

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

JANE S. HESS
INTERVIEWED BY SANDRA JOHNSON
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JOHNSON: Today is April 2, 2014. This oral history session is being conducted with Jane Hess at her home in Newport News, Virginia, as part of the NACA [National Advisory Committee for Aeronautics] Oral History Project sponsored by the NASA Headquarters History Office. The interviewer is Sandra Johnson, assisted by Rebecca Wright. I want to thank you again for agreeing to talk to us today and for letting us come to your home. I want to start today by asking you about how you first learned about the NACA and where you grew up and how you ended up here.

HESS: Where I grew up was in Kentucky. I grew up on a farm about 20 miles out of Lexington, Kentucky. I was one of six children. However, my mother and father had a family of four older children and then they didn't have any children for a while and they had two very late in life. My sister Dorothy was two years older than me and then I came along. My mother was 47 when she had me.

JOHNSON: Goodness.

HESS: Poor woman. She always told me, "I hope you don't have any children." She said you worry, worry, worry about them, and I understand that. How I found out about NASA [NACA], I went to college, and my family tried to get me to the University of Kentucky, but that was just

40 miles from my home. So I had to leave home, and I went to Morehead University in Kentucky. I majored in economics and had some minors that I could type and I could do shorthand. All women in my day had to have that capability.

Then the war started and I was in school, I had a sister who was in Kentucky who was teaching in grammar school, and my oldest sister Avis was married to a minister, and they were in North Carolina. Then they moved to Virginia, and that's how I happened to get to this area, because I visited her in Portsmouth a lot, I knew about [NACA]. You do know that Langley [Memorial Aeronautical Laboratory, later renames Langley Research Center] was the only [NACA] lab for a long time, and they called it Mother Langley, and there was a considerable amount of jealousy about all the attention that Mother Langley got, so I tried never to mention it.

But it really was wonderful that this happened to me. I came here to teach in high school in Hampton. I had a good friend who I knew from school that lived in Hampton and she took me to a party down in Hampton. When you came to Virginia in my day, the Virginians had nothing to do with anybody that wasn't a Virginian, believe me. So it was amazing how other than in church—I did belong to the church, so the churchpeople were friendly, but there wasn't anybody else that was friendly. But she was my friend, so she took me to parties. At one of these parties I met this gentleman who was head of all the employment agencies in Virginia, and they had a lot of them at that time. This was a party that was dancing, and I'm dancing with this gentleman, and he said, "Why are you going to teach?"

I said, "I don't know, because I'm not really the type, I don't really want to, but it's what I'm trained to do."

He said, "I can take you to NASA and you can double your salary right now."

I told you before I thought he was hitting on me, but I thought well, that's all right, he can take me out there, I don't have to see him after that. I let him take me out there, and I took some tests, and they hired me. But before I did that, I said, "Listen, they're having a RIF [Reduction in Force] right now."

He said, "If they hire you, they will not RIF you, because they're only hiring people they're going to keep."

So I was hired, and they moved me around. I started out in personnel. That was the first place I worked. I'll try to mention some of the names that I worked with. Betty Gilman was head of the technical library, and I really wanted to get in the library, but I knew that I was going to have to do further education if I did. I did do that later. One of the people that I worked with was Peggy Palmer. Peggy lives in this area and Palmer was her married name. She was doing cataloging. But I also had to work with the group that were keeping records of everybody who was here, and when they got changes in their career and so forth. They didn't really have a good system. It was messy, and I've always been a person that I think I can do something better.

I said, "We need flexy-lines for this."

"What's a flexy-line?"

We changed the system, but we hadn't finished it when they had to move me. They moved to another building, I think one of the wind tunnels. They moved me all over the field until the end of the RIF, which was about nine months, something like that, maybe longer. I worked everywhere, and I thought it was really bad that I was being treated like that, but I found out what a blessing it was, because I learned about everything at Langley.

Then I was assigned to the Planning Office. The Planning Office was where they kept all these charts and records of every job that was being done on the Center, and it was charted daily

what accomplishments they'd made or if there were setbacks or whatever. It was interesting work, and I enjoyed it, but I still wanted to get in the library. I don't remember how long I had to wait; it was a year or two anyway. The head of the library had a nice Catholic girl that she wanted my husband to meet and marry. She just wanted that, and she told me so, and she said, "What are you doing seeing him?"

I said, "Well, you want to know how I met him? I met him right here. He wanted to see me as well."

She of course thought she had control of everything. Her name was Betty Gilman. Betty Gilman was head of the technical library. I got along fine with Betty but a lot of people thought she was too controlling and too bossy and she did not have a degree but she was very smart. I knew she was very smart. But everything everybody did, she took credit for it. So she was unpopular with the staff.

