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VOICES ORAL HISTORY ARCHIVES
IN PARTNERSHIP WITH NOAA HERITAGE AND THE NATIONAL WEATHER SERVICE

AN INTERVIEW WITH ALBERT “BENJIE” SPENCER
FOR THE
NOAA 50TH ORAL HISTORY PROJECT

INTERVIEW CONDUCTED BY
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Molly Graham: This is an oral history interview with Albert “Benjie” Spencer. The interview is taking place on May 19, 2020. It’s a remote interview with Mr. Spencer in Fort Washington, Maryland, and me, Molly Graham, in Scarborough, Maine. Well, we’ll start at the beginning. If you could just say when and where you were born?

Albert “Benjie” Spencer: I was born June 23, 1956, in Washington, DC.

MG: I’m curious about your family history. I know you’ve done some genealogy research. What have you learned, starting on your father’s side?

AS: So my father, whose name I bear, is from a place called Hazlehurst, Mississippi, in Copiah County of Mississippi – C-O-P-I-A-H, something like that. He has eight sisters and brothers. His mother died while he was young. So he actually has a half-brother whose name also is Albert. I actually have a picture in my collection where the two of them were sitting on a porch down in Mississippi. He believes he may have some Indian blood within his bloodline. His grandmother’s name is Mary Trueheart. I have yet to have been able to get anybody in the bloodline to do a linkage on the female side. So by being the male, it goes through the male but not through the female. So it branches out above my – it just follows my father’s track on his bloodline, which went back to Spain, Ireland, and one other country I can’t remember off the top of my head. I think it’s in the thing I sent you.

MG: Yes, Hungary.

AS: Which makes sense, because – so Mississippi – slave state. I’m assuming Spencer is a plantation name, even though I have yet to find anything that said there was a Spencer Plantation. My father told me – or should I say I recall my father saying, even though my sisters don’t recall it – saying that his original name was Albert G. Brown Gallatin Spencer, and he shortened it once he became of age where you could change your name. Based also on the research I did, it looked like there were two European-American brothers-in-law, Walters and Saunders from Gallatin, Tennessee and named a town outside of Hazlehurst, Gallatin after Albert Gallatin Brown. It [Copiah] had a previous name. I ran across that through some Internet research. I had printed it out. I can’t find it. I have gone back on the Internet. I have not been able to find it again. But I vaguely remember that. So I was curious about whether or not Gallatin and Brown had something to do with the actual Spencer name. So that’s something I have to continue to research when I retire someday and can actually do some research. But two interesting things came out of that. So this is interesting – both of my parents married each other twice. So, what happened? My parents got married, and then it was determined that neither one of them had divorced from their previous spouse. So then they had to go and get a divorce from their previous spouse and then remarry. I think it was – I don’t remember if it was the first time they were married or the second time; they got married in Baltimore, Maryland, at night at the justice of the peace. My father’s darker than I am, and on the marriage license, he’s identified as a Caucasian. Best I can figure it out is this is back in the ’40s. Less questions would probably be asked about a Caucasian person getting married in those particular situations than a non-Caucasian. They probably said it’s probably easier to correct a marriage license than to have it correct in this particular situation. That’s Benjie Spencer theorizing this, okay? So the reason why I said that was because my father had married more than once and his father had married

more than once. Going back two generations in front of my father to Mary Trueheart, Mary Trueheart bore four children, I think in the 1880s, and four in the 1890s. I'm doing all my genealogy work, right? So I'm catching all of these children, right? My tree is populated, and I'm sharing it with various people, and I get an email: "Hey, Benjie, why do you think Pedro's father is a Spencer?" The reason the question was being asked was because there is a family called the Demeyers who had Pedro in their tree. I had Pedro in my tree, and somehow we knew we were related because of the DNA. So somebody said. "Why do you think Pedro is a Spencer?" I said, "Well, Mary's the mother, all the kids, da-da-da, da-da-da." They said, "Well, Pedro ain't a Spencer." I said, "Well, sure Pedro's a Spencer. Why wouldn't Pedro be a Spencer?" Eventually, she sent me a copy of the will from the father of Pedro. The last paragraph of the will – and I think I even got a copy of that in my family tree – stated something to the effect that – "John Demyers had a relationship with Mary Trueheart that gave birth to Pedro." I'm like, "Okay, I'll change my tree. He's a Demyers. Now we know how we're related. So that was one. The other one was – do you remember AMS [American Meteorological Society annual meeting] was in Seattle two years ago?"

MG: I didn't know that.

AS: Okay. Maybe it was three years [ago]. This year, it was Boston. Last year, I think, was New Orleans. The year in front of that, I think, was in Seattle. Just before going out there – speaking roughly like about maybe two months – I get an email: "Hello. I think we're related." "Okay. why?" So anytime somebody says you're related, you just don't immediately say, "Hey, fantastic. This is great." No. You got to go through a Q and A just to make sure that's legit, right? So this lady – God, what is her name? I can't think of the name [Georgia Spencer]. This is a shame. She sent me this email. She said, "I think we're related. I noticed in your tree that you said that your grandfather was only married twice." I said, "Yeah." "Well, I'm here to tell you he was married three times." I said, "I'm listening." "So he also married this particular woman. I am the daughter of that marriage." And she sent me the information and stuff. I did some research. Sure enough. So, on my father's side, there's been some interesting relationships. They've got the multiple marriages, the multiple kids, the [inaudible]. So even after meeting her when we went to the AMS – and my wife went with me to Seattle. We actually went to her house and had dinner with her while there for the AMS. Later that same year, she and her family came to DC to go to the African American [History and] Culture Museum, and we had them over for dinner. It's like doing detective work. I have really enjoyed it. So on my father's side – Mississippi. I'm still trying to get some linkage to Mary Trueheart being Indian blood and that. The interesting thing about right there in the 70s and the '80s – as a matter of fact, almost like the '60s, '70s, and '80s is the hardest part of the time to find very good connections in your genealogy for African Americans. You almost have to find people that were living before slavery and after slavery such that you can make the connection, because when you look at the records, what happened is they'll show you here's a plantation name. They will tell you how many males you have, how many females you have, how many kids you have, and they only have first names. There's no last names, so it's a challenge making that jump. So I think the most I've been able to get back to, I think, is 1858 or '48, something like that. But when I retire, I'm hoping to put more time into it. I think between my wife and me, we have over two thousand names in my family tree from our two individuals. So that's my father's side.

MG: That's so impressive. What inspired you to do this research in the first place and to start to fill in your family tree?

AS: [laughter] So a long time ago, a great adventure. No, I'm just kidding. In 2001, I started working for NESDIS [National Environmental Satellite, Data, and Information Service] on the NPOESS [National Polar-orbiting Operational Environmental Satellite System] program. One of the engineers – basic office; you got your cubicles where the open side faces the other. So I'm sitting across from a contractor. He said, "Hey, Benjie, you ever looked into your family history?" "No, I've never done that." "You should do that." So he pulled up on the computer Ancestry.com. He said, "Look, go in there and do some search. I'm going to lunch. See if you find yourself interested in that." And that kicked it off. I had come to find out my father had actually done a handwritten beginning of a family tree, and he only went back to Mary Trueheart. He has some of the stuff there. But now, thanks to the Internet, there's so much breadth of more. So I've been at it now for at least maybe fifteen years, and it's not boring. The challenge is knowing when you got information that is not good information. So my father was in World War II, served in the Navy, was a sonarman. I had got a hit. There was a person that has his same name, was in the Navy at the same time but was on a different ship. So I was going through what they call – I think they call it the Muster list or something like that, which identifies all the crew, right? So this is my daddy's name, Albert Spencer, World War II. It doesn't have all the nuanced information where you say, "Oh no, that's not it." So I pulled that and got in contact with my sister. She said, "Let me check, but I think that's the wrong ship that he was on." So she did some checking. She said, "No, he was on a different ship. It was not that one." So you run across this where Albert Spencer – great English name, right? [laughter] There's probably a lot of Spencers, right? There's probably a lot of Alberts. Maybe not a lot of Albert Spencers, so that, when you get one, it's kind of like is the probability more likely or less likely that it's one and the same? So that's how I got into it. A coworker said, "Hey, look at this. Try this out." I've been hooked ever since.

MG: So what did you make of that record of seeing another Albert Spencer on another boat in the Navy? Do you think that was a relative or just a coincidence?

AS: That was a coincidence. That person would wind up being Caucasian, and my father kind of looks like me. So it was two different [inaudible]. [laughter]

MG: I'm curious about your mother's side of the family because her origins go back to Cameroon, I think you said.

AS: That's correct. So my mom's home is a place called – on the paperwork I sent you, it said Merry Hill. Ironically, if you go down there, they will say Windsor-Merry Hill. So Windsor and Merry Hill are right beside each other. So if you were to travel south from here through Virginia on Highway Seventeen, it takes you through Elizabeth City, North Carolina. Then it takes you through Edenton, North Carolina. South and east of that is where Windsor-Merry Hill is. The reason why they used the two names with each other all the time is because the people there basically have married substantially across that county line, such that it's Windsor-Merry Hill. Truly country. When we used to go there – and I grew up in Portsmouth, Virginia. So I was born in Washington, DC, in 1956. 1959, my father migrated the family to Portsmouth, Virginia,

so I grew up in Portsmouth, Virginia, until I came to Washington, DC, to go to Howard in 1974. So when we would go down to my mother's home, which her sister was living in – Aunt Gladys – you go down Seventeen. When you see Cofield's gas station and juke joint, you make a left turn. Go down the road. When you see the red barn, you make a left turn. You go down that road until you see a particular dirt road with a curve, and you take that down; that takes you all the way back to the house. Went down there for the funeral. Guess what? There was no red barn. [laughter] Immediately became lost. So my mom's home was Merry Hill, North Carolina. I had done the DNA test. I did two DNA tests. I did one with African Ancestry, and I did one also with Ancestry.com. So the African Ancestry – they actually primarily did the establishment of their database by actually going to Africa and touching as many of the tribes and so forth there in Africa. So they were actually able to track it back to a tribe called the Tikar, I think it is – T-I-K-A-R – in Cameroon. I've actually met other Cameroonians right here because there seems to be a high population in the Baltimore-DC corridor. They invited me to a couple of things. Even a couple of times, I even got invited to an annual event that they have back in Cameroon where they try to get as many of the bloodlines to come there for an annual event. I would tell them I would love to go there. It hasn't happened. I know, with COVID-19, it definitely ain't going to happen. [Editor's Note: The COVID-19 pandemic is an ongoing global pandemic of coronavirus disease. The outbreak began in Wuhan, China, in December 2019. The first case in the United States was on January 19, 2020. In March 2020, a national emergency was declared, and businesses and schools across the country were shut down or reduced operations.] Anyway, her side of the family has not been as involved, would I say, as my father's side. So hers is pretty straightforward. So that's the mother's side.

MG: Are the artifacts you have on your wall from Cameroon?

AS: I do not know the origin of those. Between my wife and I, we have a collection of these that we keep saying we're going to hang up on the wall. The basement had flooded about four years ago. And so we had to take everything down, so now we got a box with all the masks. We've been talking about – "Now that you're home, Benjie, maybe there's some things we can do that we haven't had time to do before." So we got a box full of masks, so we're planning on hanging them up on the wall. This area back here [laughter] – when we started COVID-19, it looked nothing like this. Right? The only thing on the wall was the crucifix and the clock. Because this is my little cubbyhole, right? This is where everything – this is the job computer, right? So the one I'm using is mine, and I have two screens on mine. I have a left screen, a right screen, and a TV. Over there, I got my receiver. Since you are on the screen there – just to show this – I don't know if you can – how well you can see it – this here is a replica of the NPOESS satellite that did not fly, when I was on the NPOESS program. This is a one-fifteenth scale model of the satellite. So it's fifteen times larger than this. The way they kind of describe was like it was kind of like flying – if it had flown, it would have been like flying a school bus. So some of these instruments that are up here are currently flying on the [S]NPP [[Suomi] National Polar-orbiting Partnership] and also on the NOAA-20 satellite in a polar orbit. But this is one of the things I managed to acquire as a part of my – so I had to fix up this area so it would be presentable, especially by yesterday, because yesterday we had an SES [Senior Executive Service] panel that I was on, and so I tried to make it look presentable.

MG: Well, it looks great. [laughter]

AS: Thank you.

MG: Can I ask a little bit more about your father's service in the Navy? What do you know about the ship he was on and where he went?

AS: I might have to – I'd have to look up the name of that ship that he was on and give that to you. He was in the Navy for about two years. He was what they called a sonarman. Back there, during that time, when you served in the military, as opposed to doing so many years before you could get out, you did what they call a – you got points. You acquired points, and then after you got those points, then you could actually then disembark from it. The ship that he was on was the USS – and I'm going to spell this just to make sure that I don't mispronounce it. It's G-U-A-D-A-L-C-A-N-A-L. Guadalcanal – something like that. So that's the ship he was on. So he was a sonarman. My father was keen to sound. He had an appreciation for music, as I do also. I guess, when they did his testing, they figured out that they would use him as a sonarman. Watching television, I only thought of a sonarman as a person on a submarine, a boat. No, they also have them on ships, which makes sense, because if you're listening to what's underwater, it's the same principle, right? So he was a sonarman. I remember him saying that he remembered when he went to – I think it was in Michigan, where he went to basic camp. He said that what they did was that you went out to the side of the pool and they'd just knock you into the pool, jump in, to see if you could swim or not, and it started from there. [laughter] So he got his ship. He served – South Pacific. They have the World War II Memorial. So my father had very little information to share with us as family, relative to World War II. Looking back, there were probably more bad things than good things, since he never – he really did not talk about it at all. So when they came around to talk about establishing a World War II memorial, you could actually log into their site if you had a family member that was World War II, have a service number. I'm all excited. I'm all excited because now I can see what campaigns he was in. Right? Going in, put in the number – nothing. Then I get an email from them saying, "Your father's records were destroyed during the Kansas City warehouse fire. We have no information. We are wondering, by chance, do you have any information you could share?" Ironically, on one of my flights, I remember sitting by this guy, and we somehow started talking about World War II. I had commented about the fact that my father was in World War II, and his records were destroyed in the fire. He said, "Truth be told, it was not the fire that destroyed the paper. It was the water." He said, when they doused the place down with water, that's what really destroyed the records. It was not the fire. But anyway, I still don't have them. So I've been hoping, through some of my searches – now that I know the name of my father's ship, I've been looking. They do have a website for his ship. His name is not there. It's like those individuals that were on that ship and living can put the information there. I'm kind of like secondhand, dare I say. So I'm really wanting to find some credible, substantial information relative to that. So far, I've come up empty handed. I know from the limited amount of research I've done – I also know that the Internet is not the all-in-all for doing research. You have to sometimes go to places. So I might have to go to like some of these facilities where they have Naval records, where something in there has something. Even though his personal records may have been destroyed, that does not mean any and everything that could have been associated with him, and his name in the Navy is not somewhere. So that's on my to-do list.

MG: Do you know how your parents met each other?

