

NASA HEADQUARTERS NACA ORAL HISTORY PROJECT

EDITED ORAL HISTORY TRANSCRIPT

DUNCAN MCIVER
INTERVIEWED BY REBECCA WRIGHT
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WRIGHT: Today is April 1, 2014. This oral history is being conducted with Duncan McIver at NASA's Langley Research Center in Hampton, Virginia as part of the NACA [National Advisory Committee for Aeronautics] Oral History Project, sponsored by the NASA Headquarters History Office. The interviewer is Rebecca Wright, assisted by Sandra Johnson. We thank you so much for coming in this afternoon here at Langley to visit with us. We'd like for you to start by telling us how you first became interested in going to work for NACA.

MCIVER: I had been in the Navy during the Korean War. After I got out, I went to college at the University of North Carolina in Chapel Hill and studied physics. In the Navy, I was involved in electronics and sonar. That was the job I had, which was searching for submarines, if you will. Anyway, when I was graduating, I interviewed for a number of jobs. One was this thing called NACA, which I didn't fully understand except they talked about rockets and going to the Moon and so forth. I was a long-time fan of science fiction, so I signed up for the job and came to work here in July of '58. It was still NACA until October.

WRIGHT: Where was your interview? Was it here locally when you got out of the Navy?

MCIVER: Well, I interviewed in Chapel Hill.

WRIGHT: In Chapel Hill.

MCIVER: They had a recruiter, Bill [William M.] Bland, if I've got the name right. He went to Houston [Texas, Manned Spacecraft Center/Johnson Space Center]. I'm sure he retired there. He was a super interviewer, and he got me all excited about the job. Anyway, I came up then. When I arrived here, I interviewed at the headquarters here. They said, "OK, electronics and physics—you're going to work for the Instrument Research Division [IRD]. Don't even look anywhere else." The first building as you come in is Building 1230, and that's where I went in 1958. I stayed in electronics and instrumentation measurements for most of my career.

WRIGHT: When you got here, 1957 was such a monumental year. Sputnik [Russian satellite] had debuted in October. Of course, it was months after that. Did that have an impact on your interest at all of trying to do something maybe in space?

MCIVER: Yeah, absolutely it did. I was very much interested in that. When I got here, it was all rumbling. There was this committee put together by NACA, laying out space plans, which eventually resulted in the creation of the Space Task Group and then the opening of the Center in Houston. They were putting that together. It was just very exciting—the response to Sputnik—but really to go in space and so forth.

WRIGHT: Did you have any thoughts of maybe wanting to join up with that group, or was that even an option at that time?

MCIVER: It was an option, but I liked it here. I liked Hampton. It was close to where I was born in North Carolina, so I just didn't feel like I wanted to leave. This was the right place. I had met my wife shortly after that. I can't remember. We probably knew each other. No, we did, because her cousin worked for NASA but went to Houston. He was the one that introduced us. I stayed here. I really liked it. Hampton is a wonderful city, Newport News and Williamsburg. It's a great, great area.

WRIGHT: Beautiful to look at, especially. Talk about some of the activity that was going on when you arrived here, because it was starting to transition. The [National Aeronautics and] Space Act passed at the end of July, so you knew that part of the Center's activities was going to move towards space exploration. How were you drawn in to the work that had to do with the IRD? Did you have a mentor, or did you have a group that helped you become part of what they were doing?

MCIVER: Yes, and the reason we had, almost right off the bat, a space connection—we were in the Instrument Research Division, and that was a measurement branch where we dealt with telemetry. In telemetry, if you will, we would put sensors and instrumentation on a vehicle and radio transmit it back to the ground and record it. We were doing instrumentation on high speed rockets that were investigating high speed flight. That was immediately a good connection to space, because, when we put the spacecraft out there, they were going to be heavily instrumented. We were sort of in the forefront of that. In fact, one of my early jobs that I had was the high speed, four-stage rocket that we launched from Wallops Island [Virginia]. I did the instrumentation. We were looking for how telemetry signals reacted at high speed.