I soon learned how to get around that. Every time she said, "Jane, come in my office, I want to pick your brains," I said, "What's the subject matter?", and she'd tell me, and I'd write a memo, everything I knew on the subject, and I'd send it to files. That way I got credit. When she found out I was doing that, she was very angry, because she couldn't take credit for it anymore. But I tried to talk with her and I said, "Betty, you're so smart, you don't need to be stealing everybody else's credit, and they need that in order to get ahead."

I was just an employee then in the library. Very soon, when the war was going on, they found that they had to do something about having better records of the classified material at [NACA], so they selected me for this job. They were going to put me in charge. We had two libraries out there, the library in the West Area serviced the Center, and the library in the East Area did all the cataloging and all the acquisition, we did everything for all the Centers. By that

time we had Ames [Research Center, Moffett Field, California] and Lewis [Research Center, (now Glenn Research Center,) Cleveland, Ohio]. We furnished them the cards and everything, and also did a lot of reference in the East library. The West Area library did the major part of the reference for the employees.

Betty Gilman put me there and said that I had to get the records straightened out because all of the material that was charged out had two charges, one under the name of the person that had it, and one under the number of the document. I found the biggest mess. They didn't match. So I had migraines, I had a migraine every week. Finally I called Betty and I said, "Betty, you have got to allow me time to actually review all this and find out where this material is and make the right records before we start."

She was nice about that. She said, "Well, I thought things were in a mess over there." We got that straightened out. It wasn't easy. It took a number of months. But then we had to make three charges for each classified document. We had one for the name of the person it went to, under the number, and one under the classification.

JOHNSON: That's a lot of work.

HESS: That was my job, as well as being in charge of that library. I was a GS-5 [General Schedule pay grade].

JOHNSON: What year did you start? That was before the war, or at the beginning of the war?

HESS: No, I got a job at [NACA] in the early '50s, and it was later that I was sent to the West library. What I've described before is what I did first for several years. But then I was sent over there in charge of that library fairly early, I would say still in the '50s. The early '50s, I was in the East Area library, but the late '50s I was in the West library.

Then they did not pay attention to the grade levels, how the people were classified. I took up that cause right away for the women, because it distressed me that we had people that had degrees that the highest grade was about a [GS] 7 in the whole library system. I asked my boss for the standards, and she said, "Oh. You're not allowed to have those." Never mind, I don't take no for an answer, so I figured I could get the standards, and I called the GPO [Government Printing Office] and said, "I want to get the standards for librarians within the NASA system."

They said, "Fine, we'll send them to you, but you'll have to pay for them." So I paid for them and I got them.

Then I was still just a [GS] 5, and I said to Betty, "Betty, I deserve a raise. I thought maybe you'd tell me, but you're not going to."

She said, "Well, if you think you deserve one, then you write your own job description." She didn't think I could do it. I did, and I used those standards. She said when she read it, "Who did this for you?"

I said, "I did it because I have a copy of the standards."

"Well, you're not supposed to."

I said, "If you can buy them, and anybody can buy them, why am I not supposed to have them?" So that story ended.

I started looking at the people working there, at their jobs, and what they did, and I found they were all underpaid. In my time in the library I raised everybody up to [GS] 11s, 12s, 13s. All the scientific types, I couldn't get them higher than the 13, because I was section head under the branch, and the branch head was a 13. But I got some of the scientific ones the same level as the branch head. But I couldn't get everybody there. There were two particularly, Sue [K.] Seward and Marie [H.] Tuttle were two of the scientific types. Marie Tuttle had a physics degree and Sue had a chemistry degree, and Sue published a lot with the scientists. They worked well with her, and she was so smart. All these people are deceased. It just breaks my heart. They were younger than me.

In any case I thought they needed honorable mention, because they were so good, and Sue published so many documents. Her name was on the documents when they were published, because she did as much work or more than the man himself.

“What were your duties?” I told you that. “Describe the facilities where you first worked.” We've done that. “Did the attack on Pearl Harbor affect your work?” Greatly, greatly. This meant that they had to have planes that could fly faster for the war. The research increased greatly, and so did the staff. The staff at Langley, I don't remember how many thousands there were, maybe a couple thousand, but it got up to 6,000 I think. They hired people in. They even sent researchers out to recruit from the military, and that's how my husband got there. But my husband was born in Vienna, Austria. He grew up there and lived there through college, and his father had studied in this country, and he wanted his children to study here, and he had relatives that already lived here.

He sent my husband to MIT [Massachusetts Institute of Technology, Cambridge, Massachusetts] for graduate work. He sent his daughter to Harvard [University, Cambridge,

Massachusetts]. She became a very well-known chemist, and she invented liquid heat. Bob [Robert V. Hess], my husband, became a very well-known researcher. He gave a lot to this organization. In any case, his father called him when the war started and said, “You all stay in America. Don’t come home, because you’re not going to fight for [Adolf] Hitler. You fight for America.” So Bob joined the American Army. He was not a citizen, so he couldn’t be an officer, but he was a staff sergeant or something like that. He trained all these people, he trained them in English that came in that didn’t speak very well. In any case, he was waiting to be shipped overseas when a neighbor of mine around the corner here was sent to recruit anyone that had the proper background, and Bob had studied aeronautics, and wanted so badly to work in this field, but his father wanted him to be a lawyer, because the father was a lawyer. He wanted him to do the same work he did.