AS: My father was raised by his sister. I see her face, but I can't pull out her name yet. So my father was raised by one of his older sisters. He was the youngest of nine. They migrated to Chicago. That sister married a gentleman by the name – last name is Myles. When my father got out of the Navy, he was in DC. Mr. Myles had taken them down to Portsmouth, Virginia. They went to some event, and that's where he met my mother in Portsmouth, Virginia. Since they had met each other – obviously they were already married to somebody else, since they had to divorce their other spouses to get married. So they met in Portsmouth, Virginia, back in the – which would be, I guess, the mid-'40s. So when he got out of the Navy, he actually worked in DC. He actually had been a bus driver, and he had been a taxi driver in DC. That's vaguely what I remember. We migrated down to Portsmouth in 1959. I think he became a taxi driver in Portsmouth. As long as I can remember, I always remember him working at the Portsmouth Naval Hospital. So during the '60s, I have vivid memory and recollection of him working at the Portsmouth Naval Hospital. What I remember him first doing there was working in the kitchen because I was fascinated by the fact of how big the ovens were because the Portsmouth Naval Hospital is in the Fifth Naval District, which is the largest naval district that the Navy has. It encompasses the entire Tidewater area, and I think it includes the Bahamas and some of the other islands, so it's the biggest naval district. So Portsmouth Naval Hospital was one of the major hospitals for the Navy. The oven may not have been that big. As a kid, it was humongous. It looked like it was probably – if I look back on it, the thing had to be at least twenty feet tall. It looked like it was two stories tall. It was as wide as a room. It had this rotisserie in there – because that's how many people they had to feed. The other thing was I remember he actually had one of those jobs of dishwashing. Well, the dishwashing wasn't somebody putting dishes in a tub and washing. No, it was an above-floor automatic dishwasher where you basically scrub the plate, you put it on this conveyer belt, and the dishes go through it. It hits it with water so hot you can hardly touch it. The person on the back end is just taking this stuff off. About a fourth of the stuff that they're taking off is hitting the floor and just breaking because it's so hot to touch. So I remember him working in the kitchen. Around about the – I guess the late '60s, he landed a job in the storeroom. So the storeroom at the Portsmouth Naval Hospital was technically the storeroom for the Fifth Naval District. Okay? Humongous. Humongous. Back at this time, I could get on the hospital grounds because my father's car had a decal on it and, if you had the decal, they just saluted and let you in. He started there as just a person working in the room there – the storeroom. He worked himself up to actually being the foreman for the storeroom. So when he retired, he was the person that was actually running the storeroom. He was good with logistics. He was good with numbers. He was meticulous. He was very organized. What can I say? When he was in DC, he was even a part of a – what you call it – oh, God. It'll come to me. It's the organization – it's one of those organizations where it's a religious [organization], and you have to be indoctrinated to it. You wear the aprons. You got the Scottish Rite, and you got the Yorkshire Rite. What are they called?

MG: The Masons.

AS: Masons. Thank you. Thank you. It's a Mason. Right. So the Scottish Rite and Yorkshire Rite, and he was in the Yorkshire Rite. So he was even one of those because he was also very

much into religion. He was even one time even thinking about becoming a minister, but he didn't go that far.

MG: So would you attend church services growing up?

AS: Oh, yes. We came up in the church. I was baptized in Washington, DC, at Sargent Memorial Presbyterian Church, which I have visited since I've been back here. When we moved down to Portsmouth, we became members of the Community Presbyterian Church in Portsmouth, Virginia. So that's primarily where I grew up. Yes, like most kids, sung in the little kids' choir, the junior choir, the senior choir. Interesting. So when I came back to DC, went to school, married, working, joined a choir at the church that I was in, left that church, went to another church, a person who became a friend of mine. They said, "Hey, Benjie, why don't you consider joining Men and Women of the Gospel, which is under the Kennedy Center." I went, auditioned, got in. The person I auditioned said, "Hey, why don't you consider joining my choir," which was Heritage Signature Chorale. Did that. Okay. So one of the bass singers in there goes to Sargent Memorial Presbyterian Church here in DC. He said, "Benjie, I was going through the rolls of the church because we're coming up on the church's fiftieth anniversary," or whatever anniversary it was. It might have been the hundredth anniversary. He said, "There's this person Albert Spencer in the rolls." I said, "Yes, that's my father. I said you probably saw somebody named Clara Spencer, too." "Yeah." I said, "Well, that's his wife. Those are my parents." "Really?" I said, "Yeah. That's where I was baptized." "Really?" I said, "Yeah." He said, "Well, when are you coming back?" "Well, I've since changed denominations, so I won't be coming back." So that little quick thing there was just to show how things kind of go around in a circle. So born in DC, baptized in a Presbyterian church here, went to Portsmouth, came back to DC, got into the choir, and actually met a person in the choir that discovered that my parents' name was in the church rolls for the church that's still standing here in DC.

MG: [laughter] You have three older siblings. Can you tell me when they were born?

AS: So I have three sisters. The oldest one is Carol, born in 1948. Carol Ann. The second one is Gloria Lynn, who was born in 1949. Then there's Charisse Minerva, who was born 1954. So I'm the only male, and I'm the youngest. Carol, when she graduated from I.C. Norcom High School in the '60s, she went to Norfolk State University. She majored in math. She wound up going to work at IBM in New York, where she met her husband, Michael Askew, and they are still married to this day. They have four kids and four grandkids. She is retired as well as him. Gloria majored in French. She graduated from Cradock. She graduated from Cradock High School. She majored in French. She went to Virginia State University in Petersburg, Virginia, married, divorced, and has one kid. She has a daughter and a grandson. She's retired. She did not do anything in French, even though she did a semester in France. She came back. She wound up landing a job with EEOC, the Equal Opportunity Employment Commission. It took her out to Phoenix. Then it took her to – I think she went from Phoenix to Norfolk to Baltimore to Richmond. Or it was from Richmond to Baltimore. She retired. Now she's living in the house that my parents were living in. Both of my parents are deceased. Charisse Minerva graduated from Cradock. She went to VCU [Virginia Commonwealth University] Medical. It was kind of interesting. Carol went to Norfolk State. Gloria went a little bit north to Petersburg for Virginia State. And Charisse went a little bit further north to Medical College of Virginia,

VCU, in Richmond. Then I went further north to DC to Howard University. Charisse never married, has one son and one granddaughter. She lives in Portsmouth as well as Gloria. They live around the corner from each other. As a matter of fact, Gloria's daughter lives down the street now from her because she moved back. So three sisters, all living, and I'm the youngest.

MG: Do you have any memories of living in DC, or were you too little?

AS: This is what I remember about DC, we lived at 2400 3rd Street Northeast. Yes, I have actually driven past that house just to see that house. How can you not be fascinated by exactly where you lived, where you're born? What do I recall? One thing I recall is, since we went to church all the time, I have a vivid memory where we would walk out the back of the church. What I remember was it was subterranean level, basement level, because I remember we would walk up these stairs, come out, walk across the street, and there was an ice cream shop. I have a vivid memory of that. The other thing I remember was my parents were avid bridge players. The family that we were close to – still close, in some respects, today, with the kids – are the Pinkstons. So they would come over, and the parents would be playing bridge. The teenage kids, which I was not because this was in the late '50s, they would be playing their games. I think it was Paul – “Baby Boy,” I think, was his nickname. He and I would be running through the kitchen and the dining room. The way their houses were designed in DC, they have a nickname. They call them shotgun houses, something like that. What it's implying is the front door and the back door are in line with each other such that, when you open it up, you can see right through. It's one hall. I think it was called a shotgun house. It had to do with the ability to actually shoot a person going through the house. So it was very typical, with that foyer or that hallway, the kitchen would be adjacent to the dining room, and they had two doors. So you could literally go in, come out the other one. Okay? So I have a vivid memory of the parents playing bridge, the teenagers doing something else, and Baby Boy and I – or John Boy, whatever his name was – Paul, I think, was his real name – we would actually run around. That's the only memory I have of DC as a kid. The first three years of my life, and that's all I remember.

MG: What prompted the move to Portsmouth? How come the family relocated?

AS: Because my father thought DC was not a place to raise a family. [laughter] So he loaded up the truck, and we moved to Beverly – Portsmouth, that is. Swimming pools. [Editor's Note: Mr. Spencer is parodying “The Ballad of Jed Clampett,” the *Beverly Hillbillies* theme song.] So that's how we wound up in Portsmouth. We lived in – I have [inaudible]. During my livelihood still being at home, we lived in seven different places during that time, from the time of 1959 to where they passed, based on what I can remember. So I didn't have a real well-established friendship base by being in a single place. So I have a few friends down in the Portsmouth area as opposed to, gee, I grew up in the same neighborhood all my life. We all went to schools. No, because I started off in Cavalier Manor Elementary School, did grade one through four. Grade five, I started off in Mount Hermon. Then I transferred to Academy Park Elementary School, which was a white elementary school in a white neighborhood, and went from there to William E. Waters Junior High School. Then I went to Woodrow Wilson High School for one summer and one week. No – excuse me – I went to Cradock for one summer and one week because I was in the band. I played clarinet. I got accepted into an electronic program, so I transferred to Woodrow Wilson High School for my freshman and sophomore year. They took I.C. Norcom,

converted that school, and so then I transferred to I.C. Norcom for my junior and senior year. So I just moved and moved and moved and moved. The interesting thing with the Academy Park – the way that Portsmouth setup – this is back during the civil rights era. Segregation is a big thing. So Cavalier Manor was the Black neighborhood, and Academy Park was the white neighborhood that was across the street. A ditch was the dividing line between the two communities. At that time, what Portsmouth had was – it was freedom of choice. You could send your kids to any school in the city that you wanted to. This was before busing. There was no busing. Desegregation hadn't come down yet. Okay? So my father and some other Black parents decided we're going to send our kids to Academy Park; wanted them to get a better education. So I can't tell you how many fights I was in. I have a very vivid memory – I'll never forget this one – on this winter day, it was four of us – four Black kids. We were walking home. School was let out early because of the snow. Snow was probably – for us, as kids, it was knee-high, so we're like this, walking through the white neighborhood to get to the imaginary line to get into the Black neighborhood. I'll never forget it. This man came out of his house with a shotgun and started shooting at us. So we had the old typical wooden telephone poles. Wood was splattering off the telephone poles from the bullets hitting it. You've never seen four Black kids run fast before in their life. O.J. [Simpson] had nothing over us. That was something that was traumatic. I have a vivid memory of the Ku Klux Klan being a few miles away. When we lived on Allard Road, it's kind of like a horseshoe street, and it intersected with a street called Gust Lane. Gust Lane, if you stayed on it, took you into Chesapeake. There was a train track that separated Chesapeake from Portsmouth. We were probably two-tenths of a mile, at best – our street from the train track. So the Ku Klux Klan would actually set up at night their camps or whatever you want to call it, and they would actually burn a cross, and they would turn on their bullhorns and say what they would do to us. Very, very vivid memories of that back during that particular time. So when I talk to you about the civil rights era – yeah, I may not have been subjected to it as severe as some of my other peers. If you talk to my wife, she would tell you about the time Martin Luther King came to their church in Shreveport, Louisiana, and the white people threatened to actually burn down the church. So the pastor went and got a gas can and set it out in the front of the church and said, "Go for it." So it's an era that – it was an experience. I put it that way. So I don't know how I got to all of that based on whatever question it was that you asked.

MG: How were you treated in the predominantly-white school that you attended?

AS: My best friend was a white guy from New Jersey. He started attending the school after I did. We became the best of friends, and that just made it really rough. Generally, whenever there was a fight, it was he and I against other people. So if we got jumped by white people, he was fighting with me. If he got jumped by Black kids, then I was fighting with him. The thing is I don't really think – psychologically, you really don't understand what you're being subjected to until you become an adult, and you have a better understanding of life and these things that have occurred during your lifespan and how it affects you. He was my best friend. I would say probably, for the most part, it was somewhat tense. But it was interesting – what you learn after you become an adult – children act out their parents' verbal and physical expressions associated with anything. That was apparent. But it was even more apparent when the desegregation came down, like around 1968, '69. William E. Waters Junior High School that I went to – grade seven, all Black, just a normal school here. For grade eight, the desegregation rules had come

down, and so now white kids were being bused to our school. The school used a chime as opposed to a bell. You know – *ding-ding-ding*. We had a *dong-dong*. So when it was time to move between classes, you would get the chime. So at the end of the day, there were two rings. There was one five minutes before the end of the day, which was the warning bell, and then the departure bell. So to show you how people’s mind thinks, instead of, how do we integrate in a fashion where things should not be different, they desegregated in the fashion where it’s different. So grade eight, teachers are walking around with walkie-talkie. Never seen that before. The first time we ever saw people in junior high school pregnant – that was a shocker. What’s so unique about the bell? All the white kids were allowed to leave at the warning bell at the end of the day. All the Black kids had to wait until after all the white kids left before they could leave. So to tell you frustration – the last day of school, all the Black kids left with the white kids. The Black kids got to the bus before the white kids. The Black kids tried their best to kick every white kid’s butt before they got on the bus because they knew they couldn’t leave. That was frustration. The thing is, as an adult, the adults of that era did not take the time to understand the why. They just said it was wrong. There were so many things during that era at the beginning of desegregation, even through my high school years, that were traumatic. Norcom – I went to I.C. Norcom High School. I’m in the marching band. Our band gets invited down to South Carolina, Myrtle Beach. First time in my life ever gone to Myrtle Beach. The name of our school is Norcom. So what do we have on our breastplate? The letter N, right? It was like an eleven-mile parade, a ten-mile parade, something like that. So very typical of an African American school, we only had one uniform. So we don’t have a marching uniform for summer and a marching uniform for winter. We only have one uniform, where basically it’s for when it’s cold. So we’re marching in these uniforms – hot, sweating, playing. So as we were walking down the street, repeatedly, we’d be called n***s because we had the N on our nameplate, right? We even had things that were thrown at us and stuff and everything. To this day, I have yet to go back to Myrtle Beach. That is the impact that had on me as a young teenager where, after that happened, I had absolutely no interest in ever going to Myrtle Beach. To this day, I have yet to go to Myrtle Beach. That’s the psychological impact. So I have lived through that civil rights era, where it has affected me in a way where, in an environment where I currently work, we have taught our children the difference between subtle and blatant racism. I can tell you, yes, in NOAA [National Oceanic and Atmospheric Administration], in the National [Weather Service], it exists. And the thing is – everybody that does it does not do it intentionally. But the behavior in some of the people is so ingrained that they don’t even know that they’re doing it when they do it. If you tell them that that was inappropriate – “Well, what are you talking about?” It’s the kind of thing – the more you do something, you continue to do it, continue to do it, you self-justify that it’s right as opposed to I know that’s wrong, and every time I do this, it’s wrong. I have had people within NOAA and in the government say – I’ve been in meetings, I’ve been in sessions that people said, “Benjie, I don’t believe what that person just said.” I said, “I’m not surprised.” They said, “Well, aren’t you going to retaliate or something?” I said, “No.” I said, “A person at this stage of life, the likelihood that they are to change is zero.” I have to determine whether or not – did they actually mean it to be malice in nature, or they just feel I look like them, so what’s the big deal? So when things like this happen, I have to ask myself, does it raise itself to the level where it needs to be addressed? When I see certain people react a certain way, typically, what I do is I don’t go to the person that made the statement as much I go to the person that reacted to the statement that was made. To me, the person that reacted to it – obviously, in their DNA, there is something that was wrong

with that, and they did not appreciate it. I respect the fact that you, as an individual, were able to pick up on that. That means there's hope. The person who said it – there is no hope. I'm sorry. You know, you can't be thirty-five, forty, forty-five, fifty, fifty-five, sixty years old and saying something like that, and tomorrow I'm a different person. So being in the position that I'm in as a senior executive, even before a senior executive, I always weigh – when a person says something – and depending on what it is, what it is, I have actually gone up to people and said that that was inappropriate. Generally, when I'm doing it, I'm doing it more so for the other individuals, not me. I've gone through the scarring. I've gone through all of that. I've been beaten down. I've been called all kinds of things other than a child of God. Hey, at this stage in my life, you pick your battles.