Unfortunately, my rocket unscrewed, it was in four stages, and crashed. We were so excited about it, and then one moment later, it was gone. Another thing that we were studying in that period was when spacecraft re-entered the atmosphere, they created plasma around them which then interfered with the transmission of radio signals. Some of the early work that I did was trying to understand that. As they were launched, the rocket plume behind it also would interfere with it, so some of my early jobs were dealing with some instrumentation we flew and analysis and understanding of how the plasma generated either by re-entry or by the rocket exhaust interfered with signals. What we did eventually was to record it on board, and then you could telemeter it later or recover it. We looked at things like going to higher frequencies or lasers that would penetrate that plasma, but in the end, NASA just recorded it on board.

WRIGHT: Were the launches close by, or did you use Wallops?

MCIVER: We went to Wallops Island, and then later on, we would work with Gemini. There was a Scout rocket at the time when we were looking at the plasma. I got associated with a camera that we put on board. We looked at the plume during the period that it interfered with the radio signals to begin to understand the physics of that interaction. From an instrumentation point of view and sensor measurements, they would fit aircraft or spacecraft—the technology—and that's what I was working on.

WRIGHT: You used the word 'forefront.' You were making things for the edge of technology at that time, weren't you?

MCIVER: Yes. You asked about mentors. They were here. Jim [James Edward] Stitt was one of the guys that was a mentor to me. Later on, when he became the Director for Electronics, I was his technical assistant. He did that for a couple of years in headquarters at Langley but a terrific guy; a Georgia Tech [Institute of Technology, Atlanta] graduate and no-nonsense. He ended up living in the same neighborhood in Williamsburg later on. They were all great guys; very practical engineers, and you just loved to work for them. The excitement was the job.

A little later, another guy I worked for, Cliff [Clifford H.] Nelson, who was the kind of guy who would give you an idea to go work on. We were trying to understand the plasma around the re-entry vehicle, and he said, “What about if you fired the rocket over an antenna in the shape of a re-entry rocket but have a little, small, solid-state rocket motor fire it in a vacuum sphere?” Well, lo and behold, we had 41-foot and 60-foot vacuum spheres. I went down and met with a guy named [Joseph Guy] Thibodaux who is still living in Houston, Guy Thibodaux, and he put some rockets together and we instrumented a cone. We would pump it down, and what was fascinating about it, when you would begin to pump it down, you didn’t know when it was going to be ready to fire, to run the test. So, I would get everything set up and go home. At two o’clock in the morning, a phone call would come. “We’re ready.” We would get in the car, come down, fire the rocket, and take the data and analyze it. That didn’t interfere—I mean, it interfered with life and family a little bit, but the excitement and then we were associated with the Space Task Group. The original astronauts were here for a while and so forth. It was an exciting time. It really was.

WRIGHT: Can you talk a little bit about the interactions of how you all worked? You were working on a part. You mentioned about the rockets. So much of what we hear now today is

about how bureaucracy slows things down, but I understand that, in the NACA, the whole atmosphere was that you just worked on it as it happened, and you made it happen.

MCIVER: That's right, and I'm sure that there was another period in life when I worked at Bechtel in the executive exchange program that NASA had at the time. I went out there, and it was a big engineering operation. You walked in the front door, and you were among a bunch of engineers, and that was sort of the same thing it was at Langley. Anytime you get those kinds of guys together, it's similar. But they have individual challenges and they would help each other. There were, obviously, some people pushing for higher rates and some of that, but that never seemed to get in the way. What really was exciting and important to everyone was the job, and how do you get the job done? How do you get it solved? All kinds of challenges. I've never been around a group that worked together so well. You respected those before you and they laid the groundwork for you.

In the first days, they gave you a project. It was about a year's time. You had to sort of write that up and report on it. It was an evaluation of you. I was watching NCIS [television series]—'probie,' just starting out—but you were that, so you had to learn. It was good discipline. You had to learn from the people you worked with and then report on the assignment. The subject I did at the time was optical communications. They were looking at using lasers for space to space communications. It was interesting, this was 1958 and 1959. I saw recently they flew some tests in optical communications, so they've been working on it a long time.