Bob said, “My father was so brilliant, I didn’t want to compete with him.” The recruiter went to the center where Bob was located, and I think it was Wright-Patterson Air Force Base. They called for anybody who had any background in aeronautics to bring a fountain pen and come to a certain room. He said he thought that was the strangest instruction.

He had been writing documents in aeronautics, but there wasn’t anyone to approve them, so he couldn’t get them published. The Air Force wouldn’t approve them. They didn’t have the knowledge. He took this document with him that he had finished, and went to see my neighbor, whose name was Don [Donald D.] Baals. Don looked at his document and he said, “Oh, this solves the problem we have in the wind tunnel.” He hired him on the spot.

JOHNSON: What a story.

HESS: It really was. He was at [NACA] when I went there. I didn't get there until after college, and I graduated from college in '44, '45. He was already there, and I didn't meet him until 1947. But he had friends that told him about me, and I had friends that told me about him. They were trying to get us together, but whenever there were parties we just didn't seem to go to the same parties.

One day I'm over in the Administration Building waiting to pick up something from a shuttle bus, and I see this good-looking man coming down the stairs, and I thought, "He's good-looking." But I figured he'd just walk out. He kept walking, he kept coming towards me, and I'm wondering what in the world is this? He walked up to me and said, "I've been trying to meet you through mutual friends and we don't seem to have any. So I've decided to introduce myself." I could tell how embarrassed he was to be doing this because I knew how the Europeans were. You have to have a proper introduction.

I said to him, "Well, my mother requires three written references from anybody I go out with."

He looked at me and he didn't offer me any references, but he said, "I'll call you sometime." He called me that night. That was the beginning of a beautiful friendship and life. I was dating a lot of different people because there were a lot of dances and things, but I didn't care anything about any of these people. He eliminated all my friends by saying, "I have to see you a little more often." Finally I realized I wasn't seeing anybody but him. That's how it all happened between the two of us. It couldn't have been a better deal.

JOHNSON: That's wonderful.

HESS: It was just an absolutely wonderful life we had.

WRIGHT: How many years were you together?

HESS: Sixty-four, and I wouldn't have minded 64 more.

JOHNSON: That says a lot right there.

HESS: I learned something from him every single day he did research, because he'd come up with something. He was researching in medicine, and we were interested in a lot of these bad diseases. He found something for cancer. He turned it in, and they went to the doctors and they said, "It's just too expensive, we can't do it."

Now this is how sometimes things don't get done because they say it's too expensive. But when you think of how long we've been contributing to cancer [research], and we ought to have all the answers there, but we don't have them. That's off the subject matter. But I told it because it was just amazing to me that he could contribute in any subject matter.

While he was at NASA he switched subjects quite often, and he ended up in space and one of the Center Directors who was out here said to Bob, "How can you switch from this to this?"

He said, "Well, if you have a good education, you can switch to anything." I guess you could. That was [Edgar M.] Cortright. The Cortrights were very good friends of ours. She is deceased but he is not, and he lives now up in Maine. They retired up there. They had a

daughter in that area. Oh, I miss my friends so much. They're all deceased too. This is the bad thing about getting old, especially if you don't feel it. I just don't feel it.

WRIGHT: It's a great blessing.

HESS: It is. I decided I wasn't going to be old. Bob was like that too. We never got old.

WRIGHT: Did you ever research a project together?

HESS: No. I did not do that, but I did a lot of stuff at NASA. I guess I gave all my time to the researchers. I did not do research. But I was involved in it, and I knew all about it. I had to know about it because I had to acquire the proper materials. People say, "Well, how did it change when you went to N-A-S-A?" Didn't change at all. We still had to do aeronautics. We just had to do aeronautics and space.

Nothing changed, we just took on double work, and it was a lot more work. We had to build up a space collection, and we had to build it up fast.

JOHNSON: How did you do that?

HESS: We worked overtime and we had all these brilliant people. I had them checking everywhere and getting information that we could get from other collecting agencies. We soon built up the library with what was known in space, because space was a new field. In a few years

we had probably the best library in space in the country. I know it was the best scientific library in the country. I got a lot of credit for that. I got the NASA Medal for that.

WRIGHT: How did you correspond with other places that had materials? Now everybody's answer is you just go to the Internet. You didn't have an Internet.

HESS: No, we didn't. By phone. That's how we corresponded. I had all these people that were so bright. They understood the subject matter so well, they did the phoning, I didn't phone, because it'd come to a point where they'd ask me a technical question about it that I understood it enough to collect materials, and I understood it enough to get the right journals in. We had to subscribe to a lot of journals, and we had a great collection, and it was foreign and domestic, and I had to know enough. I had to learn enough foreign language to understand those titles.

