

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
VOICES ORAL HISTORY ARCHIVES

IN PARTNERSHIP WITH  
NOAA HERITAGE AND THE NATIONAL WEATHER SERVICE

AN INTERVIEW WITH SAMUEL P. DE BOW, JR.  
FOR THE  
NOAA 50th ORAL HISTORY PROJECT

INTERVIEW CONDUCTED BY  
MOLLY GRAHAM

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TRANSCRIPT BY  
MOLLY GRAHAM

MG: This begins an interview with Rear Admiral Sam DeBow for the NOAA 50th Anniversary Oral History Project. The interviewer is Molly Graham. This interview is taking place on April 17, 2020. Due to the coronavirus pandemic, this is a remote interview. Rear Admiral DeBow is at home in Olney, Maryland, and I'm in Scarborough, Maine. Can you say for the record when and where you were born?

SD: I was born in November – the date? November 17, 1953, in Philadelphia.

MG: Can you tell me a little bit about what Philadelphia was like at that time?

SD: I don't know. I grew up in the inner city. I grew up in a rowhome, but the best part was my parents had a house down on the South Jersey Shore, so every summer, we went down. As soon as school let out in June, we went down to the – I went down to the Shore, and I spent all summer there for every summer of my life, actually until I came into the NOAA Corps [National Oceanic and Atmospheric Administration Commissioned Officer Corps]. So I did that a lot, which gave me the reason why I wanted to do something ocean-related in my career. That was the nexus for what I finally did for my career.

MG: Can you tell me a little bit about your family history, starting on your father's side?

SD: On my father's side, everybody was settled in the Philadelphia area. I'm actually Samuel P. DeBow III, and Samuel De Bow IV actually, so it's been a lot of Samuel DeBows in this family. So my father actually – his final job, he was a longshoreman. He was working on the docks as a checker checking cargo as it came off the ships, which is interesting, because, in the latter part of my life, that's basically what I'm doing now. I'm doing maritime transportation stuff, so it's connected. My mother was born in Philadelphia, also. [She's] from the Philadelphia area.

MG: Do you know where their ancestors came from or what generation migrated to the United States?

SD: No. My son did a – what is that called? – ancestry thing. Dad always told me they were from the Alsace Lorraine area of Europe. DeBow probably was – I always said it was French, but somebody said it's actually more Dutch than French. It's probably a Dutch – it's an Americanization of a Dutch word. I thought the ancestry name would be “of the woods” in French. But I haven't figured that out yet. My mother's side was from Ireland. She's from Donegal. They were from the Donegal area of Ireland. I know that.

MG: Do you know how your parents met?

SD: No, I don't. No. I don't really know.

MG: Do you have any siblings?

SD: I have one sister.

MG: Is she older?

SD: She's seven years older than me, and she's living in Ocean City, New Jersey. She has four kids. I have three kids – a boy and two girls.

MG: Well, I'm just curious about the neighborhood where you grew up. Could you describe what part of Philadelphia it was in and what it was like?