WRIGHT: That's a good subject then, I guess. The publishing part—was it actually a full, technical report that you were responsible for putting out, or was it a collection of information for a presentation?

MCIVER: Well, we had to eventually write. These were guys who were engineers and not always writers, but we had people—Sam [Samuel] Katzoff was the guy at the time. If you came under his purview or his oversight, you were very nervous about it, because he was a purist but just an absolutely wonderful guy; a great inspiration. But, you did have to write, and so that first project that I talked about, I had to write a report. It was edited. A team of editors would look at it, review it, and give you guidance. That helped you, because you had to really document what you did. That's what the guys out here do very well and have always done. That whole library of technical reports that the NACA did was so instrumental in the aerospace industry and reports since then, so they're remarkable.

WRIGHT: I guess it was an interesting time, because you came in when this new frontier was taking off, but yet you walked into an atmosphere that had been here for a number of years with such credibility for aeronautics.

MCIVER: There was a time earlier in my career, Floyd [L.] Thompson was the Center Director, and we had a monthly technical meeting in the evening where engineers would give reports on things they were working on. You'd have a rehearsal. It was not a casual thing. It was very important, so I was rehearsing, and Floyd Thompson, the Center Director, was there and getting ready. It looked like he was asleep. I was a little bit annoyed that I'm practicing, and here's the

big guy. Something came up, and he said, “I’m not asleep.” He was absolutely terrific, as all the Center Directors I did get to know and others here in management. It was good.

WRIGHT: Yes, they were very much the epitome of amazing engineers.

MCIVER: Oh, yes, absolutely, all of them were. I mentioned Nelson and Jim Stitt. [G.] Barry Graves was another one I worked with. George [W.] Brooks, who directed the structures program is still living—he’s close by. They were all just terrific guys. The ones I gave you on that last list, they were ‘Directors for.’ If you can imagine, you had the Center Director and then maybe his deputy, and then the next level were department heads, and they were called ‘Directors for.’ Those guys—Stitt, Barry Graves, George Brooks—they were just terrific, terrific guys. You did the right thing. They got you excited, and then you did the right thing. You didn’t screw around. You did it right. They would take you to task to be sure that you had done it exactly right, and that’s good.

WRIGHT: Did you have a formal peer review? How did you know you did it right?

MCIVER: Yes, you had a formal career review. It would take on different things over my career. Towards the end, it was fairly formal. You had to report and deliver on these things. In general, whether it was a formal document or not, you were given assignments and graded on those assignments. Later on, I remember there were cases where you really were; your name was attached to that thing, and if that didn’t succeed, then your career was—

WRIGHT: Impacted.

MCIVER: Impacted. That's right—influenced.

WRIGHT: Were you able to follow your projects all the way through? You mentioned about the different project things. Did you just work on a piece and then hand it off?

MCIVER: You generally could follow through. Some things had been going on for a lot of years. You may come in and help contribute to it and then step back out, but your contributions in that period were recognized and they knew what you were doing. As you got up in management, then you began to have to manage those under you and see how they worked. You'd have to track them, motivate them, and make them commit to it; performance appraisal-type stuff.

WRIGHT: A different type of hands-on activity.

MCIVER: That's a different type. That's right.

WRIGHT: What was the biggest change, if any, when the NACA officially became NASA?

MCIVER: I didn't spend a lot of time in NACA—a couple of months pretty much—but the people who had been there were still there. As an aside, the most important thing for those who had worked in NACA were the wings [wall plaque] that you got. I ended up getting a set of wings at the end. For a while, you had to have worked one year or two years or whatever, but I

watched grown men cry when they were awarded those wings. It was a very significant moment in their professional careers.

WRIGHT: So, for different parts of their career, they received those?