JOHNSON: How did you get the foreign documents and those kinds of things into the NASA libraries?

WRIGHT: Did you have restrictions?

HESS: We got subscriptions. We brought subscriptions in. I had loads of subscriptions to the scientific documents and literature, all scientific literature, and especially the journals, because that's where they published most. All new things were published in journals.

I had great help from the researchers. I have to tell you one thing I did. I established a library committee and I was allowed to select who went on this committee. I took the

outstanding researcher in every division on the committee. They fed us a lot of information of what we ought to have in the library. They helped build the collection and they helped do the research. They were very very active on this committee.

Sometimes you give somebody another job and they're a researcher, they're not interested. But everybody was interested. I needed their help so much because the library was classed as a support system, and we were under the people that brought in the furniture and the people that did this, that and the other. I tried all the years I was there to move the library to the Research Directorate, but I never accomplished that. They just couldn't turn it loose. I had always a boss that didn't know anything about the scientific world.

Because of that, when I would want to find something that we really ought to do. Such as, when we needed to change our computer system to get an up-to-date computer system, and we needed one that was going to be able to access all this material with one language, because you had to know a lot of computer languages in order to get to the material, I set out to search for one that was working on this. I found this company. I'm sorry I can't tell you the name of it. But I found this company that was working on what we needed. I told them that I wanted to have a meeting, and they came, and they had gotten quite far along with the process. I said, "We need to change our system. We need to get so we can access all the material with one language. The world actually needs that."

It was expensive, and I knew it was going to be expensive. I prepared a presentation about it, so I could take that to the front office, but my management wouldn't let me. I just kept working on it. I kept talking to them about it. I didn't get anywhere, so I called the Chief Scientist. He was over in the front office. He was a friend of mine, and I said, "Can't you help me get a presentation to the Director for this system? Because this ought to be brought here."

He said, "Sure, Jane, I'll help you. You'll get a presentation."

In two weeks I had a call from my boss, that, "I would have to make a presentation on the computer system you're talking about, but you're not going to make the presentation, I'm not sure we'll even let you go over to the front office. But I'll make the presentation." He was my Division Chief.

Then we were also under a Directorate. Then the Directorate Head wanted to make the presentation. With the two of them, I had to go over the presentation with them over and over and over. I did that. However, I insisted, I said, "If you all don't let me come, I'm just going to be there."

They said, "Well, you can come. But you can't say anything. Especially, you cannot ask how it's going to be paid for."

When we got there, I took a back seat, and remarkably my boss wasn't allowed to get up to make the presentation. The Directorate Head got up and went up front. The Director of the Center said, "What are you doing up here?"

He said, "I'm going to make this presentation."

The Director said, "I don't want to hear from you, I want to hear from Jane Hess." They had to give me back my notes. I should do it, because when he had questions about how are you going to save any money with it, we were going to save a lot of money with it. A lot of stuff that we had to subscribe to and had to get in there that we could get through the computer and just print out what we needed.

I had figured all that out, figured out how much money we could save. When he asked the question I told him. I had an answer for everything. At the end he said, "Jane, that was an excellent presentation, and I do think that we ought to have that system."

JOHNSON: What was the system? Do you remember what it was called?

HESS: It's the system that's on the Internet right now.

JOHNSON: The NTRS [NASA Technical Reports Server]?

HESS: Our scientific system was put on the Internet. That's the scientific system on there. In any case he said, "Yeah, I really like that. Sounds like something that we ought to be thinking about." I just decided I was going to mention money. So I said, "Who's going to pay for it?" You should have seen my bosses, their eyes got big.

WRIGHT: The gasp.

HESS: Gasp. He said, "I'll pay for it."

JOHNSON: What year was this?

HESS: It was in the late '80s.

WRIGHT: Who was the Center Director at the time?

HESS: Donald P. Hearsh. He was a great friend of mine. He is the one that I got a promotion to a [GS] 14, and my boss didn't let it go into effect. I sat there for almost a year with no increase, and finally I went back to the Chief Scientist, and the Director called my boss and said, "Why haven't I gotten Jane Hess's promotion in here?" At a 14 level it was approved by the front office.

I got the promotion finally, but they were just terrible. They hated the fact that the library was so popular. I was a branch head. They had about four other branches, and they wanted all the branches to get equal treatment. It couldn't be. We shouldn't have been under the service area anyway.

JOHNSON: You were mentioning the fact that this is a computer system. This is something completely different from when you started.

HESS: We had a computer system that had all the material on it, but you could not access it with one language. What they had, we could start doing what they were doing, and we could also include the fact that with this system we could access ours with one language, because it had a black box, and everything went through this language-wise.

JOHNSON: Computer language.

HESS: In the computer. That was the thing that sold it to me. I said, "Well, we don't have to do away with anything, we can just incorporate it, it's wonderful."