SD: It was called Port Richmond. It was about five blocks from the Delaware River. It was a lot of – Irish, Polish, Italian were the dominant – it was a melting pot. It was probably upper lower class. We weren't impoverished. My parents always had a job. But everybody's dads worked in the industries. There was a lot of industry around at that time. We all walked to school and didn't take school buses. So I walked to grade school. It was about seven blocks away. I went to high school there. Then I went to – so it was all the parochial grade school and high school. Then I majored in – I got into all this because, when I was growing up, Jacques Cousteau always had specials on the TV, and [my father] would always make me sit there and watch them with him. He said, "This is what you should do when you grow up. This is what you should do when you grow up." I'm like, "Yeah, okay, Dad. Fine." So I figured that, when I graduated from high school, I was going to go and major in marine biology. That was my first goal. But my college board scores weren't high enough for me to major in science. I was at La Salle College at the time. I went there as a freshman. I was just in – what would you call it? – undeclared, or I was just taking courses. I had to get at least a B in math and something else. I realized that there wasn't going to be a job for me when I got out of college because – well, at the time, there were no undergraduate marine biology degrees. You had to go to a master's program with Scripps or University of Miami, or wherever. I don't even remember – University of Hawaii, maybe. There weren't that many marine biology degrees at the time. So my friends were going to Drexel University. Money to pay for college is always a big issue. So I transferred to Drexel in my sophomore year, mainly because it's a cooperative college, so you're in school six months out of the year, and you're in an industry six months out of the year. My friend was majoring in a curriculum called commerce and engineering, which is business and engineering. It's like engineering management. So I majored in engineering management and spent every one of my co-op periods across the river in Camden, New Jersey, at RCA. It was a big electronics production plant. I was an industrial engineer, so I stood behind somebody with a stopwatch to see how fast they could put components on a printed circuit board. When it came time for me to graduate, they had offered me a job. But out of the blue, there was this – at the recruiting venues that they have in college, there was this young woman in a uniform saying, "Join NOAA. Be a diver." I went, "What?" So I was recruited straight out of college by the NOAA Commission Corps. I said, "That's what I want to do." I applied, I got accepted, and turned down a \$13,500 job at RCA for an \$8,500 job at NOAA. Forty-two years later, I'm still working at NOAA. [laughter]

MG: Do you think you made the right decision?

SD: In retrospect, yes. There were many times I didn't think so, but in retrospect, I had a great career. I have nothing to complain about. I did a lot of great things and rose to the top and had a lot of close colleagues. Serving your nation and doing what you always had your heart set out to do – it's pretty good.

MG: I want to back up just a little bit. You had started to describe the neighborhood where you grew up. I was wondering what it's like today and how it's changed.

SD: Well, it's the reverse. That neighborhood probably is not as good as it was when I was a kid. But my daughter lives in a neighborhood that wasn't a great neighborhood when I was a kid. You didn't go there. So she's part of the gentrification effort of moving back into the inner city – young professionals moving back. So it's interesting. It's interesting going back to see her. She lives in a rowhome just like I lived in a rowhome in the Northeast. She lives down near [inaudible] in the Graduate Hospital area. So I haven't been back to the neighborhood that much. It's changed. The dynamics change. There were a lot of older people that lived in my neighborhood, a lot of immigrants that came there. My next-door neighbors were Polish immigrants, and they hardly spoke English. The whole time I lived there, until I was twenty-something, they hardly spoke English, and they lived there most of their adult life.

MG: I read an article that talked a little bit about your childhood, and you were described as a "corner boy." I didn't know what that meant.

SD: Oh, yes. That's where we used to hang out on the corners. Yes. You got that off of Dawson & Associates, I think, or maybe I sent that to you. I remember that article. So yes, that's what you did. You hung out on a corner. Every night in high school, you were expected to go out and just hang out on the corner. That's where we hung out. That's exactly what it was, a corner. It's funny.

MG: Tell me a little bit more about the house on the Jersey Shore. Where was it? How did it come into the family?

SD: I don't know. It was in Sea Isle City, New Jersey, which is just south of Atlantic City. They had one of these big old duplexes, a summer home – big old three-story summer home duplex. Next to it, they built a motel. It was ten-unit apartments. But we went down there – my mom and my sister and whoever kept the apartments up when they were renting to people. I was never there. I'd wake up in the morning. As soon as I got down there – the day I got down there – I just wore a bathing suit. I didn't wear a t-shirt. I didn't wear anything. I just woke up, had a bowl of cereal. No shoes. Out the door. You'd only come home when you were hungry. So I would be out on the beach, or I'd be back in the bay swimming. It was great. It was a wonderful time. It was in the early '60s. I used to hitchhike as a kid. I was seven or eight years old, [and] I would hitchhike. If I wanted to go somewhere, I'd hitchhike. Of course, you couldn't do that today. But I never had a problem, never had any threats. But that was a different time and a different environment.

MG: Did your mother work outside the home?

SD: Yes. She worked. She worked in a savings and loan company in Philadelphia and later she worked for the Philadelphia School Board.

MG: Something else I've heard stories about are the Mummers parades in Philadelphia. Can you describe what they were?