MCIVER: Yes. I just want to make the point that a lot of the guys that had served—and women—in NACA were still here with NASA, so we carried over a lot of that history and appreciation of what had been done in the past and their contributions as we began to bring in large numbers of new people. As you know, at Johnson, the Space Task Group was formed here with [Robert R.] Gilruth. They went down, and a lot of friends of mine went down with them. I kept track of them for years. I've lost a lot of people at this point in my age.

WRIGHT: Do you feel like the culture of the comradery or the nature of the level of achievement changed in any ways when more and more new people were added to the ranks?

MCIVER: I don't think so. There were times when some of the people here had been at Langley for a long time in aeronautics, mostly. This space group had run off down to Texas. A little bit later, Langley did a Viking project [Mars space probes], and it was a terrific program. It went to Mars, but, at the time, it was a group that worked on that space project who demanded a lot of resources from Langley. The aeronautics and older people working there resented that a little bit, so there was a little bit of in-fighting and that kind of thing. In the end, I think they all were extremely proud of the product and the accomplishments. It was an amazing thing for this

aeronautics-based organization to rise up and take on a major space exploration project. They had done other things, but here was landing on Mars. That was absolutely terrific.

WRIGHT: Were you involved with that?

MCIVER: No, I wasn't. I was on the other side. A lot of my friends were.

WRIGHT: Did you know what they were doing?

MCIVER: Yes, you knew pretty much what they were doing. What would happen was they would work on a project. There was one where they were doing the lunar orbiter, which was doing photographs of the lunar surface. They would come, and we'd interact with those people pretty well. Then, as Viking, I'd go in, and they would come in and say, "We need more people, engineers or electrical engineers in this area to come work over here." So they would draft some in for a while. They'd come back and forth. It was an interaction. There was a little competition during it, but with both sides working just absolutely focused on success.

WRIGHT: How did your role change in the division from where you started?

MCIVER: The first job, as I mentioned, was telemetry measurements. At the time, there were sections, so I became a section head after a few years. We moved into this building that you're sitting in [Building 1202]. We were over by the front gate, and they formed a flight instrumentation division, and it was here. It was composed of this building, one across the street,

and one down the street. The antenna facility was across the street. The navigation guidance and research was down the street. This one was the core building. I was in something called a Measurements Research Branch for a while—Assistant head of that branch. That was on the backside of this building. You're bringing back memories. It was terrific. We would come up with ideas, and we'd do research on new instrument approaches.

My division chief at the time became the Director for Electronics, which was, as I mentioned earlier, that board of directors, if you will. That's the best way to describe it. He went over to take that job and asked me to come over as his technical assistant. What I did there was to help him run what was a directorate composed of about four or five divisions. It was computational science with computers for the Center, instrumentation for the wind tunnels and for aircraft and spacecraft, and guidance control navigation, which was how you guide and control these things.

I became his technical assistant and helped him run that; all the hiring and promoting, keeping the programs, and dealing with [NASA] Headquarters [Washington, DC]. Suddenly, I was now, for the first time, having interaction with Headquarters. After three years, I said, "I've done that." That was Barry Graves and my good friend, Jim Stitt. I think the world of both of them. Jim has passed away. They said, "Look, the transition from Barry to Jim is going to be rough for Jim. Can you stay for a few years?" I ended up staying for about three more years and worked for both of them. They were great to work with. They would give you different levels of responsibility. The only problem with Jim was that we both lived in Queen's Lake, I mentioned, and we carpoled together. We started work when one of us picked the other one up 25 miles away, but it was absolutely terrific.

WRIGHT: You had an extra hour's worth of work, didn't you?

MCIVER: Extra. We talked sports, so we covered a lot of it. That worked well. After that, I became the Assistant Division Chief here in an office in the front. Then, I ran by the headquarters one weekend on a Friday. I mentioned something about not feeling like I'm really doing what I—I need some more challenges or something. On Monday, I had a job at [NASA] Headquarters.

WRIGHT: Be careful what you ask for!