JOHNSON: It just pulls from what was already in existence.

HESS: But it did cost a lot of money. I was trying to think what my budget was. My budget was really high but I don't remember how high. In the end I know it was very high. But I'm not sure of the amount. I just know they had to pay for this computer system.

When you got your budget, you had to use it that year. There was a lot of brilliance at Langley. Langley was the Research Center. Even when the other Centers were created, they had different responsibilities. But we had the responsibility to do the research.

Now research was done in some of these other Centers, at Lewis, and Ames. It just broke my heart when they took [George W.] Lewis's name off of that Center [and changed it to John H. Glenn Research Center]. Oh, I raised Cain about that, because he was a brilliant man, and contributed much to the history of aeronautics. I don't forgive the person who takes away something. I feel they're as responsible as anyone. I was offered many jobs out there I didn't qualify for and I wouldn't take them. I said, "I'm not qualified for that, I don't want to do that."

They said, "But you could learn it."

"I don't want to learn it," I said. "I'm doing what I want to do

I didn't think Glenn should have taken that title. He should not have allowed them to move that name to his. He should have said, "We should always remember this man who contributed so much." His father and the son both, they both contributed much. It's sad. There'll come a time nobody'll remember him.

JOHNSON: Speaking of astronauts, when they formed the Johnson Space Center [Houston, Texas], when the Space Task Group first formed at Langley and then they moved to Houston,

part of what happened is they started building up these technical libraries at these other Centers. In Langley did you disseminate the documents, the information and everything to the Centers?

HESS: Yes. We were the lead Center, and we assisted them. They never had everything, they usually just borrowed material from us. They could make copies and they could keep copies or they could just borrow it. A lot of things were big and bulky, and a lot of material, and they didn't want to copy everything. But none of those libraries ever were like this library that has been destroyed. Oh, it's terrible, I try not to think about it, my blood pressure goes up.

JOHNSON: We're living in a digital age now where everything—they're scanning documents, and then as you say they're getting rid of them. They're keeping them in electronic form instead of the actual physical form. When you started and you were talking about your first position in that East library, in acquisition and cataloging, that was all by hand, writing it. The technology changed so much during your tenure out there.

HESS: Totally.

JOHNSON: How did that affect your job? At what point did things go from doing everything, hand-inputting information?

HESS: It was gradual, because you can't just quit this and go there. You had to do it gradually. You start off with the things that you think are so important that you've got to go that route first. That's how we selected what materials we'd do it with first. We acquisitioned material and I had

people working in the library who were so talented and they were scientists. Then after I got the library committee, whenever my bosses would say, “No, we’re not going to do that,” I’d just take it to the library committee and they’d take it to the front office. In a little while I’d get a notice.

I must say that some people really didn’t like me out there, because they thought I got too much. But we were the support of research. You have to know why you’re formed, and that’s what our goal was. When I went there, the [U.S. National Aeronautic Association Robert J.] Collier Trophy was won I think three or four times by Langley. I’ll tell you who was responsible for it, John Stack. He was the cussingest man. He just couldn’t speak without it. But he was brilliant. My introduction to him was interesting.

In any case, I was trying to look at the kind of research that we did and had to do. We had the things that were being developed, the low-drag cowling, the laminar-flow airfoils. The airfoils were all changing shapes. Drag reduction and supersonic flight and transonic flight and area rule concept. [Richard T.] Whitcomb was a very dear friend. He was brilliant, and he came up with the area rule, which we called the Coke bottle shape. He changed the body shape that really increased the speed significantly. These were the things that the researchers had to do for the war. They said, “How did the war affect you?” The war affected us a lot and increased the speed with which we could develop. They went from 2,000 to about 6,000 people at Langley during the war.

Then of course you know how the war ended with the bomb.

But the major leaders that should always in my opinion be given credit were part of what N-A-C-A was. It was George Lewis, Max [M.] Munk. Max Munk was a genius and very brilliant, and all his work included a lot of math.

The Director then was Henry [J. E.] Reid, who was the Director when I came in. Eastman [N.] Jacobs, Theodore Theodorsen were two other important people. You all I'm sure have heard these names. John Stack. Robert T. Jones. This was an interesting thing. Robert T. Jones was uneducated formally. He was brilliant. He was smarter than almost all these others. Educated himself.

Robert [R.] Gilruth, Richard Whitcomb, Floyd [L.] Thompson was the Assistant Director, and he became the Director when Reid retired. "What were the changes and how did the decision to form NASA impact the work?" I've told you part of that.

NASA was formed. "Did you work for N-A-S-A.?" Yes. "Share the transition," and that had to be gradual, because you couldn't do it all at once. But we had to speed it up. They had to give me more staff.

WRIGHT: How many did you have at the maximum number? Do you know how many?

HESS: When I left I can tell you that the ones that were employed by the government I had probably 10 or 12. But I had a larger staff, including contractors. My total staff was 30 some.

JOHNSON: How many were there when you first started in the library?