MG: What kinds of discussions were you having about the civil rights movement in your home? Were your parents involved with the movement?

AS: So my father, being a federal employee, you have to be careful with where you reside in an organization. My father was smart, though. So my father was very active with the NAACP [National Association for the Advancement of Colored People]. He was the secretary for the NAACP for the chapter in Portsmouth, Virginia. My father actually was the person that strategized how to establish a campaign to put Dr. [James W.] Holley on the ballot. He got him voted to be the first Black mayor of Portsmouth, Virginia. I remember meetings, tons of meetings being held in the house. My father had the capacity to be the president. But since he was a federal employee, he would only be no more than the secretary, and so what he would do is – and I remember – even though he wasn't the president, he was the one that's saying, "Here is the approach. This is how we should do it. This is the process we should do and da-da-da." So he played a very major role – he and my mother – in actually establishing the level of involvement of the Blacks in Portsmouth, Virginia and becoming a part of a voting bloc, dare I say, to put the first Black mayor, Dr. Holley into office to be the first Black mayor of Portsmouth, Virginia. So they were very keen. My father was very adamant about the word sir in that do not, at any time, refer to him as sir. The reason was because sir is a white person term to use to show a distinction in level or rank between yourself and the other. So if you want to refer to me as something, you can call me mister, but don't call me sir. Okay? So he lived through various things, being a Black person. Virginia is not the northernmost southern state. That's Maryland. There was a lot of racism in that part of Virginia, down in that Tidewater area. So he and my mother both were very involved in the community to get the Black person a better voice, more voice, footing in the neighborhood.

MG: You said you moved around a lot. Were the neighborhoods that you lived in predominantly Black neighborhoods?

AS: Yes. All the neighborhoods that we lived in were Black neighborhoods.

MG: I want to hear a little bit more about your experience in school. Were there any classes you took that you loved or teachers that stand to you?

AS: I loved math, and I loved music. I love math, I love music, and I love electronics. [laughter] Music, I guess, because my father is because of the music. My father loved jazz,

country and western, classical. I love jazz. I love R&B. I love classical. Never really got into the country, per se. There are a few selections in there. It's interesting knowing the music genre. The R&B, rhythm and blues, was a different genre than soul. But the music industry decided to actually merge those two into one, which took away the essence of what soul is. Rhythm and blues is dealing with –country and western and rhythm and blues are more tied together than soul and rhythm and blues. So soul was definitely a separate genre that primarily and predominantly was by African Americans, where rhythm and blues – it didn't, because you actually had Caucasians that sung rhythm and blues, you know? They were storytelling. Country and western and rhythm and blues – which now they're forced to be blues – is storytelling. So I kind of acquired it. I love jazz. I remember there was this one AM station; every Sunday evening, they would play jazz. The guy had [imitates deep voice] – “Hi, my name is so-and-so and so-and-so. Welcome to Sunday evening jazz.” Oh, I just loved that. So, in the public school system, going from sixth grade to seventh grade, that was when you determined you wanted to do band, orchestra, woodshop, home-ec – whatever. You had to make – I selected band. I wanted to play drums. “You're not playing any drums in this house.” Okay. So then I said I wanted to play sax. So we were a low-income family. The way the public school system was set up, you had to buy your own instruments. They did not provide the instruments. So we went to the pawnshop. My father said, “I can't afford a saxophone. So the guy said, “The clarinet is cheaper,” so I got a clarinet. I played clarinet through junior high and high school. My head was bigger than my brain, I guess. So why am I saying that? The way that the band is set up, for the clarinets, you have first clarinet, second clarinet, and third clarinet, and then with each one, you have [inaudible]. So I have never played second clarinet in my life. I only played the third clarinet and first clarinet. So in junior high school, I started as third clarinet, first chair – then they moved me up to the first clarinet, so I'm first clarinet, third chair. Never played second clarinet. So when I got to high school, I started at third clarinet. Then I moved to the first clarinet. So why was my head big? I didn't practice music at home. I could pick up the music that quickly. I had nobody mentoring me about, “Hey, let's work with this.” So I probably have an untapped talent in that particular area that was never realized at the right age. So music I love. Junior high school, Tom Hardy was the band director. One of the things he was known for was throwing erasers at you. That was very common in the Black schools. You can't play your part, they point at you and – “Why are you sitting down? Play your part. Stand up. Play your part.” You couldn't play it – took an eraser – *woom* – threw at you. [laughter] So Thomas Hardy was my junior high school director. When I went to Wilson, I don't remember the director at Wilson. But at Norcom, I remember we had a Black band director. He was a trip. So when we practicing marches outside – see, at this time, it's during the daytime, people would be suing schools left and right. So when you would march, you were required in the Black – it's very typical, if you ever noticed, in Black bands – we don't walk-march. We typically raise our leg or our thighs parallel to the ground, and, with the feet, the toes are typically pointed down. That's the basic march. Then the exaggerated version of that is when we dip with it. Okay? We march, and we dip with it. So the leg comes up, you go down. When we used to do march practice, he had a – you know the bolo bat . So he would have one of those, and he had a hole drilled in it. So if you didn't march right – *pop* – on your butt. [laughter] This was customary, right? I really enjoyed being in the band. I enjoyed playing the clarinet. I enjoyed math. I took algebra I in the eighth grade, which was uncommon at that time. This would have been 1967, '68. Let me see. '67, I think, is when I was in eighth grade. I started high school in 1970. So I guess '68. So in the seventh grade, you had to take a math test. Based on the outcome of that

math test, it would determine if you would take algebra I. I took the test. I passed, so I got to take algebra I in the eighth grade. As a result of taking algebra I in the eighth grade, it allowed me to apply for the – it was called the – I’ll think of it eventually. It was an electronics program [Pre-apprenticeship Electronics Program] that was in conjunction with the Norfolk Naval Shipyard. The Norfolk Naval Shipyard is in Portsmouth, Virginia. It’s not in Norfolk. It’s not in Norfolk, Virginia because it’s in Portsmouth, Virginia, but the reason it’s called Norfolk Naval Shipyard – because there’s a Portsmouth Naval Shipyard up in New Hampshire, and you can’t have two shipyards with the same name and on the same coast. So there was an electronic – oh, it almost came to me – so it was an electronics program set up in conjunction with the Norfolk Naval Shipyard infused into the high school program. By taking algebra I in the eighth grade, it allowed me to be in that particular program. So I had electronics through my freshman to senior in high school, which I thoroughly enjoyed. So electronics is one of my things. I guess that’s why I have an electrical engineer degree. Yes, I did get in trouble with my father, per se, because, yes, I was known to tear into things and could not put them back together. But that was one of my thrills. So music, math, electronics – I did that throughout my high school years. While in high school, I actually worked in a TV shop. I started out sweeping the floor and wound up becoming an uncertified TV technician. I was actually at a point where my boss would send me out to service people’s TVs by myself, driving the company truck to the house to service the TV, which was also interesting and a challenge too, because if you think back in the ’70s, ’74, which I was in high school – color television is kind of new now. Very few Black people have color TVs. So unlike the TVs that we have today, which are LEDs, LCDs, nice flat screen – I don’t know if you remember the rear-projection TVs.

MG: I’m not sure I do.

AS: So the rear-projection was the ones just in front of the generation of TVs we have now called flat screens. Typically, your flat screens are kind of like this.

MG: Oh, yes.

AS: Your rear-projections were kind of like this. When you look at the back, they had a slant. So if this was where the picture was, there was a slant, and then it went like this. If you remember, that was what we call a rear-projection TV. So what it was – what you saw was the screen. What was behind it is what was imaged on that screen – hence, rear-projection. So the reason why it was slanted – because there’s a mirror here to reflect it onto what you’re looking at. In the bottom of the TV is essentially three TVs – more technically, three picture tubes. So in your older TVs, the three picture tubes were in one. So what are these three picture tubes? One was red, one was green, and one was blue. For TVs, those three colors give you all the colors that you need – except for black. You just don’t emit anything for black, right? [laughter] With all three together, you got white? So you got everything in between. So, with your rear-projection TV, you had three of these things – red, blue, and green – that projected. But in your older TV, it was one great big tube – your picture tube – with those three what we call guns in them. So when the picture didn’t look right, it could potentially be because one of those three guns are out. I go on a service call – older Black lady. She said, “Hey, my picture don’t look right.” So I go and look at it. I said, “Your picture tube is bad.” “Boy, don’t be telling me my picture tube is bad. I see a picture. What do you mean it is bad? Ain’t nothing wrong with that

picture tube. Boy, get in there and fix that TV. Make that thing look like what it used to look like before what it looks like now.” “Now, miss, it’s your pic.” “It ain’t my picture tube. I see a picture, so don’t be” – that was one of the hardest things. I had a business where I would go in there, and I would diagnose it correctly, and – “Oh, boy, you don’t know what you’re talking about. You’re so wet behind your ears; you don’t have enough hair on your head to see how wet you are.” All kinds of things. So that was a challenge. But I enjoy electronics, and that set the foundation for the rest of my professional career.

MG: I bet.

AS: So I love music. Even when I went to college, I decided that I was not going to get in a band because I could not equate being on the football field practicing in the morning and at night and trying to get an engineering degree. Some people could do that. I couldn’t do that. So I joined the gospel choir. [laughter]

MG: Before we get to college, I just wanted to ask you a little bit more about this apprenticeship you had at the Norfolk Naval Shipyard.

AS: That’s it. That’s what it was called, yes. The pre-apprenticeship program – there you go.

MG: Would this have been during the Vietnam War years? Was the shipyard working in conjunction with the war and production?

AS: So was this during the Vietnam War? Yes. The reason why I can say that – because, yes, I had to apply for the draft when I was eighteen. Yes, I did have a 1-S status. [laughter] So I don’t know if you know what a 1-S status is – okay. So the Norfolk Naval Shipyard was not a production house, but it was a place where they did repair work on ships. I was assigned to the USS *Mullinnix*. [laughter] I worked in what they call the Fire Control section. So when they said you’re going to be in – because it was a group of us. It was a group of us in the class. And when they said you’re going to be in Fire Control, I’m like, “Why am I going to be putting out fires? What in the world does that have to do with electronics?” Why am I going to be going to Fire Control” Come to find out – fire control was the controls for the guns on the ship. Who knew? I was just a young kid. Because I think it wasn’t until we completed our sophomore year in high school that we were able to actually go down to the shipyard and work. Fascinating. Do you know how you see these computer racks? I was working with this guy that’s probably five times my size. He’s sitting there, and he’s wiring the rack – fascinating – on the ship. So the ship has three decks. You have the top deck, the middle deck, and the bottom deck. Top deck – gun. Bottom deck – ammunition. The middle deck is a rack that aligns where the ammo is coming from the bottom deck to the gun, based on the position of the gun, to load and fire. They have four sets of drums on the lower deck. One was the shell, and one was the gunpowder. So they would line it up. The rack on the middle would align itself with the bottom, and would transfer it up. Then it would rotate, align itself with the gun. Then it would take it up, and it would load the gun. The guns on the ship used to be manual-control guns, where somebody actually sat in there and aimed it. Okay? It might sound strange, but they modernized it, [laughter] where it was done through electronic control. So where people used to sit, they now put the gearboxes and everything in it. These two old white guys – I’ll never forget. So imagine – they’re sitting

like this on the middle deck. The gate – the fence is away from the thing that’s moving around. They’re sitting like this, and this thing goes *whoosh-whoosh*. You see their hair fan back and forth like this as the thing – and they would say, “It ain’t right. It’s vibrating.” I’m like, “What the hell are they talking about?” The only thing I see is this thing swinging. They said, “Hey, you, come here. Go up there and sit in that gun. We want you to tell us such and such.” They said, “See if any of those sprockets up there or gears up there are doing this [vibrating].” I went up there. Sure enough, it was doing it. I came back and said, “Yeah, it’s doing it.” “See, I told you.” [laughter] So I got to work on the ship, helping them with the guns. Yes, I did have the you-know-what scared out of me at one time, because they did an underwater explosion, and I was in the lower one [deck]. When that thing exploded, I took off running out of there like a bat out of hell. All the sailors on the ship just fell out laughing. [laughter] They said, “Oh, we just wait for that when you young guys come up here. We know that, when they do these underwater explosions, it’s going to scare you.” I was trying to get off that boat as fast as I could. So the Pre-apprenticeship [Electronic] Program was in conjunction – was actually sponsored by the Norfolk Naval Shipyard. The intent of it was to actually bring up, train people in engineering, and have them consider being – to actually come and work at the Norfolk Naval Shipyard not after you finish college but after you finish high school. Yes, Vietnam was still very much alive and well at that time. So ships and boats would come into Norfolk Naval Shipyard for repair and stuff. That was my experience with that, dare I say.

MG: Were you fearful of being drafted? The Vietnam War ended the year after you graduated from high school.

AS: Yes, I was fearful of being drafted. As a matter of fact, on one of those draft lists, my birthday was like number six or something like that, within the top ten. But I was still a 1-S status because I did apply to go to college. As a matter of fact, the Marines tried to pick me up, and I said no. I don’t know if they still do it today, but back during that time, it was very customary where you did the Armed Forces exam. They would take the results of that, and they would provide that to the various branches of the military service. So the Marines got in contact with me. They got in contact with me – the recruiter, right? “Oh, you need to come into the Marines. Come on down here to the such-and-such and sign up to become a Marine.” I said, “No.” So they were trying to get me to sign up. They wanted me to be involved in what they were doing with computers. I probably could have easily done it. If we probably weren’t in the wartime, that could have been an avenue, which means I would have never met my lovely wife here, which means that I would not be working for NOAA. But computers were something that I was good at. In high school, we had an analog computer and a digital computer. As a matter of fact, when I went to Howard, I didn’t have to do flow-charting because I could just see the program in my head. I’d just write it and went on with it. Anyway, I elected not to go into the service. My father was in the service. I did carry a 1-S status. By staying in school, I carried that 1-S status. My two best friends that I grew up with – Gaston and Aaron – Gaston went into the Army. It’s interesting when you look at the statistics. So, for us, one out of three, only finished school and went to college. They didn’t finish high school, either one of them. So Gaston went into the Army, and Aaron went into the Coast Guard. We’re still good friends to this day. We still communicate with each other off and on, but I was one that made it through. I think my mother finished high school. I don’t think my father finished high school. Of my three sisters and I – all of us did undergraduate and completed undergraduate work. With our children

– Margo and I, we have two kids together, and I have two kids prior to marriage. So Tiffanie and Mikaela both did undergraduate and master’s work. And Tiffanie went on to do doctoral work. So Tiffanie is the first one in the bloodline that has a doctoral in [inaudible] tree. So that was pretty exciting.