MCIVER: Be careful what you ask for! I went up on a training program for about a year. It was called the Senior Executive Service Career Development Program. After a little less than a year, I came back for some reorganization here. The guy I worked for in Headquarters retired. My boss called me and asked me if I would go up and take this job. It sounded exciting. I knew then about a year out, so I went up and took that job in '80 or '81. I was there in Headquarters until I retired in '89. Up there, following on what I had worked on in avionics and so forth, I was the Director for the Guidance Control and Human Factors Program for the Agency. Then, I dealt with all of the Centers—Johnson, Ames [Research Center, Moffett Field, California], and so forth, so it was a lot of fun. About midway through that year, I mentioned earlier that I got selected for the President's Executive Exchange Program and spent a year with Bechtel Engineering in San Francisco. It was an absolutely wonderful year.

WRIGHT: You had to go for a whole year.

MCIVER: Yeah, had to go. The travel funding paid for my apartment. An interesting thing in this program, they could only pay what NASA paid. That seemed like a fair thing. I got to meet a lot of people. We had a class of people who were government and had worked in the industry and industry working in government, so we became a class and took a trip to Europe in the '85/'86 timeframe with this whole group. It was absolutely wonderful. We met the Pope at the time—Pope John—and leaders of all of the countries, so it was a terrific involvement. Just being engaged with people, we understood industry. I came back. My boss then asked me to head up the Headquarters office of the National Aerospace Plane Program, which was with the Air Force. I ran that office until I retired in '89.

WRIGHT: Tell me a little bit more about this Human Factor Program.

MCIVER: Human factors are a pilot or crew reaction to information. For example, how do you design a cockpit? Where do you put the displays? What information do you put on it? The office I had for a while up there in Guidance Control and Human Factors dealt with the instrumentation and computers that helped fly the aircraft, but also dealt with the information you provided to the pilot. We did a program here at Langley I was only partially involved in it—not really directly—but it was Boeing. Interestingly, I'm going to be hosting a Boeing speaker tonight. They took the original airplane—a 737. They shipped one. There had been a program in the country called Supersonic Transport. That didn't go anywhere. That ended, but they took the electronics, which were glass cockpits like we see today, put it in the back of this 737 and did

research flying this airplane around, down in Argentina, looking at new electronic landing systems.

Anyway, when Boeing got ready to do the 757 and 767, they were thinking about doing electric mechanical instruments; conventional dials and so forth. The pilots who had flown in the back cockpit with the glass cockpits said, “No, no, no. You’ve got to have this in that new airplane.” Boeing, at that time—I knew a guy and he gave a talk. He said, “No, that’s what influenced them to put glass cockpits in the front of the aircraft.” So, Langley affected something.

WRIGHT: It connected back to the aeronautics.

MCIVER: Yeah, that’s right. So, when you say human factors, how do you handle, inform, and keep the pilot up to date so that, if something happens, how does he take over?

WRIGHT: Was that also related to the glass cockpit change in the Shuttle?

MCIVER: Yes, I think so, because before they were electromechanical, and now they were glass. For example, different airlines might have a different cockpit configuration. If it’s glass, meaning it’s like a television set, you can change and modify that easily through software, where before you were stuck with a hard, electromechanical instrument. It just opened up a whole new world. Like we do on iPhones today, we have the display, and we can upgrade the software and get new applications. It was the beginning of that whole period.

WRIGHT: I have a question I want to ask you about how technology impacted your career—the changes of what you walked into. Actually, when you were with the sonar, you started using that instrumentation, but yet, what you ended up with when you were leaving.

MCIVER: Yeah, that's right. Of course, in the early days, we were looking at screens and listening with our ears. You got to the point that you could identify that echo as a submarine, but you were augmented by the electronics. As we got up further, I began to look at the avionics and airplanes. I wrote a paper, "Coming Cockpit Avionics." One of the little schemes we talked about was the pilot would get into the cockpit and everything is just blank, but he put on a pair of glasses, and the glasses were programmed to be a cockpit. Anyway, Google Glasses—we didn't know. They owe us.