HESS: It was two separate buildings, and in the East Area they were doing everything for all the Centers, they had a number of people over there. They had a lot of catalogers. I would say they probably had 15 people total. But in the West Area library where they sent me there were just two or three other than myself, maybe four, about four other people.

JOHNSON: Did those two libraries form together?

HESS: Eventually we went together. We went together in 1955 when we moved my library to the Flight Building and that library in the East Area moved also to the Flight Building on the second floor. Thank God they got us out of there, because it's metal, and it was the hottest place. It was awful.

But you all want to see a picture of my library? The building. Some friends of ours who signed this and gave this to us in 2010. I'd never seen this book. Have you seen this book?

JOHNSON: I actually have seen that one. That's great.

HESS: I hadn't seen it. Susan [L.] Adkins was another one of the gals that worked with me, and she was also very brilliant, but she was not the scientist. She was left in charge when I retired. They brought in a guy from California. He said he was civil service, but it turned out he'd never worked for civil service, he was a contractor, never worked really in NASA. He was working with the library out there but he was a contractor. Susan, as long as she was alive, I knew things would go well.

She took up flying, and she crashed out here and died, this is her [showing photograph]. Just awful. She was a great gal. Let me see. Whose picture was I going to show you?

WRIGHT: Picture of your library.

HESS: The library. Here it is. This building was the library building out there.

WRIGHT: The entire building was used for the library? Was that the only thing that was there?

HESS: It was all library at one time, and the secret files were on the first floor. Later other areas were moved into the library building.

WRIGHT: Did you have to have a specific classification to get in there?

HESS: Oh yes, honey, I've had classifications much higher than secret, and they go a lot higher.

Nobody knows that unless you have to get these classifications.

JOHNSON: Also I was thinking about the foreign documents because you mentioned the journals.

Now they have import and export control. Did you ever have that problem?

HESS: No, we were on the list for a lot of those things.

JOHNSON: Did you ever have a problem acquiring anything because it was foreign? No approval process?

HESS: No. But during the war we had two communists working in the library.

WRIGHT: Was that a secret as well?

HESS: They got caught. Well, my boss was still Betty Gilman, she was smart as a whip. Betty Gilman thought they were the best thing since sliced bread.

In any case, there are pictures in here of meetings of the libraries.

WRIGHT: Did you host those? Were you a mover and shaker about getting the other libraries to Langley?

HESS: No. Each Center hosted their own libraries. Langley was the lead library. I hosted the ones that were here. But also the directors of Langley had me entertain all their important visitors.

JOHNSON: Langley had the open house in '59, the first one after NASA was formed, but they also had those meetings where as you said the important people would come through.

HESS: After the astronauts left here, they were invited back here because the head of Japan was coming to visit—the son of the head of Japan. He has been the head for a long time now, but he was the son then. That was in my real early days. All the directors out here had me do the parties. I did all the parties for everybody. Entertained. When we had meetings they had me do the program for the wives, because a lot of these people brought their wives. These are my retirement [photographs].

JOHNSON: What year did you retire?

HESS: In 1990. That's my nephew, Charles Dempsey, right there, that's Avis's son with me at my retirement party.

WRIGHT: Were you ready to retire?

HESS: Oh yes, I was ready. I didn't retire until I was 68. These two sisters, Cordelia and Avis, they were a lot older than me, they wanted to retire near me. If you want to you can look through them, you don't have to. Everybody gets everything out and wants everybody to see it, and I'm not like that really. But I thought the library building you should see because it was big.

JOHNSON: I notice they're NASA photos. So I might get those numbers off there.

HESS: The meatball [NASA logo] was on that. They got that worm [NASA logo, 1975-1992]. I refused to let them take the meatball off my building. I called the Director. I said, "I'm not going to let them take this off this building, because I can't stand that worm."

He said, "I can't stand it either." So he let me keep it.

JOHNSON: That's great.

HESS: Then when it got faded he sent somebody over there to paint it and get it looking better.

JOHNSON: It's all who you know.

HESS: It is. I have found that out at NASA, yes.

JOHNSON: Did you have anything to do with records retention and records management?

HESS: Oh yes, we kept all the records and all the old material. We had acquired material from 1915; 1915 is when it became N-A-C-A. But it existed before that. It was under Smithsonian. When it became independent we had everything that had been published actually in aeronautics from the 1800s, and we were on exchange lists with all the countries. Of course England was doing more aeronautics than anybody else in Europe, so we had all their material. Somebody over there messed up with some of their records, and they lost a good many of their old documents, and they borrowed them from us to make copies.

JOHNSON: That's amazing.

HESS: God knows what they've done with that. What was on the second floor over there, the one that they left in charge that was a computer person, she said, "Everything that you need to know is on the computer."

I said, "It is not. The very old stuff is not on there. Unless you know what has been done you don't know where to start with research. Every person that ever came to the library to do research said, 'I'm going to research in this area, can we find out what's been done here?'" That was the first thing we did. You had to have a lot of background knowledge of that in order to do that.

