a JSC document. Isn't that a NASA document?" No, not technically. "What about this memo? Isn't that a JSC document?"

"No, it's a document that was created at JSC but it's an internal memo to this organization, so it's not really a JSC document." It's hard to explain. It's hard to clarify. That's why the Library staff is so important.

You will get people who spent four hours trying to figure out where to get this document. You show it to us and like, "Oh yes, no, just go here." In two minutes you have it. Everybody's got their silos. You have many many federal agencies. They all have their numbering systems. Even within JSC you see that even for the formal things there's different numbering systems and different places you go to for those things.

We have been trying for years now to have a one-stop database for all the different silos just within JSC, and there is a JSC Google internal search, which I think has helped. Any formal databases that exist get searched when you do a JSC internal Google search. It may also come back with a lot of crap that you don't want, that you don't understand why you're getting it. How do I get to the thing that I need? Again, that's where your Library comes in, because we generally know just by looking at a number where you should be going for that document. There's a lot of different types of documents, a lot of different numbering systems, a lot of different organizations, agencies, etc.

ROSS-NAZZAL: I think I was under the belief that it was all JSC documents, not engineering and hardware, but if I wanted to look at the master plan for instance or things like that, maybe you had some of that material.

BOLTON: There's the Engineering Drawing Control Center, so they have all the building drawings and things like that. It's not necessarily all hardware, that's just an example of the type of thing that we would have that would make it unique and make it a JSC document.

We had a librarian at one time, and I forget what the name of it is called, but her major hobby is flags, and flags that are made in country. She's a member of some society that's a flag society, and there's an actual name for a person who does this kind of work. I can't remember what it is. I think she's been president of it. She is into this big-time. She wrote a paper a couple of years ago on the Apollo flag on the Moon. I don't think at the time she was really sure who might be interested in such a paper, and so she had it published as a JSC document [Where No Flag Has Gone Before: Political and Technical Aspects of Placing a Flag on the Moon]. It's a JSC document in our JSC document collection. Again it's not a document that probably would get updated. It's something that might be of interest to a lot of other people, not just people working at JSC. Eventually it was released as a NASA document in NTRS. If you were to look it up in NTRS you would see it's got a NASA ID number, and it also has a JSC number attached as well.

There are documents like that in the JSC document collection, things that staff at JSC have written, that initially maybe you weren't really sure where it should go, so it started off as a JSC document, but maybe eventually ended up as something else. Annie [M.] Platoff, if you ever want to look it up.

ROSS-NAZZAL: I think I walk through those shelves when I go see you, and I'm always like, "I wonder what that is."

BOLTON: Feel free to just look at some of them.

ROSS-NAZZAL: Do you want to just stop and come back another time?

BOLTON: We can do that. I can keep talking, whatever you want to do.

ROSS-NAZZAL: It's up to you, we can go another half hour if you want.

BOLTON: Do you think you would get through what you wanted in a half hour?

ROSS-NAZZAL: No.

BOLTON: Okay, then maybe we should meet again.

ROSS-NAZZAL: Yes, we probably should, yes. I actually came up with a lot of other questions.

BOLTON: We'll just continue until I retire.

ROSS-NAZZAL: Thank you for coming again.

BOLTON: You're welcome.

[End of interview]