MG: I never asked if your mother worked outside the home.

AS: So my mother was a beautician. She worked outside of the home. When we were in Portsmouth, she actually rented a chair or booth. She actually would walk to it. My mother tried driving and just couldn’t do it. She had difficulty where cars were coming in the opposite direction – she feared that they were going to always hit her, so she didn’t drive. My mother used to walk me to elementary school, which was very customary at that time. You walked your younger kids to school. Once they become a certain age, then the bigger kids walk the little kids to school. So she was a beautician. She worked. She did hair at the shop. She also did hair at the house. I remember the big clunky curling irons and the little small ovens that they would put the curling irons into. I remember when we lived on Allard Road, she worked. But I think when we moved from Allard Road to Basie Crescent, she kind of stopped working. To put it in perspective, when we moved from Allard Road to Basie Crescent, I think I was in the sixth grade. I think I was in the fifth or sixth grade because I used to also ride my bicycle to Academy Park Elementary School, besides walking, but I think it was at that time.

MG: When you were a senior in high school, what did you think your next steps would be? Did you know you wanted to go to college? How did you choose Howard?

AS: I wasn’t sure if I was going to go to [college]. I wasn’t sure if I wanted to go to college or not. Another one of my best friends, John Hudgens – we were good running buddies and partners because we both were into music and we both were in – as a matter of fact, we became friends in elementary school, and we went to Academy Park together, and we went to Waters together. We went to Wilson together, and we went to Norcom together, because we had the same interests. He was fortunate where his family actually gave him private piano lessons and private violin lessons. I got no private lessons. [laughter] So one of the things we had at Norcom was they had wanted to change it to a technical school, and the city wouldn’t have it. So a short go back. At the time, back in the 60s, of course, you had the Black high schools, you had your white high schools. For Blacks, it was primarily only one high school, and that was I.C. Norcom. The whites had multiple high schools. By the time junior high school came around, they had built a second Black school, which was called Manor High, which was in our neighborhood. So they decided, as a result of the desegregation, we got Woodrow Wilson, we got Norcom. Woodrow Wilson’s white. Norcom is Black. They’re a couple of miles within each other. We don’t need two high schools that close together, so we’re going to close Norcom. The Blacks went buck wild. They went livid. They went crazy. It was almost like they were ready to burn the city down if you were to close Norcom. So what they did was they said, “Okay. So we’re going to take Norcom. We’re going to make it a special school. It’s going to have all the standard high school curriculum, but in addition, we’re going to bring these other things into it that will prepare people for college or if a person doesn’t want to college. So our electronic program transferred from Wilson to Norcom. And that’s how I wound up going to Norcom. You had journalism, automotive mechanics. You had diving. You had cooking. You

had just beyond typing. You had a higher level of administrative skills. So all of this was in that school, so this school was unique. Norcom was a school that transitioned to something special, and you actually had to apply to get into that school. Now, what was the question that you asked me?

MG: How were you making plans for after graduation?

AS: Yes. So coming up in the senior year, I knew I didn't want to stay in Portsmouth, and I really wasn't interested in going to college, either. So my boy (John Hudgeins) said, "You need to go to college." "Eh, okay. All right." So I applied to Norfolk. He said, "Apply to Howard." I said, "Okay." So I applied to Norfolk, and I applied to Howard. Both of them had accepted me. Howard was further away from home than Norfolk State, so I went to Howard. My father packed a chest, put me on a Trailways bus. I rode that up to school. One of his friends in DC picked me up at the train station and took me to Cook Hall, Howard University. That was the beginning of my college career.

MG: Did you know you wanted to study engineering?

AS: I was torn between engineering and music. I decided to go with engineering because I figured I could get a paycheck quicker than going into music. So I was in the second graduating class of I.C. Norcom after they had done this transition. So the first graduating class was less than a hundred people. The second graduating class, I think, was right around just over a hundred. So I do enjoy singing, which you're aware of. I was in a band. We also do stage productions, like any high school, which means you need a stage crew. The stage crew was four people. I had the lights. Another person had the curtains. Another person had the sound. And another person sat out in the audience, all the way in the back, giving us instructions on what to do when. So we put on the production of *Purlie*. There's two songs in there where the bass voices are prominent. So the music teacher's like, "Benjie, I need you to sing with us." "I can't operate the lights and sing at the same time." "Well, you need to find somebody else to do the lights." Nobody is standing in line to do any stage production. There are only four of us. There are only four of us. There are only four of us. Nobody is interested [in this]. Oh, he never let me live it down that I did not do that production with them at all. It's a great production – [singing] "The first thing Monday morning, I get up and go to set things straight." So that was good, but the takeaway there – it was small. I was on the stage production crew. It was an interesting four years of high school. So now, thanks to Facebook and other types of social media, they allow you to have some interaction with the people that I actually went to school with. I know we're transitioning from high school to college. So everybody calls me Benjie. I acquired the nickname Benjie in the tenth grade, which is short for my middle name, Benjamin. Everybody here calls me Benjie – everybody. It's to the point where, if somebody calls me Albert, somebody's like, "Who the heck is Albert," right? So even though, technically, this is in the next part – so, one day at work, two of us decided to go down Georgia Avenue to Popeyes, I think it was, to get some fried chicken. So this is a little way down. I'm standing in line, and somebody said, "Hey, Albert." I said, "It got to be somebody from Portsmouth." Here's a guy standing in a uniform, sure enough, we went to school together – I.C. Norcom. I hadn't seen him since I left high school. That was the first time I had seen him since then. But if you call me Albert and don't call me Benjie, it had to be somebody that knew me from time past.

MG: Why the switch in tenth grade to Benjie?

AS: So it was a making of my own. Albert is a hard name to pronounce. To me, Albert is a conservative name. I don't think I have a conservative bone in my body. I feel like Albert is – I should be a chemistry professor with a three-piece suit on with a goatee hanging down off my chin teaching chemistry or something. That is not my personality. I'm a laid-back person. So Benjie is a much more casual, relaxed name. Even though I've got so many modifications that people call me associated with Benjie, it's – but I tell you – when you hear people pronounce the word Albert, a lot of time they don't pronounce the T in Albert. I've been called Abbott. I've been called Albott. When you say Al, it's – Al is one of those kinds of syllables where you don't say Al because it sounds like something's missing, so you say Al – you just kind of say Al, and they're kind of like, "Ahh." I think it fits my personality more than Albert. When you say Albert, you really have to stop and think on how you formulate your mouth to get Al out because it's so hard of a vowel – Al – okay? You know, Benjie just roll right off the lips. It's a nice, comfortable constant – Benjie. So that works for me.

MG: Well, you talked about when you arrived at Howard, and so I was curious to hear about your first semester on campus – where you lived, the classes you were taking, and things like that.

AS: Lived on campus – the Cook Hall, C-O-O-K. Something that is ironic – so Howard University has this – it's kind of like a buddy system, and it's called the Campus Pal. So when you first come to school there, they have already assigned you a person to be your Campus Pal. The purpose of the Campus Pal was to introduce you to school, show you around. You have questions, and you have somebody that you can reach out to. And this person's name is Dawn Young – who is my Campus Pal. So this is 1974. We are still friends today because, ironically, she is – I'm a member of Phi Beta Sigma Fraternity. Our sister organization is Zeta Phi Beta Sorority, which she is in. My wife is also a Zeta and been friends the whole time. So Dawn does not hesitate to remind my wife that, yes, she knew Benjie before she did. [laughter] So Cook Hall. Howard University is a small inner-city campus by all respects. I started in '74. I did not come out until '81 because I did go – I did sit out a semester, and I also went part-time for some of that period of time as opposed to carrying a full load. I was working and paying my own way through school for the majority of it. So my freshman, sophomore year, I did spend on campus. I think it was around '74, '75 – it was maybe '78 – it may have been '78 when I moved into – yes, it was. I think it was '78 when I moved off-campus. Five of us lived in a house on Irving Street in DC, in a row house. Spring '79 I took off from school, came back home to Portsmouth, and actually worked in that TV shop that whole semester. Summer of '79 is when I went back – summer of '79 is when I came – I didn't really leave the government. The program I was on with the government was called the ten-forty program, which is half of the twenty-eighty. So the government year is two-thousand-eighty hours, so the ten-forty is half of that, and that program for students was – you could not work more than one thousand forty hours in a year. If you did, you were kicked off the program because the intent was to help you as a student in school financially as opposed to not going to school and working for the government. So that summer, I was still working for the Overseas Operations Division, an office within the National Weather Service, while in school. That's the summer I went to Swan Island, and came out of Swan

Island, and went back to school. Coming out of there, then I was staying in an apartment with one of my frat brothers in Hyattsville, Maryland, until I graduated.

MG: Tell me a little bit more about the fraternity. What was pledging like?

AS: Your African American fraternities are very service-oriented type fraternities, with an emphasis on doing things for the Black community at large to help them deal and get through some of the struggles that we have as an African American community. At that time, pledging was typically an eight-week ordeal, starting in like February. You're probably tired more than you're not tired during that because you're constantly busy. It's all about trying to avoid your big brothers. [laughter] You learn all kinds of shortcuts and hiding spots and everything to try to keep from being seen by your big brothers because you know if you get seen by your big brothers, you know you're going to have to do something. As a matter of fact, believe it or not, the reason why I am here today is because of the fact that, while I was pledging, one of my big brothers actually worked for the National Weather Service. When you were pledging, we were called Crescents in the Phi Beta Sigma program. [And I heard him] say, "Crescent, take me to work." I took him to work. "Crescent, come inside and fill out a job application." I did. Next thing I know, I get called for a job interview. Next thing I know, I get offered a job [and I had] no place to stay. So pledging was an experience. One of my floormates asked me to consider it, and my roommate and I did, and then my roommate and I did pledge. The rest is history. So that was back in 1976.

MG: I want to learn more about that position, but I also wanted to ask about your involvement in the gospel choir on campus.

AS: So it was the Howard Gospel Choir. It was Arphelius Paul Gatling III who auditioned me. Coming up in the Presbyterian denomination as opposed to Baptist or one of the others, gospel music is not their primary genre. In the Presbyterian church, we do anthems, we do the hymnals, and you may do some light spirituals, per se, but it's not gospel music like you would find like in a typical Baptist church tradition. So I was recommended to join the Howard Gospel Choir. As a matter of fact, the same person that asked me to join the fraternity was the same person that asked me to join the gospel choir because he was singing in it – a gentleman by the name of Haywood Allen, and we're still good friends to this day. So I went and auditioned. Paul said, "Okay, sing me your selection." I said, "Okay. Let's do hymnal number one, *Holy, Holy, Holy*." So we did *Holy, Holy, Holy*. He said, "Okay. Let's test your range." I said, "Okay." So first, he went up, and he said, "Oh, so you can falsetto to a second soprano. Good." Then he went down. He said, "Oh, okay, fine. I'll stay in the lower range. You're in the choir." So I got in the choir and started singing. We even have a Facebook page for the alums of the Howard Gospel Choir. One of the members out of the choir – the selection – which is pretty internationally known – if I could remember stuff like I used to, I would probably be a dangerous person. Hopefully, it'll come to me eventually – was a member of the choir at that time, back in the '70s, is a very well-known gospel musician right now. One of his selections, they call it *Perfect Peace* – is that the name of it? It's been sung internationally so many times that it's just outstanding. It's *Total Praise* by Richard Smallwood. We only had rehearsal twice a week, which was great, based on the schedule I had. It was also a way to release stress in college. When I was pledging, that was one of my hiding spots because, when we had rehearsals, if those

members that were members of the fraternity, if they sang in the choir, did not try to do anything while I was singing in the choir or anything. If members of the fraternity came looking for me, they would hide me so that I wouldn't have to worry about being seen. But I really thoroughly enjoyed singing with the gospel choir. That was my introduction to singing gospel music. So when my wife and I got married, she was a member of Shiloh Baptist Church at Ninth and P in DC, and Everett P. Williams was the director at that time of the gospel choir. I auditioned and got in their choir. Everett came to be close friends of the family such that he is the godfather of our oldest daughter, Tiffanie, and to this day is – not for Tiffanie – for Mikaela, excuse me. He's the godfather for Mikaela. The two of them are just like that. So that eventually led to me auditioning for the Men and Women of The Gospel and auditioning for the Heritage Signature Chorale.

MG: Where would you perform mostly? On-campus or would you travel at all?

AS: We performed on campus, and we traveled. I remember going to Boston. We went to New York – I think it was New York – at a Catholic church. We did perform *Hymns of a Soulful People*. One of the directors – well, a musician that actually composed a mass – a Black mass or mass for Black people. We actually performed his composition at a church in New York. We also did it at the University of Illinois. What was interesting about that was he was torn between the University of Illinois and the Howard Gospel Choir [doing it]. So he wound up choosing the Howard Gospel Choir to perform it. It was great. Really enjoyed it. We did some outstanding pieces during that tenure. I really enjoyed singing.

MG: Can you tell me about the classes you were taking and your engineering curriculum?

AS: Yes. So talk about being bombarded with math – the calculus, the differential equations, E-mag [electromagnetic] theory, the whole gamut. It was a full load. It's a full load because of the non – you have your EE [electrical engineering] curriculum with the electives – or you have the engineering curriculum, you have the EE curriculum on top of the engineering. So we had four engineering disciplines – electrical, mechanical, civil, and chemical. So you had your base engineering subjects everybody had to take. Then you had to take your own discipline courses, and then you also had to take some of the other discipline courses. Then you had what the school required as far as your English, your history, your literature, your basic whatever. Is this correct? If I remember, I'm thinking the number of credit hours we had required was something like around a hundred-and-twenty-something, because really the number of credit hours required equated almost to a comfortable five-year program that they squeeze into four years that took me, dare I say, seven years because I was going part-time, and plus I had sat out a semester. It was interesting. It was challenging. I enjoyed the engineering courses more than the other one, dare I say. I had my own little study group. It was only four of us – two ladies and two guys and no more. That was it. I wouldn't allow it to be any bigger than that. And we were, I would like to say, a pretty impressive foursome. As we moved into the junior and senior years, we studied everything together. We tried to line our classes up with each other. One of them was Carol Cochran. The other one was Lisa Young. Lisa Young is the daughter of Mayor [Andrew] Young from Atlanta – and Frank Brown, who also pledged on my line with me. We just killed it, and we had a ball. We would actually go into the engineering school after sunset and use the classrooms to do our studying because, for me, some of the problems were just so long, trying to

do it on a sheet of paper just didn't work. When you have a three-integral equation, and on a sheet of paper, it's just rolling and rolling and rolling, you can put it on the blackboard or the easel and stand in the back of the room, and you see the whole thing, it's kind of like, "Oh, that makes sense." Looking at it zigzag, and it's kind of like, "I don't get this." It was intense. It was good. One of the interesting things about going to Howard was – coming out of the things I was experiencing during the civil rights era in high school, going to Howard was like the pressure and stress that I had been subjected to while I was in high school was no longer there. I didn't realize that I was under that amount of pressure and [stress] until I went to college and realized I no longer had the stress upon me. So college was good for me. I enjoyed it. Engineering's hard. I love physics. As a matter of fact, if I had to do it over again, I might have majored in physics and taken electrical engineering as a master or as a double major, but I really enjoyed physics.