JOHNSON: You were talking about how you had somebody that was in physics and chemistry and you had all these people that had that knowledge in their head of where to go look for these things to help the researchers.

HESS: Listen. I don't understand people that don't want somebody smarter than they are working for them. I really loved it. I knew they knew things I didn't know. Detail. I just had broad knowledge, because I went back to school. I got the rest of my library science, and then I took chemistry and physics and aeronautics, and I had a great helper.

JOHNSON: You had your own tutor at home.

HESS: That's right. Bob when he first came to [NACA] worked in aeronautics, but he ended up more in space. He brought laser work to the Center.

WRIGHT: That was a whole new field for your area to research.

HESS: Yeah. That's when Cortright said, "How can you work in all these fields, Bob?" Bob, he was the most unassuming person, he didn't think he ever did anything great. He really didn't.

JOHNSON: He was doing his job.

HESS: Just doing his job. I would have thought it was insulting to say, “Well, if you have a good background education you can do it.” But he didn’t mean that that way. He just didn’t think that was anything special. He was the best Christian. I shouldn’t be telling all this on here.

JOHNSON: It’s fine.

HESS: He’s the best Christian I ever knew, I never could get him to talk about anybody. Always if I said something about somebody he’d find something good to tell me about him. He was like that with everybody.

JOHNSON: I was going to ask you real quick if there’s anything else in your notes that we haven’t talked about that maybe you want to talk about.

HESS: Oh yeah. I wanted to tell you the things I did. I did a lot of things. I was very active in the community. We have four libraries in this area, we had three at that time. I was on that library board and chairman of it part of the time for 10 years. In that time we built a new library, which is up in this east end of the city that did not have a library. And I helped form the opera, 10 women, 10 of us, most of them from Norfolk, started the opera company. It’s a very going and good thing right now. Of course I attended a lot of American Library [Association] meetings.

They asked me to be in charge of a women’s program here in Langley, which I took that job, because the head of personnel over there said, “I want a study on the women at Langley and how they’re faring relative to other places.”

I did a study and I had to prepare a report and I had to get up before the whole Center and present this. That really was tough. I kept saying to him, “Why don’t you do it?”

He said, “No, Jane. You’re going to do it. You did the study. I may have advised you a little bit, but you did the study, so you’re going to get up and present it,” which I did.

The women after I was no longer head of that group, they would invite me to come back and speak, but they only invited me twice. The second time I had been to some management studies that some of them had been there. They divided the women and the men, they didn’t let them go together. We were training separately.

These women just lied through their teeth. They said they didn’t cry easily and that they weren’t more emotional than men. On my speech that they asked me to come and give—and they were bringing their bosses. I told them that they ought to quit denying what was true. I said, “You do cry more easily. You’re more emotional. It’s the only thing you had in your favor for thousands of years. So use it.”

The men chuckled and I said, “Now I got a message for you men too. When you all learn to cry and get rid of your frustrations and get rid of your pressures and tensions, you’re going to live long enough to spend your money. Otherwise the wives are going to get all of it.” They loved that.

JOHNSON: I can see why.

HESS: They do need to. Men need to have a release. They don’t. Look how they raised children back in my day. They told little boys they couldn’t cry. Terrible. I’m saying all this stuff on record.

Let me see what else I wanted to tell you. I did those programs. I assisted the Director in all the AIAA [American Institute of Aeronautics and Astronautics] meetings. They always had me get a program up for the wives. I usually took them to Williamsburg [Virginia] because I could do more there. I used a lot of people at the Center, a lot of the women in the different departments, to help if we had a dinner and if we had a program. They all got to participate.

JOHNSON: Thinking about the time you started, and then by 1990 when you left, women in the workforce had changed so much, just how many women, plus dress codes, all those types of things, everything was changing.

HESS: The dress code in the library when I went there was awful, but I always all my life, because my mother was like that, you had to look nice, so I always dressed nice. By the time I left everybody in the library was dressing very well all the time. They didn't like for me to be looking so good. One of them said, "All the men were in love with you."

I said, "It's the way I looked, it wasn't me, it was the way I looked, because you all were looking tacky."

She said, "I guess there's something to that, because when we got to dressing better we got more attention."

My mother said, "Remember that you don't look at yourself, other people have to look at you, so make yourself as attractive as you can and then forget it." I just always worked that way. She was a smart lady. She was a character. I could tell you some stories about her that would just—she was a pioneer woman.

JOHNSON: I bet. Looking back over your history, is there any one thing that you would look at and think as your major accomplishment?

HESS: Yeah, I've got something here somewhere. I felt that certainly getting the computers changed was a major accomplishment, and it took a lot. Also we had a center for processing. Eventually we didn't do any of that here. We did it all in Baltimore [Maryland]. We had a NASA Center up there that printed all the materials and distributed it. They did the cards and everything. Then eventually when we were computerized the cards ceased to be.