SD: Oh, yes. Every [New Year's] Day, we used to go to Mummers Parades all the time.

MG: I also wanted to ask you if you were a Philadelphia Flyers fan in high school.

SD: I was a massive Flyers fan. So the Flyers won the first championship when I was – so, since I didn't leave Philly, I went to Drexel. I didn't live on campus. I lived at home, so I was a commuting student. They won their Stanley Cup, and I was there. I was up, climbing the poles for the parade. Yes, I was one of those guys. Everybody in Philadelphia seems to climb up on the telephone poles to get a view – or the light poles.

MG: That was in '71?

SD: Yes. So I was there. So yes. I graduated from high school in '71, so I actually remember. We were in Drexel, and we walked from 32<sup>nd</sup> and Walnut down to Fifth and Market, thirty-some blocks, to go to the parades. So yes, I was there. I'm a massive Flyers fan, Eagles fan, Phillies fan. All my kids are required to be. They're not allowed to root for anybody else.

MG: I understand.

SD: My son's more of a Flyers fan and Eagles fan than I am.

MG: Well, tell me a little bit more about your high school. It was a Catholic high school.

SD: Northeast Catholic High School for Boys. Yes. It was a factory. Thirty-two hundred boys. Think about that – teenage boys. Think about that. There were four-hundred-and-sixty people in my graduating class. That's because of attrition; not all of them make it through the system. So you had a choice. You either go to North Catholic, or you go to the public high school, and the public high school system in Philadelphia was not that great.

MG: What stands out to you about high school? I had heard some stories about the junior varsity basketball team going to the championships one year.

SD: Yes, they won the high school championship at the Palestra. Yes. We used to go to those games. It was crazy. They had some great athletics.

MG: Were you taught by priests and nuns?

SD: Nuns for grade school, priests in high school, with a mixture of laypeople, because they didn't have enough priests, but half and half.

MG: This was during the 1960s, and so I didn't know if there was any pushback. The Catholic church went through some changes in those years when people were questioning authority. Did you see this or feel this while you were in school?

SD: Well, I was a rabble-rouser, so I didn't do too well with the grade-school nuns. They hated me, and I hated them. It was a mutual relationship. In high school, it was a big difference. If you did anything wrong in high school, you got it. [laughter] And I deserved it. Everything I got, I deserved. The change? Well, the whole process changed after Pope John XXIII, and the mass was changed, the way they say the mass. Yes, there were a lot of changes. But once I went to Drexel, that was it. I was in a public college, and that was it for me.

MG: Were you able to receive a deferment for the Vietnam War because you entered college in 1971?

SD: No, no. I was on the lottery system. So my number, I think – I never got above two-fifty or two-sixty in the lottery. But some of my colleagues, some of my friends they got selected. They had to go because of the number that they got in the lottery. I wasn't going to go. I was violently – I was pretty much a hippie, so I was violently against the war. I was going to go to Canada. I told my father that, and he wasn't happy because my father ended up as a captain in the Army in World War II. So when I told him, I'm not going – but I didn't have to worry about it because, by the time I got out of college – it turns out, interestingly enough, a lot of officers that served in the NOAA Corps during that time didn't want to go to Vietnam, and so they joined the NOAA Commissioned Corps, which was the Coast and Geodetic Survey Commissioned Corps. So when we were young officers, we used to call them “draft dodgers” – all our seniors – it was, “Oh, you guys are draft dodgers.” But they didn't have to serve. They were serving their country as part of the Coast Survey, so they didn't have to go to Vietnam. It was interesting. I didn't know that at the time. But I think it was all over. I graduated in '76, and Vietnam wasn't an issue when I graduated.

MG: What do you know about your father's service? You just mentioned he was in the Army.

SD: Oh, I have all of his pictures. He was in the Transportation Corps in the Army, so he did the backside logistics for [George S.] Patton. So wherever Patton's army was, that's where he was. So he was in North Africa. He was in Sicily. He was in Italy. He was in all of those major battles. He was in the logistic tail for the Army. He was in – it was called Transportation. I actually was looking at them last night. I have pictures over here I was looking at last night of my father and his brothers. He had three brothers, and they all served simultaneously in the war.