MG: How were you picturing your career? What did you hope or plan to do with this degree?

AS: The only thing I wanted to do with my degree was anything that had to do with electronics. I didn't care what it was. I was not looking to be this, this, or this. I just enjoyed doing anything that had to do with electronics. I just loved it. [laughter] So ironically, when I had landed my first job with NOAA – National Weather Service in the Overseas Operation Division – it was a communications engineer. That was fine because when I was back in high school in that pre-apprenticeship electronics program, the teacher of that was a ham [amateur radio] operator, and so communication engineering was somewhat being embedded. We had to actually – not only did we study the work in high school, but we actually built class-A amplifiers and radios in the class. We would take a sheet of aluminum. We would actually bend it. We would punch the holes in it. We would actually put the vacuum tubes in it and do the wiring of the resistors and capacitor and other components – did all of that in high school. Most people probably don't even know what a tube is today, but we did that. So, when it got to college, engineering – aspects of electronics was not foreign to me as what this is. That probably helped. I would like to assume that when the school was making decisions on selecting students to come to the school, by already having somewhat of an exposure to electronics enabled that. So I was not focused on becoming a specific kind of engineer. I just enjoyed what I was doing. I lived for the moment.

MG: Yes. You were also familiar with programming language, like Fortran, at this point?

AS: So interesting – so I was taught Fortran, and I tutored BASIC. Never learned BASIC. Let me change. I never was taught BASIC. BASIC was basic enough for me, where it was an easy language just to take up and understand. I did get in trouble with it. [laughter] So, in college, my roommate was part of a tutoring company. They were not associated with the university, but they made their services available for students on the Howard campus. They needed people to help tutor BASIC. So my roommate told me about it. My roommate is Brian Thomas – still friends today. Don't tell him I forgot his name for a moment there. So I was taught Fortran. Fortran was the basic language that we used in engineering. I tutored BASIC. When I was tutoring BASIC, the majority of students I was getting was from the school of business. So how I got in trouble was I had taught them to understand logically how to look at a problem to establish a flow and to write a program based on understanding that flow so that, if you

understand the flow, then the program will come naturally to you and you're understanding, at the same time, how you're solving the problem. Well, the problem was that it was not how the business school taught it. The business school taught it a different way. [laughter] So I got called to the dean's office in the business school about the manner in which I was tutoring their students to write their programs. So they said, "We do not agree [with] the method that you are tutoring them because that's not how we teach it." I was like, "So the first question is, are the students understanding?" I said, "First, does the program work? Are they understanding the program that they wrote? Are they understanding the program from which they – do they understand the problem and how they wrote it?" They said, "That's irrelevant. That's not how we teach it. We prefer for you not to teach them anymore." I said, "I'm not a teacher. I'm a tutor. It ain't my call." They got in contact with my boss. Boss says, "It's not our problem. We are an independent entity. We are not paid by the university. We made our services available. It's free to the students. So if a student comes there, if they understand what they need to do from what we're tutoring, I have no problem with what Mr. Spencer is doing." So I wound up getting more students as opposed to less students as a part of that, so the business school was not too pleased with me at that time. The engineering school – the problem I had there was we would get assigned a problem. I had a one-credit class. I would go to the one-credit class. I would write the program. I would get out of that class. I would go to the computer lab. We had IBM punch machines with a punch card. I sit there and punch it, take the cards, go into the lab, run the program, get the printout, drop it off to the professor's office by the end of the day. He said, "Mr. Spencer, you have no flowchart." I said, "No, I do not." "Why do you not have a flowchart?" "Because it takes too much time to do a flowchart. I see the program in my head, so I just go ahead and then write the program and punch it in. I don't need a flowchart to figure out where it is." I think, after the third time, he said, "If you don't submit a flowchart with it, then I'm just going to not give you a passing grade for the work that you submit." So I probably could have become a programmer. I did not. Truth be told, during my early years, back in the '80s, I was actually part of a team of individuals, where we would crack game software. I did that for a matter of years and then threw in the towel. We would meet every Saturday, and we successfully cracked every program, every game that we put our hands on. [laughter] But I guess I enjoyed the software. I enjoyed writing the program and working with it, but I guess it did not appeal to me to the point where I wanted to do software as my main gig. It didn't turn me on in that particular fashion. Up until probably six years ago at the latest, I used to build my own computers. I've always built my own computers and stuff; used to go to the computer shows all the time. I think just within the last five or six years I just decided it was cheaper just to buy a computer that's already together and use it. [laughter]

MG: [laughter] What did you know about the National Weather Service before this position came up in 1976?

AS: Zero. [laughter] Zero. The only thing I knew about weather was what I saw on the TV screen. Nothing. I knew nothing about it.

MG: Well, then tell me more about that position and what you were required to do.

AS: The first one I had with the Overseas Operation Division? So the reason why they had – and my boss's name was Delmar Whipple. [laughter] Some names stick with you, some don't.

Delmar Whipple was a communication engineer. He was looking for a student. When they actually interviewed me – actually, when they called me to say, “We’d like to offer you the position,” I said, “I can’t take it.” They said, “Well, why can’t you take it?” I said, “Here it is, May. Graduation is Mother’s Day. The campus closed down. I live on campus. I have to go home. I have no place to live. I can’t accept the position.” They called me back and said, “He wants you.” That’s great. The next day, I got a call from him – Delmar Whipple – asking me to really reconsider. “Is there anything that you can do to be able to take this job?” So the same now frat brother that made me take him to work and fill out a job application – I said, “Alright, you got me in this mess. Find me a place to live.” He did. So I started the job. At that time, the Overseas Operation Division of the National Weather Service, which is probably unique that it was in the National Weather Service, but its main mission was to satisfy those aspects or things that came out of WMO, the World Meteorological Organization, where they had decided what major countries were going to do to help third world countries or countries that were not considered to be a major power. The US, at that time, had committed to providing communication equipment to Central and South America. So Delmar Whipple had the responsibility of making sure that the equipment was acquired, shipped, installed and became operational, so I was supporting him in that particular [venture], and it was great. I was going to these communication conferences and stuff. I didn’t get a chance to go out of the country until 1979 when I went to Swan Island. So it worked great. I had a ball. So that was my introduction to NOAA, the National Weather Service, and the Overseas Operation Division. Believe it or not, the director of that was – his name was Bernie [Bernard] Zavos. Don’t ask me why some of these names I remember, and he drank nothing but iced coffee. [laughter] I remember that. He had a way of just sitting at his desk and drinking iced coffee and stuff. That was my coming into NOAA, National Weather Service.

MG: Did you work part-time for them throughout the next couple of years, starting in 1976?

AS: I was with the Overseas Operation Division until 1980, I think. It was either the winter of ’79 or the spring – it was the spring of ’80. At that particular time, there was a – one of the offices in the Weather Service was the Office of Technological Services – something like that. They would have an annual Christmas party. The reason why I remember that was because they were talking about moving Overseas Operation Division out of the Weather Service Headquarters, which was 8060 Thirteenth Street, right down the street from where headquarters is now, to Rockville. My mode of transportation between campus and headquarters or Weather Service was public transportation – a bus. So I said, if they move to Rockville, there’s no way I can do that. I don’t have a car. Plus, even if I had a car, that’s just too far, because the way I had scheduled my classes and stuff, I had ample time, so I could get out of class, get on the bus, go to work, and come back for the classes I had on the back half of the day. So one of my coworkers – this colleague – she said, “Hey, Benjie, why don’t we crash the Christmas party of this particular group. I know a couple of people that maybe we can work something out.” Joyce Innis was her name. Boy, I must have a few black hairs left in my head. So, Joyce Innis – she and I crashed the party. It was at one of the restaurants in downtown Silver Spring, Maryland, that’s no longer there. She took me to this one guy, said, “Hey.” She told him, “Look, Benjie is working for Delmar. They’re talking about moving us to Rockville. That ain’t going to work for him. He needs to still have some form of income to pay for college. Is there anything you can do?” So I wound up transferring from the Overseas Operation Division of the National Weather Service –

OOPS for short – Overseas Operation Division – to the Engineering Division of the National Weather Service, and that director’s name was Sinclair. It took up an entire third floor of the Weather Service headquarters. Believe it or not, they never did move to Rockville, so I had moved down to the Engineering Division of the National Weather Service, and they put me in the Surface shop of the Engineering Division of the National Weather Service. That was my first transition within the Weather Service to another office.

MG: Can you say a little bit more about your time on Swan Island in the summer of 1979? What were your duties there? Can you tell me a little bit about the history of the place?

AS: So Swan Island – so before I came down to the Engineering Division, there was a person there by the name of Doran Platt, who was one of the electronic technicians that would actually go to Central American and South American and deal with the installation of the equipment, make sure it’s set up, so forth and what have you. I had actually met Doran because, while working for Delmar Whipple, he would be going out to these places. And Doran eventually wound up working for the Engineering Division as well. So Swan Island sits about a hundred and eighty nautical miles south of the Cayman Islands and about a hundred or so nautical miles north of Honduras. If you don’t know where to look on a map, you won’t find it. It’s a little dot. It may be, at best, maybe five miles across. The island has a little small outpost there, fenced off, for the US government, where it primarily does upper-air balloon release. You also have locals there as well. I was a part of a group of students. I think it was five or six of us. We met in Miami. We did a flight from Miami to the Cayman Islands. From there, we get a puddle jumper from there to Swan Island. The runway’s a grassy runway. You only had the MIC – the Meteorologist in Charge – a small staff relative to doing the meteorological stuff. You had a cook, and he was from Jamaica. The place is so remote; there is nowhere to go. There is nothing there. Nothing. There is nothing there. Okay? So as far as entertainment, they had movies. As a matter of fact, if I remember, we actually had a reel-to-reel projector and reel-to-reel movies. I came up with the idea – why don’t we show it on the side of the building where we inflate the balloons because it was big enough for us to have our own little outdoor thing. Our primary job was – as this teenager, the college student there, our primary job there was to do physical maintenance – repair the fence, digging a fencepost, running barb wire across it, painting the barn, repairing the barn, laying concrete, all handiwork kind of stuff. It was great because you’re getting your pay plus differential on top of that because everything has to be shipped in. So if you want something, no matter what it is, the ship would come in like once every two or three weeks. We were there for the entire summer, from June through August. Whether it was food, candy, or alcohol, you put in the order. Our lifeline was a radio, where we communicated directly with Silver Spring, Maryland, on an HF [high frequency] radio. About halfway into that experience, the technician there found out that I had an electronics background. They actually then started allowing me to work on electronic stuff there, and that’s when I first became familiar with the teletype. So I was actually doing work on the teletype and also on the HF radios and some other stuff that was there. Some of the other students didn’t care for that too much. They thought that was actually not fair – I’ll put it that way. I guess the government was actually making out because I wasn’t getting paid more to do technical work as opposed to handiwork, but I enjoyed it. At night, if the power went out – if the generator went out – it would be so black, you could not see your hand. If the moon was not out, the stars were out, if it was overcast – I’m serious – you could put your hand in front of your eyes, and you could not

see it. That's how dark it was. But when the sky was clear, it was beautiful. This was at the same time when Skylab descended and crashed. [Editor's Note: Skylab was NASA's first space station, in Earth's orbit from 1973 to 1979.] We could see it during its initial burning, as it was entering the atmosphere. I got sick while I was there, and it was the Fourth of July. The engineer on site was by the name of Spencer Bennett. His home was the Cayman Islands. Spencer had started a herd of cattle on Swan Island and sold that beef back to people in the Cayman Islands. So since we're on an island, there's water everywhere, right? Yes, we did see sharks at times and stuff. Plus, you always hear people that were coming through there – I'll tell you a little bit more about that in a moment. So, Fourth of July, they decided we're going to go out lobstering and fishing. So barracuda and amberjack are two popular seafood items in that part of the world. Also, amberjack is known for you to get sick from because amberjacks feed on the smaller fish. They feed off the coral reef. There's a toxic poison, ciguatera, that's in the coral reef. So the theory at that time was, if you skin the fish and it has worms, it's okay to eat. If it doesn't have worms, the worms that should have been there would have died from the poison. So went out lobstering. I can't swim, so I didn't get into the water. We had like an eighteen-footer boat in. The swells were so big on a mild day – and it's not like this. Very calmly, the boat would go down, and there'd be water all around you. The only thing you see is the sky. Eventually, the boat would kind of come up, and you would see everything. Then it would drop back down. That was a heck of an experience. So we would drop the anchor. The rope would be off the front of the boat. The anchor would be off the back of the boat. No, the anchor was off the front. The rope was off the back. And so, of course, the current is strong, so they would go down to lobster, and the water was so clear, you could see all the way down to the bottom of the ocean floor. When they would get the lobster, they would swim to the back of the – they would swim toward the anchor and wind up at the rope that's at the back of the boat, and then we will pull them in. So we got the seafood. People [are] going out to the beach. They got their grill up. They got the meat. They got the music going. They got the beverages. So Spencer Bennett turns around to the other students – not me – to the other students – and says, “Don't eat the fish.” Didn't tell me, right? That night, it was coming out of both places, okay? It was so bad that they called Silver Spring to say that I was sick, and I was going to have to be flown to the Cayman Islands to the hospital. The way that this ciguatera poison attacks you – it exists also amongst the Hawaiian islands as well. So when you touch something cold, it feels hot, and when you touch something hot, it feels cold. It reverses your sensations with your nervous system. I have no recollection of the flight from Swan Island to the Cayman Islands because I was that bad. Put me in the hospital there. I was there for about three days. Ironically, my nurse was Spencer Bennett's daughter. That worked out nicely. So that was one of the things that happened to me. The other interesting thing about Swan Island is Swan Island was the antenna location in support of the Bay of Pigs, so there they have these concrete pillars for the tower. So imagine roughly about maybe twenty feet by twenty feet by twenty feet. [laughter] That was just one pillar for a three-legged tower, and they had three towers. They didn't talk much about that. I asked about the towers. They said it was associated with the Bay of Pigs, and then all the research had things associated with that. So what happened was, of course, that went down once that was all done. The United States used that as a weather outpost. It was very important to find out the weather coming out of the South Atlantic that would intensify the hurricanes, per se. There, at that time, the way that Honduras was [inaudible] – Swan Island's the property of Honduras. The way that Honduras works is, you come there, you build something, then you can actually declare it. So on the backside of the island, a person had built

something – an American and had his house there. We had people that would come through there. We saw a father and son almost divorce each other. They were sailing from the East Coast to the West Coast. They were planning on going through the Panama Canal. They got caught in the high seas. They managed to get water in the engine, water in the fuel. They were adrift. Spencer Bennett had to actually go out on his motorboat and tow them in. They had hit coral and some other stuff where it had shaved some of the stuff off the hull of the ship. Then, on top of that, you had people that would come in there and visit the island. I remember Spencer Bennett had an avocado farm. These people had gone down to the avocado farm and picked some of his avocados. So it was a once-in-a-lifetime experience that I will never forget. You could fly a DC-3 in it, maybe a DC-4. If you did a DC-4, when it took off, they started as far back as they could on the grass runway. They will go to full throttle, where the tires were basically sliding across the grass, and they would release it. They pulled up on the yoke at the very last second. Sometimes they would just tip the trees as it was obtaining flight. So that was my summer of 1979 – a once-in-a-lifetime experience.