Of course we had to subscribe to all the open literature that pertained to our goals. My major responsibility was building the collection that met the requirements of the research staff, and that was major, and that was not easy, and I used every support I could find to do it.

That's when I set up the library committee.

WRIGHT: That was a smart piece of strategy. They're the ones that benefited.

HESS: That's right, and they knew that. They really appreciated the library. Anything new, they would come to the library and tell us.

WRIGHT: You had a nice partnership.

HESS: We had a wonderful relationship, yes. My management hated the fact that we had this library committee. They just despised it. But it meant that I could get things done. I couldn't get anything done through them. But I don't understand people that give up when you can't get

something done the way that you're supposed to, find another way. It's possible. I know. I did it.

WRIGHT: Did you have to keep up with numbers, like how many journals you subscribed to per year? Do you remember any of the numbers?

HESS: Yes, we had all kinds of statistics. Yes, we had to do that, had to justify the subscription.

WRIGHT: They're so expensive.

HESS: Some of those we could get rid of when we had the computer changes, because we could have access to them. It was online, the whole journal. That's one of the things that I used when I was selling the computer. I said, "They're putting journals online now, and we'll be able to get rid of a lot of our subscriptions, and we can move that money to pay for other things."

The Chief Scientist called me one day. I can't tell you exactly when this happened. But he said, "Jane, I'm getting involved in a lot of classified effort in Washington and in the country." This was during the war. "I need access to DIA [Defense Intelligence Agency] and CIA [Central Intelligence Agency] databases. I want you to get them here for me." He didn't tell me how to do it.

I had to work out what I was going to do, so I had access and phone numbers for DIA and CIA. I started out by calling as high a level as I could get to answer the phone, and they said, "We can't take your request, if you're the librarian."

I said, “No, you’re not going to take my request, you’re going to get a request from the people that need it, but I’ve got to find out how I can get the databases.” I did, and I got the databases, but I had to tell them who was going to use it. I told them who was going to use it, and I said, “You have to talk with them.” They did. They talked with them and they knew how it was going to be used. I had both of those.

We had to have a lot more security. We changed access daily. Daily. Had to do that every day. We had to have a different approach. I had to learn it too, they said I had to learn it as well as the others. They sent us all to Washington to learn stuff. That was a big project, and I know that it helped a great deal during the war.

“What is your greatest accomplishment?” I told you. We met the requirements and the needs of research and we developed it far beyond what they ever expected, I know that. I wouldn’t have gotten that NASA Medal had that not been true.

JOHNSON: I imagine so.

HESS: “What was your greatest challenge while working at NASA?” It was being smart. Being smart enough. That was my greatest challenge. I had to just keep learning. I had to keep learning all the time. I couldn’t rest on my laurels.

“When did you leave NASA and why?” I left NASA because I had gotten that computer system in. That was the last thing that I was doing. I had it under way to the extent that I knew it would be completed. I was 68 years old, and I was tired. They’d already started doing a lot of things at NASA that I didn’t approve of.

I decided that I was going to retire, and I did. I just decided it was a good time to leave. Most people don't work till 68. In fact I was not tired from the effort, it's just I was tired from what they were doing out here. Not in the library, but other areas. Had I known what they were going to do, I might have stayed longer, I really might have.

After I retired, Bob had already been there so many years. They just wanted him to come back. He did stay there, and he stayed until '95. He retired in 1995 totally, not giving them any work. He was not getting paid after age 55. He never retired, because they just called him back. He was so happy to do it without being compensated because it was his hobby.

WRIGHT: He enjoyed that whole learning process and the whole sharing.

HESS: It was his hobby. I went out there and did a lot of things to help out for a while. But I really loved every minute of my work life. I feel that I was one of the most fortunate people that ever had a job. I learned so much and I knew so many famous people and I got to travel a lot. Bob was going and presenting papers, and I'd meet all these famous people. It was really great. Of course I went to every place there was to go to in Europe and in the Scandinavian countries. I was well compensated for all my efforts. I had a GS-14, and my boss said to me, "Well, you'd be a 15, but I'm just a 15, so you can't be one."

JOHNSON: It's always the politics, isn't it?

HESS: But it was all right with me because I didn't need anything beyond a GS-14. I want to say that people said, "You should retire early, they're taking your money when you stay a long time." That's not true. The longer you stay the better your retirement is.

Bob's and my retirement was so good, it wouldn't have mattered whether we had any investments or not. He left so much of his to me. We were just very fortunate. He really looked after me when I didn't know he had left so much of his pay. We got so much when we retired that I thought we were getting everything. He left a lot of it to be used for me if he died first. He's such a great person, so sweet, wonderful, wonderful.

JOHNSON: I want to thank you for talking to us today. We really appreciate it.

HESS: I have to tell you I've taken too much time.

JOHNSON: No, it's been great.

[End of interview]