MG: Wow.

SD: All of them came back.

MG: Good. You might have said this, but what made you go to La Salle for your freshman year?

SD: Because the high school I went to – we used to call it thirteenth grade because you went from a Catholic high school to a Catholic college. It was fairly inexpensive. But I wanted to major in biology, and they accepted me. I think I was accepted in like four schools going into college. I wanted to go to Penn State, but I only wanted to go to Penn State – there was a

campus outside of Philly. It was called the Ogontz Campus. So I was accepted in Penn State, but I had to go to dreary Erie, the mistake on the lake, and I didn't want to go to Erie, Pennsylvania. I was too naïve. I was pretty immature. But two years [in Erie] would have been okay because the final two years you spend on the main campus in State College. So I would have gone to Penn State. Delaware – I wanted to go to Delaware. Then I think I was accepted at the University of Hawaii, believe it or not. My mother said, "You're not going anywhere. You're staying right here where I can keep my eye on you," which probably was a good thing that that happened. I turned out okay.

MG: It sounds like you were a little bit of a troublemaker.

SD: I was. But Drexel was really hard. The engineering courses – I mean your freshman year, first quarter – and it was ten-week quarters, so they did a semester in ten weeks. So your first quarter, you have computer science, calculus, physics. Every one of those courses were extremely difficult and massive lecture halls. It was tough, but you only had to do it for six months out of the year, which was the nice thing about it. Once you learned the system, it got better. Initially, I would always go into finals failing the course. They put everything on the curve, and I ended up with C's and B's, so it all worked out. I don't think I ever got a D. Yes, the lowest grade I ever got was a C.

MG: Good. In your off time from school, was that when you were working at RCA?

SD: Yes. RCA six months out of the year.

MG: Did your job change there?

SD: Not much, no. But you're like – what is it called? – an intern. What is it called when you're supposed to go out on a major and get experience when you're – not an internship. Is it an internship?

MG: An apprenticeship?

SD: My son did it, too. He majored in IT [information technology] at Penn State, and he was expected to go find a summer job related to that. It was like an internship. But this was back before computers – well, before personal computers, that's for sure. So it was very analog-driven. I did it because it was a job. I didn't really like it. I knew I wasn't going to do that [for] the rest of my life. So, as it turned out, it was good for me. It got me money to pay for my tuition. That's what I did with the money most of the time was pay for my tuition.

MG: Were you living at home while you were in college?

SD: The whole time. The whole time, except every summer, even after – so my parents sold – they were brilliant in real estate. They sold all their interest at the Shore a year and a half before Atlantic City became legal for gambling. [laughter] As soon as Atlantic City became legal for gambling, all those properties along the Shore doubled immediately. So they sold it, but I kept

going back with my buddies from college. So I went down to Sea Isle City every summer of my life until I joined NOAA.

MG: You said there was a woman who was representing NOAA Corps doing interviews on campus. Do you remember who that was?

SD: Karen Pachuti (sp?). She was at the training center. So at the time, our training center was at the US Merchant Marine Academy at Kings Point, New York. She was one of the assistant training officers. Her maiden name was Karen Mac Donald – she has strawberry blonde hair. But she married another officer named David (Pashuti?).

MG: Were they recruiting specifically for divers?

SD: The Corps basically recruits – where they recruit from – since I ran the program. They recruit from people with majors in engineering, science, math, for the most part. As years have gone on – I changed it when I was the director, because they wouldn't hire people with GIS [Geographic Information Systems] degrees because they're usually at a liberal arts program. At the time, when I was the director, you only had a GIS degree if you were a geography major. Geography majors were usually in a liberal arts college. So we changed that because it's a very needed task. But math, sciences, or engineering is what they would recruit from. So I did a degree in engineering, so that's mainly what I got [recruited for]. Because I had a passion to do this type of work, and I became a diver. I have hundreds of NOAA working dives. But they weren't great. They weren't Jacques Cousteau dives. I can tell you that much. They were hard-working dives.