MG: Did you want to say anything else about your time at Howard or that first position with the National Weather Service?

AS: So, that's pretty much it. I did my years in Howard, sung in the gospel choir. As a matter of fact, I was the chairperson for one of the floats for one of the years. I don't remember the year. We did a replica of the Star Trek Enterprise as our float. It was a collaboration amongst the engineers in the school as far as the designing and building it for this float. It was outstanding. That's about it, for the most part.

MG: Did you come to work fulltime after graduation? Did your work change?

AS: So I was now in the Surface shop of the Engineering Division. When I graduated, they actually offered me a fulltime job. That started my permanent career with the National Weather Service.

MG: As a junior electronics engineer?

AS: Yes. Who was my boss? My boss – I see his face, but I can't pull [his name] out. It was interesting. So there was a necktie, no tie, and bowtie, which are three different individuals. No tie was Nick Sheller. Bow tie was the boss. I see his face, but I can't pull his name out. So they had me in the surface area [where we build things] doing things like temperature at the surface level, rainfall rates, visibility – things along that particular line. That actually was my introduction to actually, I guess, professionally, doing design work. This is where I first did the – another colleague and I – we designed, built, and tested a particular apparatus. Back during that time, there was a system called AFOS [Automation of Field Operations and Services], which was the – was this one AFOS? No. It was called AMOS and RAMOS, AMOS, Automatic Meteorological Observing System, and RAMOS, Remote Automatic Meteorological Observing System. That was the predecessor to AFOS. This was equipment that they would use to do various detection, monitoring, and sending information out. So they had this great big suitcase that the technicians in the field would use to troubleshoot. So Rick Alberg – that's my colleague – and I – we designed a – do you see this [inaudible] computer?

MG: Yes.

AS: So we designed a replacement for the suitcase device that was about the width and depth of it, but a height that was probably around maybe six inches. We designed, built, tested, and deployed the smaller version, which allowed the technician to – one, it could simulate the equipment in the office that connected to the AMOS or RAMOS. Two, in the field, it could – so in the office – let me change that. So, in the office, you could simulate the remote – what was out in the field. In the field, you could simulate what was in the office. Then it also had the capability to be in between the two, where you could actually see how the two were communicating with each other. So we did programming at the lower level, where we call that the machine level. Right now, everything we do is basically high-level language. Even BASIC is a high-level language. Like today, when you hear people talking about Python and all that – that’s a high-level language. We did the programming down at the machine-level language, and therefore, you have what we call a microprocessor. We would actually write the program at the machine-level and program it. That’s what we used to do back in the ’80s. You don’t really hear people doing that anymore these days. That was the first thing that I actually designed as a part of being a career professional person. So that was pretty exciting. That I started getting involved with. So, as a result of that, I wound up having some introduction to radars. We have this program called ASOS, the Automated Surface Observing System. So I was on the front end of that, where I was actually approached one day by another person in the Weather Service. They said we need to develop a set of requirements to integrate all our surface instruments into one. So I actually generated the first iteration of that requirements document, gave it to another office, and then they went from there. That was beaucoup years ago. One of the things that was interesting during that time, which scared the hair off my head – the country of Canada had donated tons of thermometers to the United States government, which made their way to the National Weather Service. So, at that time, we had what we call liquid and glass thermometers, which is a liquid in the glass, and we also had mercury. So my job was to design a back to hold because it was just the bare thermometer, which I did – had that done, and then, to disseminate or deploy it to all our areas. Right? If I remember it only went to the regional offices. I don’t remember going to the local office. It went to the regional offices. So I had given specific instructions to what I think was the Kansas Avenue warehouse, which, I think, was in DC, not Kansas, Missouri – on how to send them out. Needless to say, they botched it up. Okay? So places, where they didn’t get what they were supposed to get, were quick to complain. Those who got more than what they were supposed to get didn’t complain at all. We have mercury. Mercury is a controlled substance, which means it has special handling as far as transportation. So when people said, “Well, we didn’t get our mercury thermometers,” it has to be reported. So I’m sitting in my office, kind of like where I’m sitting right here. My back is to the door. These two guys walk in – nice, neat haircut, black suit, white shirt, necktie – “We’re with the FBI. We have some questions we’d like to ask you in reference to some mercury that has not been accounted for.” [laughter] My heart skipped a beat. I’m sweating. I’m like, “I didn’t do anything wrong.” So the long story short – there I was. After they went through their Q and A with me and I got in contact where the thermometers would go – “Hey, guys, I’m being investigated because there are missing mercury thermometers that have been reported. And until they can be accounted for, I’m being held accountable for inappropriate whatever.” All of a sudden, all these mercury thermometers start showing up. We were able to account for every

one of them. That was literally a hair-raising event. I'm in my twenties. Somebody coming up to you looking really nice and flipping a badge, with the FBI – that was an experience. So those were my years there. One of my close colleagues, Michael Salyards was working with me. We had a nice working group there. So that was my introduction to doing things in a more permanent nature as a permanent employee of the National Weather Service. When I was working part-time, I was at a GS-4. So when they hired me full time, I went up to a GS-5. I've gone from a GS-4 to your senior executive over the forty years or so – 2011 when I became the senior executive, so maybe closer to thirty years. That was that phase of my professional career.

MG: What other changes were you seeing in the National Weather Service during the first ten years of your career, up to 1989?

AS: Interesting. NOAA is fifty-ish, right? So the Weather Service was absorbed into NOAA. So I had the opportunity to kind of work with those people in the early '80s when I was working in the Engineering Division. Remember, I'm young at this time, so I was not being trained, nor interested in becoming a meteorologist. So the way I was looking at the Weather Service purely from the perspective of doing engineering. An ability to do hands-on engineering was thrilling. I was even able to apply some of my course learning, as well. I didn't remember this – somebody told me this – one of the radar experts, Matt Bradley – he and another colleague were trying to figure out something. I walked upon it, and I said, "Well, why don't you take this particular approach." I wrote out the equation and everything, did everything, and just blew their mind. They're like, "Wow, I think that's it." And it worked. So the organization itself – going through the '80s, we were at the Weather Service headquarters at 8060 Thirteenth Street. What I saw is the organization was kind of no more than – I guess this is the Weather Service – the engineering functional part of the National Weather Service was the foundation of the systems which enabled the Weather Service to do its mission. There were three major components within that Engineering Division, from what I recall. It was taking very seriously what they needed to do. Generally, we contracted out on big things, not little things. I recall having an invitation for bids, IFBs, versus RFPs or Requests for Proposal unless it was something big, like the AFOS system and stuff like that. So for me, you could say I was still kind of sheltered somewhat because I worked for the Weather Service, and I'm an engineer. What more do I need to know? It wasn't, I guess until my next transition that I started getting more into the major aspects of engineering and some of the nuances of what it really meant to do weather forecasts and so forth.

MG: Would that be when you were working on NEXRAD [Next-Generation Radar]?

AS: Right. So that was 1989. Just so that you know, every job move that I've had within NOAA was not me looking for a job, except for, I guess you could say, when I went from Overseas Operation Division to the Engineering Division. But I still didn't apply for that. I said, "I need a job." They said, "We'll transfer you over," which they did. In '89, I was asked to apply for two different jobs. I was asked to apply for two different jobs. One was NEXRAD, and one was AWIPS [Advanced Weather Interactive Processing System]. At that time, I think it was called AWIPS-90. So I applied for both jobs. They were open at the exact same time. One of my colleagues told me that, passing in the hall, "You were selected for the AWIPS job." "Great. Fantastic." He said, "So, you should be hearing something." The next thing I hear is – I get two letters from personnel. It's not HR [human resources] back then; it's personnel. One

letter said, “You have been selected for the NEXRAD job.” I said, “Okay.” The other one said, “The AWIPS job had been withdrawn.” Okay. Well, that’s interesting. Hallway talk – what I was told was they wound up selecting somebody for the AWIPS program that didn’t have a degree, and it would have given me the grounds to actually protest. So I wound up going to NEXRAD. If you want to say the Lord works in mysterious ways, yes, the Lord works in mysterious ways. I think going to NEXRAD was better than going to AWIPS. I went to NEXRAD. They brought me in on the requirements side of the house under Ed Berkowitz. And now I’m working with Doran Platt, who I met over ten years ago that was deploying radio equipment. We’re now coworkers together in the NEXRAD program. So I started out on the requirements side of the house with NEXRAD, where, even though the requirements, the level-one requirements – actually, we called it the level-one spec – for the A-Spec – that’s what we called it. A-Spec was already in place, a type of specification covering an entire complex system, or a major portion of one. But the requirements are always being refined and corrected, changed – whatever. So I was working in that group dealing with requirements. They found out I had done some degree of testing before I came up to NEXRAD, so they’re like, “Can you come over and help us with testing?” “Sure, it’s no problem.” So I went over to help them with testing. Next thing I know, I’m getting sucked into the testing side of the house. Now I am becoming full-fledged involved with development, testing, and evaluation on the test side of the house of NEXRAD. And NEXRAD today still is one of the primary assets that we use for the detection of tornadoes and other things – severe weather. As a matter of fact, Matt Bradley, who I had mentioned earlier – we actually did testing together as a part of that. So this is when I am now beginning to travel. Our youngest daughter is now like maybe five-ish. Mikaela hadn’t been born yet. If you were to talk to them, they would say, “Daddy has traveled all our life. He’s always traveling.” That’s what they would probably tell you. Somebody would probably [say], “How can you have a family life when you travel?” Well, you can, okay? Being in NEXRAD was tremendous. It was one of my best opportunities – being engaged at that level as an engineer. There was also the time where there was a level of confidence that was noticed by leadership, where I was actually going out and managing tests on behalf of the government with a contractor. It just happened. One of the interesting things that happened while I was there – there is this substance called Halon. Are you familiar with the term Halon?

MG: No, I was going to ask you about that.

AS: So Halon is a substance which is generally used in computer labs to nullify fire. What you will hear people say is Halon is a gas that removes the oxygen out of air, and you will die from it. It also is the preferred chemical to use in a cockpit of a fighter jet because of how it’s able to extinguish a fire. So this is right around the time they started coming out with ozone-depletion chemicals and other chemicals, and so Halon had been identified as one of these particular chemicals. Halon is the substance that’s in all of our NEXRAD shelters, so – plus, it was also being used in the forecast office or in some of the offices where they had equipment because – the ability to quickly extinguish a fire. So we were unable to deliver our shelters with Halon in it on DOD [Department of Defense] properties, so we actually moved it out. So I and two other people were tasked to come up with a replacement for Halon. I got involved with Halon, and started learning more about it than what I thought I would know. If memory serves me right, the inner element of Halon is something, I think, called bromine, that is a primary element in reference to extinguishing a fire. It’s a misnomer that it displaces the oxygen in the air. From

what I have recalled – I don't remember the exact number of tests that had been done at that time with dogs – they determined that, with a certain percentage, typically, what was the concentration within a Halon tube, the dogs still lived. That doesn't mean it wasn't an ozone-depletion chemical, but it showed that it was not as harmful as people thought it was. It was interesting, because some of the videos they were showing at that time at some of the conferences I was going to, they showed a military personnel carrier that got hit by a shell, and a fire broke out in it. They showed it in slow motion. They showed it with the Halon in it, and no sooner than the fire started and the Halon discharged, it put it out. I mean, that's how effective it was. So I wound up developing the whole thing. They thought it was interesting when I said one of the options is do absolutely nothing because it was nothing, CO₂, water, [and] Halon, if possible. So they said, well, "Why would you put nothing down as an option?" "Because, if I can't use Halon, CO₂ is definitely going to kill. There's no question. Water is going to kill you if you get electricity flowing through the place because water and electricity don't get together. So you have a better chance of living or getting out alive if you do nothing and just let it burn, and maybe it'll suffocate on its own." They said, "That's an interesting option." [laughter] So we actually started deploying NEXRAD, before I left that program. It's not so much I left the program as it was a transition. I started in NEXRAD in '89. Around '90, '91, what had happened was this – NEXRAD was a tri-agency program, DOD, FAA [Federal Aviation Administration], and NOAA, under DOC [Department of Commerce]. The Air Force told Congress, "NOAA does not know how to manage a major acquisition. You need to stand up a major acquisition program." So NOAA established the NOAA System Acquisition Office. I don't know if you can see this now, but I'm going to show it to you. Can you see that?

MG: I see SAO.

AS: System Acquisition Office, NOAA. I found this a few weeks ago. This thing here is about thirty years old. They established a thing called the System Acquisition Office at the NOAA level. They assumed NEXRAD and other major programs and projects that NOAA had. So I moved into that. All of us went under a hundred and sixty hours for training on program management, COTR [Contracting Officer Technical Representative], budgeting, all of that, where we became certified and qualified after completing a hundred and sixty hours of training, specifically designed for NOAA. Now they are a COR, Contracting Officer Representative. So I'm doing my NEXRAD stuff. I'm jumping out here, going to these sites. I spent a lot of time out at Norman, Oklahoma. I spent a lot of time up in Long Island, New York – I can't pull the name out – it's right there where the Islip Airport and Dayton T. Brown, [Inc.] is. That's where one of the testing places is. Then the contractor was further down the road. So I spent a lot of time flying between BWI [Baltimore/Washington International Thurgood Marshall Airport] and out to New York. So NEXRAD had been close and dear to my heart since I had a part of it. I think that was – as a major program, this is one of the first programs where, probably from a taxpayer perspective, you can see essentially what your money went to for a major program and the benefit that it gives back to you. When they first started working and operating, and you'd be sitting in your living room, and you heard the forecast of the meteorologists on the TV say, "And we're getting this image from the NEXRAD radar," that was so thrilling to know that you have something to do with that, because it's not often you put so many hours and effort into and know whether or not it truly achieves the benefit of its intent. Not to mention that, in this case, the public is actually receiving this in a manner where, "Gee, this is positive." We had some

negative press like there were places where we don't want this radar in our backyard because a local scientist said that the amount of energy that comes out of this radar is equivalent to that of the microwave that's in your kitchen and, based on that amount of radiation, it will roast your children. The guy that played on – what was that show called? The one in Texas. What was it called? I cannot think of the name of it. *Dallas*. The primary character there, [Larry Hagman], lives somewhere out West, in Sulphur Mountain in Ojai, California. They were putting one of the radomes up on a hill. He made a stink about it.

MG: The actor did?

AS: Yes, to the point where they wound up coloring the radome close to the color brown for it to blend into it. So what was happening – where a place was saying, “We don't want this radar,” people like in the tornado belt [would say], “We will take it.” So it was interesting. It was an example of people not understanding what it is. Based on people who did not understand – would cling to somebody who claims that they did understand. It's just like COVID-19. You got these people that do not understand it at all. Okay? There's somebody they know that says, “It's fake,” and they're going to believe them. It's what somebody said on Instagram or something – a picture of this guy. He said, “I thought it was fake, it was a fake virus,” and now he's sick from it. So with NEXRAD, misinformation was out there. Great Neck, New York – that's where the plant was. I'm sorry. I have these kinds of slow – just like the musician back at Howard; his name was Richard Smallwood. I'll think of the selection he did, eventually. The brain just has to kind of dig back through the stack. Anyway, NEXRAD and all of us kicked off the System Acquisition Office, which took me into the next part of my professional career where, from there, I went to the Aircraft to AWIPS to Census to NESDIS. So I'm ready for your next set of questions.