WRIGHT: If you could have just patented that!

MCIVER: I was in Headquarters when Apple first came out with the Lisa [personal computer with graphical user interface], and we began to see the power of individual things. I was at Langley when initially we had a big, central computer. They still have it. Then, we began to have smaller and smaller computers that the individual researcher could then carry, and that's what we have today—the laptops, desktops, and smartphones, iPhones, and so a whole world of how information is provided for both doing research as well as doing an action like flying an airplane or spacecraft.

That's just remarkable and still changing, as you and I know today. Driving my car now with my iPhone, I can say, "Read my emails," and Siri reads them to me. I say, "I'd like to send Rebecca an email."

She says, "What would you like to say?" I tell her what I want to say. "Should I send it," she sends it. That's with hands on the steering wheel. That's kind of remarkable.

WRIGHT: It has. It's increased our productivity.

MCIVER: Yes, of course, we don't talk to each other anymore, except to Siri.

WRIGHT: She's very popular. It's a good thing you like her.

What do you think are some of the principles or some of the basic tenets that you learned when you were first here that carried you through your career, again learning from some of those first people that were here as NACA folks? You learned, and then you carried those through that other people could learn from you.

MCIVER: I think loyalty, dedication to the job to do it right, and to work hard to do it right, depending on teammates, and you have to, because you can't do it all. I don't care how great you think you are, it's going to be a team effort. And to work together to that common good and to be so excited about it and enjoy what you're doing as you go along. I left NASA in 1989, and since then, I have a small business that we helped form in '99, and it's still going. The jobs you do there—I learned how to approach them as tasks; how to plan them and how to put them together.

We have a team of members of our little company that come and go, but the company is the same sort of thing. I don't know what it is, but you need that. I need that to be able to go in and do the work. I worry about not coming home to my wife. At the same time, I go home, and I'm interfering with her life. There is a resentment I run into it with women that don't want this guy to come home and take over her life. At the same time, you both are always engaged in roles that change. As the kids grow up and move away, you both change.

WRIGHT: It's a full life of negotiation, isn't it?

MCIVER: Exactly. It never goes away. You learn that with government and keeping the marriage together.

WRIGHT: You say you worked at Headquarters for a while. You worked between all those Centers, you must have learned a few practices of well-kept secrets of how to make things work with numerous personalities and agendas.

MCIVER: If you're worried about being sure everybody is on board, make the team larger and include everybody. They've got to be there to work it.

WRIGHT: You were working there at a very interesting time during the Shuttle Program.

MCIVER: It was. The whole thing was fascinating; the excitement of the Moon landings and anything we had done. NASA was and is a wonderful name that when you mention that's who

you worked for, people step up and pay attention. One time in my life outside, I was back in my little hometown in North Carolina. Somebody said, “Where are you working now?”

I said, “NASA.”

They said, “Is that an insurance agency?” It wasn’t everywhere, but most people were learning about it. It was a great organization. It’s been wonderful to be part of it.

WRIGHT: Do you ever find a time that you go back and reflect on that was probably the most challenging time period that you worked for the agency?

MCIVER: Yeah, I think when I was doing some of the earlier launches, because everything was so new and so forth. The little rocket instrument I put together that I was going to be so proud of—it didn’t work, so that was challenging. All through it, everything—the instrumentation challenge, measurement challenge, organizational challenge—they all were good. I can’t think of any particular area.

There was always a moment when you had an organizational problem you were trying to wrestle with, or you had a mission problem. When we were doing the National Aerospace Plane Program, my boss was working hard on that. Since it was Air Force and NASA, we had a little colonel that we used to meet in the parking lot of my apartment building in Washington, and we’d work strategies out. Since we had to get Congress to put the money up, I would go with him to the Air Force side, and he’d say to their legislators, “You’ve got to give us money, because this NASA guy has got his,” which I hadn’t. Then, we’d go down to the other end of the hall and tell the same story on the other side. It helped keep it going.

WRIGHT: You found a way to make it work.