MG: Did you ever do any diving training in Camden, New Jersey? There's a pretty well-known school there.

SD: No. Actually, my senior year, I took a course at Drexel and became a sport diver. So I did that. I think that's the reason why they recruited me –because I already had a diving certificate. I graduated from basic training in December of '76. They immediately sent me to the NOAA dive program training down in Miami in January. So I was in NOAA diving training a month after I graduated from officer training.

MG: Well, maybe just walk me through that year a little bit. Was there anything we're missing from your college years that you wanted to talk about? Any professors or classes that stood out to you? Or trouble you got into?

SD: Well, a lot of my buddies were frat guys, so they went into the frats, and I wanted to do that. My mom said, "You're not going into a fraternity." Unfortunately, they were just like *Animal House* kind of frats. So these guys that were brilliant, very smart kids, ended up washing out of college. They didn't do much at all with that and with their life afterward. Anything that stood out? I had a tough time with the advanced math courses. So I ended up really battling it out with math courses Calculus IV and Physics IV. I used to call Calc IV lost in space, so it was all three-dimensional. Physics IV was Atomic Physics, AKA A-Bomb because you were failing most of the time. Drexel was the kind of school [where] you could take a course and, if you were failing



it, in the eighth week, you could drop it, and you just had to retake it, if it was a required course. Most courses only had a Mid-Term and Final, so if you failed the Mid-Term you were on the ropes. I think this was the third time I was taking Calculus IV. I had this teacher that – it was a mental block. After that, I got A's in it because it all had to do with the teacher. I forget his name, but he was an outstanding math teacher. Let me think. What other good courses? Oh, business law. There was a classic guy. His name was "Gallagher". Everybody in the business administration said, "If you got to take business law, take Gallagher." It was one of the best courses I ever had was business law. I took, I think, two or three of his courses as electives because it was so good.

MG: In what part of the year did you graduate?

SD: I graduated in June of 1976.

MG: How did you spend that summer before training?

SD: I wanted to go straight in, and they offered it to me. But I decided that Drexel was such a – I took the summer off. It wasn't a gap year; it was a gap summer. So I worked. I had a job. I worked for Bigelow Carpets in downtown Philly. I was working in their storeroom. It was where all the salesmen worked, so I supported all the salesmen, and I went down to the Shore every weekend for that whole summer. Then I started – in October 1976, I was commissioned into the NOAA Corps.

MG: In Kings Point?

SD: Yes.

MG: What was that experience like?

SD: It was different. I had never lived – other than going to the Shore and partying with my friends; I had never lived away from home anywhere for any length of time – never. Never. So I got commissioned, and now I'm in a barracks up in Kings Point. I had a little bit of – it was tough. It was okay, but it was tough. It was tough. That was the first time I ever lived [away from home]. So I'm twenty-two years old, and it's the first time I ever lived away from home in my life because my mom required that I stay there for college. So when my kids got to be college age, I said you can go to any college, as long as it's nowhere near home. You are not living at home. [laughter] It all turned out perfect.

MG: Describe your cohort a little bit. How many were in your training class? Was it both men and women?

SD: There were fifteen of us, men and women, some [with] prior duty. Sometimes they bring in people that have served in the other services, so they come in at a higher rank than you. Usually, they're more squared away because they've been through the process. So there were fifteen. I still keep in touch with two or three. None of them are serving any longer. They couldn't be serving because it would be forty-some years.

MG: How did you fare with the training? Were you with other servicemen, or was it just the Corps?

SD: In my class, there were two prior Army folks. But the training was completely different. You're doing something you never even anticipated. I had never had the skills to do – even though I was on boats all my life as a kid, I didn't navigate. So you're learning the basics of navigation and then the organizational dynamics, what it means to be an officer. We went out to sea a lot. They have a training vessel, so we did two or three trips. We went from Kings Point to Woods Hole, and we would do things like that. I got along great. Radar was really, really hard, and the rules of the road was really, really hard. I failed rules of the road. I had to retake the test. That's because we were out partying the night before, and I just didn't do well. So I had to retake that. Navigation and Seamanship I did okay in. But you had to have at least a B, I think, in all the exams in order to move on. Almost everybody fails radar the first time. When you go live on a radar, and you have to plot it and say – and they have what's the closest point of approach that this – everybody fails it the first time unless you're a brilliant math genius. It's all vector math, so once you figure out that it's all vector math, then it's not that hard. But it takes a while to look at that orientation.