MG: Well, you bring up a couple of things that I just want to follow up on. First, there were a hundred of these radars deployed under NEXRAD. Is that right?

AS: More than a hundred. Right now, the total population is somewhere around a hundred-and-fifty, and that includes all the forecast offices. Then you have some at the regional offices. Then you have some at the centers, the seven centers that we have – the National Hurricane Center, the Severe Storm Center. Roughly, the population's around about a hundred-and-fifty, and that includes DOD, FAA, and Weather Service.

MG: The radars are coupled with an office.

AS: Yes. And that was part of the Weather Service modernization program. I think that started back somewhere in the '80s, but it was determined to reassess the number of forecast offices where they should be where they should be. So what they did was they were looking at, what I would say, two different elevations relative to NEXRAD. I think one was ten-thousand and one was eight-thousand. This is relative to where the radar beams would clip each other. So if you have an eight-thousand [foot] deck, that would be more radars versus a ten-thousand deck. I think they settled on the ten-thousand deck if I got my numbers right. They went through the process of locating the radars based on a ten-thousand deck, such that, at ten thousand, your mosaic is one hundred percent complete. There are some caveats there. Yeah, there are some

mountains in the way. Got it. Okay. So the number of radars, where they're located, and then the WFOs [weather forecast offices] would be primarily where the radars are. However, we do have some remote, where I have a WFO and, some miles away, is the radar. It had to do with where the – based on where the radar needed to be and based on where we could actually establish an office where somebody should work in that was associated with that. So it was a result of the modernization of the National Weather Service.

MG: Yes. I was curious if you could just say a little bit more about the MAR [Modernization and Associated Restructuring] and how it impacted your work or how your work impacted it.

AS: So the interesting thing about engineering – engineering is a discipline where I like to say, we enable others to do their job. So if you look at it from a mission perspective – so here you have the mission of the National Weather Service – to minimize the loss of life and the damage to property and enable economic whatever. What we say, from a system perspective, is, from that mission requirement, as I tear down into it and develop these lower-level requirements, we can – they used to say, “Gee, I need to be able to detect certain events, weather events. To detect the weather events, I need to detect hydrometers. So I need something to detect hydrometers.” They determined that a method of doing that is radar. If I need to detect these hydrometers across the whole country, how do we go about doing that? So the relationship between what we do – the systems and engineering relative to the mission – we look at the mission, and what is it we need to do to meet the mission? So with the MAR, with the modernization, the only thing that did was, I would say, is I had a group of radars out there already. We had the fifty-sevens and the seventy-four radars that were out there with their grease pencil and monochrome color, right? So they probably looked at it and said, “We're not getting the kind of coverage that we need to have to fully meet the intent of our mission, where, if it's to gather this information to inform the citizens of the United States, the forty-eight contiguous states, CONUS [Continental United States], and then the OCONUS [Outside the Continental United States] and our territories, we need to do this, and we need to do it in a fashion where we put offices in place that is conducive to the information that needs to be conveyed in that geographical location.” So the engineering is just being able to understand that, interpret it, and derive the necessary requirements to be able to fulfill that, such that we wind up getting what we had. So the engineering is not the driving part. The mission is the driving part. The engineering enables us to actually satisfy that. So we didn't drive the MAR but based on how they saw MAR organizationally, whether it was from how we look at it as a mission, or there was some politics associated, or there's cause associated with it, we take that stuff into consideration as we come up with a solution to be able to meet that. That's the relationship. So the engineering is typically never the driver, but we'll give you the trade space to look at how to best get there.

MG: Is there anything I've forgotten to ask you about up to this point?

AS: Anything that you've forgotten to ask me up to this point? Not that I can think of. I would probably say that, when I came to NEXRAD, I would say I was probably at the level of a senior engineer. As a result of the NEXRAD program, I started actually taking on roles as far as a lead role, being responsible for something, whether it was individually or with a team, such that, as I moved beyond this point, I now have leadership – I would say probably a minor leadership role. So, as a project lead or a specific area within the program, not a program manager. So like

testing, I had responsibility for a specific kind of testing at that time. NEXRAD was my transitional program from being, what I would say, a part of a team that had a leader to actually moving into now I'm the leader of a team. NEXRAD was that transitional program that actually basically initiated the opportunities that came behind that.

MG: Did you have the opportunity to lead in your next position, with the aircraft acquisitions?

AS: So here's the transition story there. So with the System Acquisition Office, the intent of that was any project or program that was over a certain dollar threshold within NOAA was automatically to be diverted to the System Acquisition Office to manage, regardless of which line office was tasked or assigned to do it. The System Acquisition Office was no more than an entity that took your requirements and delivered you the goods. We didn't own anything. So now that we're in the System Acquisition Office, I'm running with NEXRAD, I am now running the test program for NEXRAD. As a matter of fact, I had even bid on the branch chief position. Even though it was open, I bid on it, was selected, and they decided not to fill it and closed it. Okay. Life happens. So the System Acquisition Office decided to actually establish a dossier of everybody in there, identifying their particular talents. I didn't do that. [laughter] They sent out the package. I never filled it out. So the aircraft – Dr. [Robert] Sheets had gone up to Congress and had convinced Congress that, if you give us – I think it was – sixty-million dollars at that time, we will acquire a business jet. We will outfit it with various meteorological and atmospheric equipment, and the first time that we use that particular aircraft to inform you to not have to move your Navy fleet out of the tidewater area, it will be paid for. The objective of this plane is to be able to fly at a higher altitude than the [P-3] Orion to get – and the intent was we wanted better measurements of the outflow at the top of the hurricane. That was the selling pitch. I knew nothing about it at the time, but that was the selling pitch. So this is, I think, 1992. I get a phone call: “Benjie, we'd like you to come over and interview for the lead engineer position on this aircraft project.” “Okay.” I go there. I interviewed. I came back. I had at least one person, if not two people, say, “You shouldn't take that job.” I said, “Okay.” I took the job. In the course of accepting the job, I said, “So how did you find out about me?” They said, “Well, we went to this dossier list, and we didn't see your name on it. We didn't like any of the other people that we saw on that list and that we interviewed, so we started looking off of this list. A person by the name of Fred Toepfer recommended you to be interviewed.” I don't know if you know Fred Toepfer or not. He just retired last year. Fred and I go back to the NEXRAD program, and he had acquired a liking for how I did my work. So he name-dropped me for the aircraft. I got the job. So I was the lead engineer. We were a small team. The first meeting that we had together, the federal government was closed. It was closed because of snow and ice on the ground. I drove from where I live, here in Fort Washington, Maryland, to Silver Spring, Maryland. We met in Building 3. There was no heat on. We sat down and started working on this. Eighteen months later, we delivered the aircraft to AOC, the Aircraft Operation Center, to be actually populated with the equipment. That was a unique acquisition. We received a silver award from Commerce of actually doing that within an eighteen-month time. What was at our back was Congress was threatening to take the money back since NOAA had not used it, and they had already taken ten million of those dollars because I think either we down like to fifty-four or fifty-million dollars by the time we got the money, to accelerate the completion of it. My understanding is, with aircraft, you buy a serial number. So when that serial number rolls off the assembly line, it's yours. We bought a plane that was already on the assembly line from

somebody else. We bought their serial number. That's why we were able to get the aircraft. We got the G4. We wanted the G5, but our backs were against the wall because of the fact that we could lose the money. So we bought a G4 business craft. I was the lead engineer on that. That was very exciting. We had a good team. It's still flying today. As a matter of fact, they're trying to replace it. [laughter] One of the things they're looking at is a G5. So that was one of my exciting accomplishments. That was the first time I had the overall responsibility of an engineering entity. So now, I have moved up, dare I say, a leadership role by taking on that. So even though at least one or two people had said you shouldn't take that job, I looked at it purely from the premises of an opportunity. Looking back, I think I made the right decision.

MG: So just to clarify, your involvement is in overseeing the acquisition of the aircraft but also the modifications, or one or the other?

AS: I had overall engineering responsibility. There was a contracting officer. There was a project manager. The project manager was Ellen Herburger. I see her face; can't pull the name out right now. So I'm part of the leadership team for the aircraft. You did have a director, an SES, assigned to it. Then you had the PM [program manager]. Then you had the contracting officer. We had contractor support. So ideally, what we like to see, from an acquisition perspective – you have a program manager [with] overall responsibility for budgeting costs, schedule, programmatic risks. One of the primary people on the team besides the contracting officer is your system engineer. So what happens is, as a program, you're giving a body of requirements to deliver something. So the program manager manages the program. The whole body of requirements of what that physical item you've got to deliver – basically, your system engineer takes that and tears that apart and start deriving all the lower requirements with the staff and contractors to where, okay, so even though we already know we got a plane, what has this thing got to do? So we started developing the lower requirements, and we test all these things, and we call it a V. We tear the requirements down, going down on the left-hand side of the V, and we build it coming up on the right-hand side. We do the testing to the point where, eventually, we're going to fly this thing [inaudible] to the airplane [inaudible]. So the lead engineer, the chief engineer, or the system engineer, has that responsibility for that physical thing there. So the program manager, who's managing program risk – the system engineer's saying, "Here's my technical risk that I got to mitigate." And the program manager is going to say, "Okay, I'm going to do this or do that for you to mitigate it." Or if it's like, "Gee, that's bigger than this program – I'm going to carry this as a program risk." So they understand that – "Hey, we were told to add a radar in the nose cone of this airplane, a C-band, which is a great idea. There is a risk that, based on the physical dynamics of this particular radar, it could put undue stress on the plane and da-da-da, which makes it a cost-driver. There are things we can do to mitigate this, but it either is going to blow my schedule, or it's going to blow my costs associated with this." So there's that relationship. Sometimes, especially nowadays, if it's not a major program, it's hard to distinguish between do you actually have a system engineering component or not? So I tell program and project managers you need, at minimum, a lead engineer on your team to deal with the engineering. Your engineer gives you the trade space, as we say. We give you the trade space on best case, worst case, and somewhere in between. You make the call. But if you're going to wear the hat as the program manager and the lead engineer, you have no trade space, because you can't do an out-of-body experience and say, "Hey, well, what do you think?" "Well, this is what I think." No, you really can't do that, okay? So, as the lead engineer

for the aircraft program, all engineering responsibility was my responsibility associated with that program. That was a first major – that was really a major stepping stone and leadership role.

MG: Where does the G4 live?

AS: Well, it used to be at MacDill [Air Force Base], but the Air Force ran the Aircraft Operation Center off of MacDill. They're now in a different location. [Editor's Note: NOAA Aircraft are now based at Lakeland Linder International Airport in Lakeland, Florida.] I don't remember where the new location is. But I don't think they're at MacDill anymore, because they were asked to vacate the premises. [laughter]

MG: Is it a weather reconnaissance plane?

AS: It does reconnaissance as well as research. So if you look at the inside of the plane, you have racks of equipment from the front to the back, so that you can actually research. And they have the tubes that run through it where air is actually flowing through the tubes, and they can actually suck the – suck off that tube and bring the air into their experiment or whatever and do various things. So the [P-3] flies up to, I think, a maximum of twenty-five thousand feet. That's one you're always hearing about piercing the eye of the hurricane. They go in and do measurements inside the eye of the hurricane, while the G4 is flying at a higher altitude, but I don't think it actually flies into the hurricane, but it's actually able to do those higher altitude measurements. One of the interesting things that I found out during that time is – probably has changed now, but at that time, you're always hearing, when we have hurricanes, that the Air Force sends out their plane – their hurricane hunter, right?

MG: Yes.

AS: So the Air Force has a hurricane hunter. We have ours. At that time, the Air Force hurricane hunter could not penetrate the air of the Cuban airspace. But NOAA could.

MG: How come?

AS: Of course, that's a logical understanding, right? [laughter]

MG: Because NOAA is not a threat?

AS: NOAA is not a threat. But the Air Force is DOD. Cuba was aligned with Russia. It's not aligned with the Soviet Union or Russia. It's not aligned with the United States, so that could be considered the potential where the US could do spying on Cuba and other things, and da-da-da. While NOAA – we're the friendly bunch, you know? [laughter]

MG: Right. I have a hard time getting my head around the work you do. So is there anything else I'm missing about this work or your role at this time?

AS: I label myself as a system engineer. In general, an engineer is a person where we have a responsibility to provide a capability for the public to be able to do something. As a system

engineer, we look at the whole enchilada – the whole thing. We're interested in everything from soup to nuts, from beginning to end. So if you look at the radar, from a radar perspective, the radar is detecting something in the atmosphere. So from a system perspective, it understands the atmosphere, how you detect the atmosphere, how you process what you detect, how you take that information that you have just processed and pass it on for further processing, dissemination, interpretation, interpretation by the forecaster for the forecaster to be able to look at it, make a determination, structure a forecast to inform the public. So from a system perspective, we don't start at the left or where the environment is. We start at the right. What is it that the user wants? So if it is, I need to be able to inform the public that there's a tornado – okay, so now it's you have a requirement, simply put in this state, to detect a tornado. So what we do as a system engineer is say, "Okay, you need to do this." There are some things associated with why you want to detect this tornado. You may say, "Look, there's a thing called a tornado. By the time we realize it's here, it's too late. We need to pick it up as soon as possible. We need to warn this many people in this amount of time, and we don't know what's in it." So we gather that kind of information such that we can say, "So what is this environment? So what is a tornado?"

[laughter] As a systems person, we understand everything from left to right – or at least a team of us understands everything left to right to be able to deliver it. With the aircraft as being the lead engineer, why do you need an airplane? So when they brought me on the program to be the lead engineer, I said, "Why do you need an airplane? Why can't you use a balloon? Why do you have to use an airplane?" Based on what we do is, you have selected an airplane without deriving that you need an airplane. A lot of times, what you would see is, in a lot of organizations, especially in the Weather Service, they would tell you what they need. They won't tell you what it is that they're trying to understand and do. It's kind of like, with the radar, it has to have a half a degree beam width when we go to the phased array radars. Why? Because that's what we determined should be. So you're assuming it's the same thing with a phased array? Sure. I can't make that assumption going in. Somebody had determined years ago that, when you're doing requirements assessment, you have to ask a person five times why, at least, to really get to what the requirement is. So like a tornado, you're saying I need to detect a tornado. Why? So, in reality, is it that you need to detect a tornado, or do you need to warn the people that you have a condition that is detrimental to their life? So then it's kind of working its way back. With a tornado, I need a C-band radar. I need this. I need this – why? Really, what you're saying is I need to detect hydrometers in the atmosphere. Based on what those hydrometers look like determines something else, which was something else. Is it rain? Is it snow? Is it sleet? Is it hail? There's all kinds of things that are associated. So as an engineer, it's tearing all into that. So, as a lead engineer, as a system engineer, it's bringing that discipline to the table. The reason why I was a few minutes late getting on with you – I was having a conversation with Wendy Levine, (John Sokich), and members of my team about the partnership policy. So we have the NOAA Partnership Policy, and we have this Weather Service directive. Based on the Weather Service directive, based on the way it's written, and based on what the intent is, there is a disconnect. So they wanted to say we need to tie this into the lifecycle. So lifecycle, to me, as a system engineer – and acquisition may have a different interpretation of a person who's not. So when you're talking lifecycle, to me, left hand, coming in – you come in with your needs, your requirements, your CONOPS [Concept of Operations], and it goes from there. Well, it's mushy. Okay? So between how they interpret the NOAA policy and how the Weather Service has written some of the directives, it's how we make this fit. We ended the conversation by agreeing today that we probably need to sit down and let's just kind of walk

through this in the absence of the lifecycle process. If you want to execute the lifecycle process, it's really simple. You show up at my front door with a set of operational requirements and the CONOPS. We can dance. If you don't show up with that, we can't dance. There are certain things that the policy requires as far as stakeholders' involvement in the process. Based on where you fit within this ball, I would tell you the stakeholders are part of the process. So that's a no-brainer. Then you hear other things being stated. So some things we're talking past each other. Some things don't line up with each other. So, as a system guy, part of my job is to tear that apart, make sure we understand the intent, the differences, so that we can bring it together and understand how we get from understanding an intent to something that is usable by the stakeholders. So, as late as this morning, I was doing that. So I don't think you missed anything, as far as your Q and A.