MCIVER: That was a great program, because there we worked very closely with the Air Force. I think, over the years, NASA has been a great partner with the Department of Defense, especially the Air Force.

WRIGHT: Do you feel like you got everything accomplished with that program that you wanted to before you left, or did you find parts of that frustrating?

MCIVER: No, it was frustrating. Some of the technology wasn't ready. It was a fairly expensive program, and so priorities come and priorities go. As we currently know in budgets in Congress, there are going to be airplanes that people love or programs that people have dedicated their lives to make work that are not going to happen because currently we have budget problems. But, don't give up the vision. You've got to keep going. I was looking at an interview with the guy who runs Tesla.

WRIGHT: Elon Musk.

MCIVER: He lives on the edge of failure at every minute but doesn't give up. He's a great model, I think, for a lot of people. The challenges are tough, but they're exciting. You may fail, but don't not go after them. That's what's exciting to me.

WRIGHT: What do you think has been the most rewarding part of you working in your career? What is something that you're most proud of that you were able to accomplish.

MCIVER: It was a small thing—not a small thing, but it was exciting at the time. A guy had invented a way for airplanes to maneuver in the terminal areas—a system he put together that used the radars of the FAA [Federal Aviation Administration]. He got a hold of a congressman who wanted to get his job and research funded. The FAA didn't want to do it, so Congress gave the job to NASA to resolve. I ended up running that little job. It was fascinating, dealing both with the FAA and the private industry and Congress and coming to what was a reasonable resolution of the job. It's those kinds of jobs that I don't forget. I think the Aerospace Plane Program—the part I played on that was exciting. All of the way back to the optical communications job, to do something, work at it, and bring it to some conclusion is exciting. An idea, to me, has always been exciting. To get an idea and work it—it may not work at all, but something of the creative side of you makes everything fun and worth doing.

WRIGHT: It sounds like it. Is there anything else you would like to add or something else you can think of that we haven't talked about?

MCIVER: No. I do appreciate you spending the time with the NACA and that history. You mentioned earlier the centennial or whatever it's called.

WRIGHT: Yeah, that's coming up next year.

MCIVER: It's coming up. The other thing I did enjoy doing very much, as you know, I chaired the final reunion of the NACA here at Langley. The guys called me from California and said, "We want to do one more, Duncan. Would you please chair it?" which I did. The Alumni Association was behind it. Langley was behind it. We did it and had 360 people all over the country. You were here. You got to see part of that.

WRIGHT: We stopped in.

MCIVER: We made money on that, which was surprising. We got about—I forgot—9 or 10K. We made a promise—I did—to the attendees that we would take that money and do something with it good. We wanted to do a scholarship, but we found out fairly quickly that that's a small amount of money. For a scholarship, you need something big.

We looked around for other things and realized that Langley—the mother, the original Center—didn't really have a Hall of Fame. So, with the Alumni Association, we promoted a Hall of Fame, which is called the NACA/NASA Hall of Fame. I'm running that. I put that together. I've got a committee, and we're going to try to do something in concert with the centennial. We've looked at Ames. They have a Hall of Fame, so we'll take that as a model. I think, from the history side, it's going to be fun, but I'm very clever. I'm the operational side to put it together and make sure it works. We'll put it at the [Virginia] Air and Space Center in Hampton. Then, we're going to form an Honors Committee who will select who is in it. I don't want to have anything to do with that. Of course, you run into, "Well, of course, my father or mother should be in that," but we're excited about it. It's going to be a lot of fun.

Someone raised the question should we expand it to the Air Force, because the Air Force has done a lot of things. I think that's something we might think of downstream, but I think, for the moment, working with the History Department is going to be an exciting thing. Gail [Langevin] is very much committed to it and Langley, so that's an exciting thing for the future.

WRIGHT: It is. You'll have to keep us posted and see how it goes. Well, thank you so much for sitting with us and talking today.

MCIVER: Thank you, Rebecca. I'm very much pleased. I really appreciate it.

[End of interview]