MG: Once the acquisition was completed and all the modifications were made, what was left for you to do?

AS: *Sayonara*. [laughter] So before we had even finished, I was approached by the AWIPS program to actually run their factory and site acceptance testing. What I had done was like – “Okay, we're getting ready to wind down the program. We're going to deliver the aircraft. For the most part, the engineering functions I need to do under the acquisition of this – those engineering functions are going to transfer to the Aircraft Operations Center because they're the one that's going to integrate all the stuff into the aircraft.” So before I finished that, I was asked to come over to run the factory site acceptance test and the site acceptance test for the AWIPS program. The same program that they told me that they withdrew the announcement on back in 1989, now I'm being asked to come on the AWIPS program and run their factory and site acceptance tests. [laughter]

MG: Can you say what AWIPS is?

AS: Advanced Weather Interactive Processing System. So the predecessor to that was called AFOS, the Automation of Field Operations and Services. Now that was being replaced by AWIPS. What it was doing is AWIPS is a – the way I would describe it is it's an interactive wide-area network that enables the WFOs, the RFCs [river forecast centers], and the centers on that network to be able to collaborate and interchange with any of the information that is on that network that is associated with the environment. So you can be in a forecast office and still see things going on at other places. So it's a closed network that ties in all the forecast offices so they can get the information. It also allows adjacent offices to back up other offices because they can still put that information – the radars are close enough together where based on your adjacent radar that can get enough information that still provides information about that geographical location or to that geographical location. So it was a major milestone going from the AFOS to the AWIPS, even though the AWIPS was originally supposed to be deployed in the '80s, then it was supposed to be deployed 1990, then it was supposed to be deployed in the '90s [inaudible] because you noticed they dropped the number. Now, the significance of the number – if you look at the Weather Service assets, most of them have a number. You have the 57 radar, the 74 radar, and the 88-D. That was the year it was to be deployed. You had the HO [hygrothermometer] – I think the HO-60, the HO-62, the HO-64, the HO-82 or 84, or something like – the number dealt with the year it was supposed to be deployed. So with AWIPS, it took so

long to get AWIPS done, they dropped the number. They just left it at AWIPS, and it doesn't have a number. So that's the significance of the numbering.

MG: Is it a computational program, something computer-based?

AS: It's definitely computer-based because what you're doing is bringing in meteorological information, so it pulls in the information from your NEXRAD. It pulls in your information from ASOS. It pulls in information from adjacent sites. So it's pulling in as much information that it needs to for that forecaster to sit right there in front of their screen and formulate a forecast. So what used to be: I had to go here, had to go here, I had to go here, had to go here, then I had to work the stuff altogether – now, all of it's in one spot on your screen, and that was it. It's interactive, so it brings all that stuff together. It itself does no detection. Everything else does detection, and it brings that information in, and it produces reports that go out, whether it's locally or nationally. So when you go to weather.gov, and you put in your zip code, and it goes to your particular area, that information is basically being generated from the AWIPS system.

MG: Who did you work with on AWIPS?

AS: So AWIPS was an interesting program. AWIPS, which originally was in the Weather Service, was transitioned to the System Acquisition Office for the same reason as NEXRAD. We had actually turned that program around while it was in the System Acquisition Office. When we were showing success, what I recall – I think this was the time where Jack Kelly was on the blue-ribbon panel. The outcome of the blue-ribbon panel was that AWIPS should be moved back into the Weather Service, which they did. With the completion of AWIPS, the Weather Service declared a success. The System Acquisition Office got absolutely no credit for that, per se. So I had so many different people I was reporting to overtime because it kept changing. The person I remember the most was Stu Williams, who was the senior executive. Mary Glackin even took it over at one time, close to the back end of it, because I think it was commissioned in 1999; the AWIPS was commissioned then, even though it had already been deployed, but that was a formal process. Somewhere, I got a blue plaque about being a part of the AWIPS program. When they moved it – when it was in the System Acquisition Office, and I was heading up the testing, I think I was one step removed from the director of the Acquisition Office, who I think was Stu Williams at that time. When it moved into the Weather Service, it moved further down. Michael – oh, I can't think of his last name – they stuck me under him, with the responsibility of reporting up to him about the status of testing. I can't remember his last name right now. I spent a lot of time out there. I had my own team. I had a team of about seven or eight people. I sent them out to the field to actually do the testing. I had an installation team. I had a site team that monitored the site installation and the site testing to accept it. I had a factory team that only dealt with doing what was necessary in the factory to get it through the factory testing. Actually, to do a leapfrog, the AWIPS program is the reason I wound up being considered to be a senior executive. Two things had happened. One was there was a young lady there by the name of Daria Webb. When she first came on board, I was one of the first people she met. We hit it off as professional colleagues, and she never forgot that. One of the hardest things to do is contract closeout in any major system. With AWIPS, we're deploying roughly to about a hundred and fifty locations. Some of them are collocated in that we have a WFO and an RFC side by side. This was also the same time, in the mid-'90s when NOAA was stated to now

use CWIP, Construction Work in Progress. This is when CWIP came down. I'll never forget when those two guys walked in my office that were contractors talking about, "You now have to use the CWIP process, and you have to such and such and such." I said, "No, I don't." [laughter] I said, "If this is such a great idea, why don't you all do it?" Anyway, what was significant here was I had all these locations. I had to take the cost of the program and divide it across all of the sites accordingly. So I came up with a way to do that. I had established where I got a closet space in headquarters. Every site had its own box. And there was a label on the box to identify what was supposed to be in the box, and you check it off. I had a young lady working for me who managed a database of everything going on. So when people would go out to do testing, they would stop by her desk. She gave them a packet. When they came back, they gave her that packet. She would put all that information in. So when we had completed the program, there were all these boxes – roughly a hundred-and-fifty – in there. It's everything that you need to know about the AWIPS, including what cost was associated with it. Well, to this day, I don't know why I did this particular thing. The software development costs I only put on one box. I only put it against one site. So, as it was told to me by Daria Webb, I don't remember if it was the IG [Inspector General] or the GAO [Government Accountability Office], but one of the two of them would come periodically and say, "We want to know how you derived for the cost for your software development for AWIPS." So since I put it all on one site, they only had to go to one box. She said, after the second time that they came, they put a post-it sticker on that box so that, whenever they came back, it would just point them to that box. After so many times, they didn't come back anymore. Daria thought that was great. She said it saved the Weather Service's butt numerous times. So when Deirdre Jones, who was the director for the System Engineering Center in 2010, was transitioned over to the operational side of the house, Daria Webb recommended to her boss to consider me for the job, and I went there for detail. It was based on what she recalled I had done for the AWIPS program back in the middle '90s. So when I talk to people, and I'm mentoring people, I tell them, "Be very mindful of your engagement with people. Don't treat anybody like they are lower than you. You never know what opportunities you could actually wind up destroying based on how you treat and interact with people." This one, to me, is a prime example of how a person – we don't even consider ourselves to be personal friends; we consider ourselves to be professional colleagues where, when we see each other, we speak to each other. It was funny how she even approached me about it. Are you familiar with the NOAA Fish Fry?

MG: Yes.

AS: I got the kitchen team. We cooked the shrimp and the crab legs. I've been doing that now for about ten years or so, maybe twelve years. Probably longer than that. She's there – Daria. She's on the beer and wine tap. I'm in the kitchen. She comes in. She says, "Hey, Benjie, when you're done, why don't you come out, grab a stem of wine? I got something I want to throw at you." "Oh, sure. Not a problem." I'm done in the kitchen, come out, we sit down, and she said, "Hey, you know Deirdre." I said, "Yeah." She said, "Well, she's moving on to another job. Would you be interested in her job?" "Me? Why me?" [laughter] Then she told me the story. So it was refreshing to know that I had an impact on a person that they respected what I do, such that, later in life, fifteen years later, that the person considered me to be ideal for a senior executive position. So that was telling. That was telling. Doing the factory and site acceptance test was very engaging. I enjoyed it; worked hand-in-hand with the contractor. I actually helped

them to get over their hurdles. I got them to look at how they were doing their tests at the site. I got it down from like a two-day test to essentially almost a half-day test, based on how they actually ran it. One of my funniest things was, the very first site acceptance test that I went to, they said, "Okay, we're ready to start." I said, "Okay, turn the system off." They said, "What?" I said, "Turn it off." "You don't want us to turn -?" I said, "So you think the equipment's going to come here all connected and powered up? I think not. So you need to have your instructions to start with this thing powered down." They said, "We don't even know how to turn it off." I said, "Then I suggest you come up with power-down instructions so you can come up with power-up instructions." That took about a week for them to actually do that. Testing is my forte. I had developed a knack for testing. From a logical perspective, it's simple. But at the same time, if you don't really understand the full breadth of it, it can be complicated. Do you own a car?

MG: Yes.

AS: You probably go out to your car, jump in the car, and start going about your business. From a testing perspective, there are so many things that are along that line just at the point of you starting the car, from a testing perspective, that's kind of taken for granted. So that same type of thinking is the same kind of thinking that I require of people that do testing. It's not just looking at the surface. It's down to nuance. With NEXRAD, we had a requirement for a chair because you're going to sit in a chair for a very long time; it has an impact on the body, not to mention it was a Mil-standard-requirement. Anyway, so testing was my forte. We did the factory testing. We did the site acceptance testing. That took over – I think I did that from '95 to about '98, and then I got asked to go do something else. [laughter] That's when I was asked to go over and help out the census with the 2000 decennial. So I'll put that there, and let you see if you got any more questions with AWIPS before transitioning.

MG: Did you work with Ed Johnson on AWIPS? I remember him talking about AWIPS when I did his interview.

AS: If I did, I don't recall. By being in the testing part of it, of the factory and site acceptance testing – because what we would do is we would test it at the factory. When it passed, it'll get shipped to the site. We go out to the site. We witness the installation – installation and check-out, INCO – I-N-C-O. Then, once they got it to a certain point, they would notify me, "We are ready to start official tests." I'll tell you another story, now that I said that. Then they will go through the test. Once they are done, and they completed it, then they would sign off the DD-250. The Department of Defense (DD) Form 250 is the Material Inspection and Receiving Report (MIRR) that is required for most contracts for supplies and services. Done. You come back. *Boom*. I'm done. I have nothing else to do with it after that. So, as far as users [inaudible] – nothing to do with it. So here's a story for you. Salt Lake City, Utah. Mary Glackin, who had all black hair at that time – have you ever met Mary Glackin or seen Mary Glackin?

MG: No. She's come up in interviews, but I don't know her.

AS: So look her picture up on the Internet. You'll see she's all gray and white right now. She ran the AWIPS program. She had a leadership role in NOAA as NOAA's Deputy Under Secretary for Operations, and then she left and went to work for industry. So I don't like my tests being disturbed. When I run a test, I run the test. I'm sorry. That's it. So I'm in Salt Lake City, Utah. I get a phone call that Mary Glackin, who is now running the AWIPS program –is coming out, and she is coming out with the NRC [National Research Council]. This is the White House National Research Council. I think that's what it stands for – something like that. So these people are coming. As a matter of fact, I got some pictures in my office from there. They said, "We're coming out to witness you run your test." I said, "No, you're not." They said, "Yes." So I said, "No, you're not." "Well, we're coming out there, and we are going to witness you run your test." I said, "You may come out here, but you are not going to witness any running of an official test, under no circumstances." "Well, we need to see what you are doing." I said, "This is what I will do. I'm going to start to test on a schedule like I normally do. When you all show up, I am going to suspend the test. If there are some things you all want to see as [and nice pictures] and all that, fine. We'll do that. Okay? Then, when you're all done, then we will kick the test back up. But under no circumstance are you going to witness me executing an official test." Mary said, "Well, I don't think that's being respectful." I said, "It has nothing to do with respect. It's the way you run a test. A test is not something to be – 'wow, isn't this great.' I don't need people asking questions while people are trying to execute steps. I don't need people walking over and doing things. We lock down everything when we go into an official test. Nothing gets touched – nothing." [laughter] Mary Glackin did not appreciate that too much but, at the same time understood. But I was there running the tests, and that's the way I told my teams. One of my test people was up in Alaska. The first test I went to, I went with him. The contractor said he was not going to do this, that, or the other. The person that was running the test on my behalf looked at him and said, "Well, you just failed the test." The contractor looked at me and said, "He can't do that. I said, "He's the government. You're not following the instructions. He can do that." So I enjoy doing testing. That was my niche. So that was one of my stories from the AWIPS testing arena.

MG: Yes. Well, there's a number of things I still want to go through. But I'm not sure we're going to get to all of it in the twenty-or-so minutes we have left. I wonder if this is a good place to stop. I know we were hoping to get the whole thing done today. What do you think?

AS: So we can keep going. Let me see if I got any frightening email. So I have a three o'clock meeting.

MG: I'm thinking, because we've come to a good place to stop, maybe we should just stop for today.

AS: Okay. We can do that, because that will leave only three parts of my professional career, which is the census, NPOESS, and while I've been a senior director. The reason why I did this – because when I started out, I was under the Office of Science and Technology, OST. Due to the reorg [reorganization], it went to what we are now, which is ESD, the Engineering and Standards Division.

MG: Okay. Well, I'll end this for today, and then I'll send you an email with some possible dates, hopefully in the next week, so that we don't lose momentum.

AS: Right. So, it's real easy to do the transition from AWIPS to census, because it was still under the auspices of the System Acquisition Office.

MG: Alright, good.

AS: I had like four jobs while I was in the System Acquisition Office.

MG: Sure. If there's anything we missed in what we've covered, we can always revisit it next time. Sometimes, as soon as I'm done with an interview, I think of more questions I wanted to ask.

AS: Not a problem. Good talking to you and meeting you.

MG: You too. I know, finally. Thank you so much for all your time and all your stories. I'm really excited about the next chapter.

AS: Okay. Alright.

MG: Talk to you soon.

AS: Alright. Bye-bye.

MG: Bye-bye.

-----END OF INTERVIEW-----

Reviewed by Molly Graham 7/23/2020
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