MG: What were rules of the road? What did that mean?

SD: For navigation, they have what's called rules of the road. They're Coast Guard rules so that whenever you're meeting a vessel or crossing a vessel, there's distinct rules that you have to follow. They seem complicated, but they're not. So what does four whistles mean? It's basically how the whole maritime environment operates because it would be total chaos if they didn't have rules to follow.

MG: Right. This was a twelve-week program?

SD: Yes. October to December. Yes, three months.

MG: Was it in December that you were sent to Miami?

SD: I think we got out – I don't remember what the day was I graduated, but I was home for that Christmas, but I think the ship I reported to is in Norfolk, Virginia, and I reported at the end of December. They were in Norfolk – the *Rude* and *Heck*. So that's the picture I wanted to move. [Editor's Note: RADM Debow is referring to a framed picture of the NOAA Ship *Rude* on the wall.] I'm going to move it anyhow, just because I can. There's the *Rude*. I don't know if it'll stay there. There's the *Rude* right there. That was one of two. They were very unique. That's a whole story and a half that we can go through on that. But I got sent to them, and as soon as I got there, the commanding officer said, "You're going to dive school next week." I said, "Okay." So they sent me down to Miami to dive school.

MG: Was that at AOML [Atlantic Oceanographic and Meteorological Laboratory]?

SD: Yes. Boy, you know your stuff. That's exactly where it was.

MG: Well, I interviewed Dick Rutkowski.

SD: He was my training officer.

MG: Now, you have to tell me what he was like as a training officer, because he's a character.

SD: He was more of a character than you can imagine. [laughter] Yes, he was a character. What you see is what you get with Dick Rutkowski. The other guy you should interview is Cliff Newell. He's up in Maine. He was my best buddy. So I came in thinking I was going to go, in my career, in that route, that I was going to be a diver and then keep doing diving and diving. Then diving turned out to be a collateral job. On a ship, I wasn't just a diver. I was a ship driver. But it turned out, on the *Rude* and the *Heck*, the only divers were the officers. The crew members wouldn't dive because they didn't feel as though it was worth their while and too dangerous. I guess what they got paid to do; it wasn't worth the effort. So when you went to the *Rude* and *Heck*, the commanding officer said, "You don't have an option. You will be a diver." So I said, "That's okay. I came in to be a diver." Dick Rutkowski – yes, that's where I was. I was at the NOAA Dive Training Center down on Virginia Key at AOML. That's right.

MG: What was that experience like? What did they have you doing? Were there any incidents that stand out?

SD: Oh, yes, there's all kinds of incidents. So we happened to be down there, and a NOAA ship that was called the *Researcher*, which was similar to the [Ronald H.] *Brown*. It was one of their biggest class-one ships. That's where they put us. Cheap NOAA, they didn't put us up in a hotel. They had us all staying on board this ship that was in a shipyard. I don't know where it was, but it was out of the water, and we had to climb this massive ladder to get up onto the platform to get up onto the ship, and you were staying in a room on the ship. There were probably – I don't know – probably fifteen of us in the class. I was the only one from my class that was in the basic training, I think. But then I met a whole different group of buddies that were all different rank officers that were there and civilians that were taking the class. It was like one of the coldest Januaries ever in – I think Fort Lauderdale is where they had us staying. But one of the missions you have to do – so you do your basic training. It's kind of like – what's that Cuba Gooding, Jr. movie when he's the Navy diver. Do you know? [Editor's Note: RADM DeBow is referring to *Men of Honor*, a film starring Robert De Niro and Cuba Gooding Jr. that was released in 2000.]

MG: I'm not sure.

SD: Kind of like that. [laughter] It's kind of that. That wasn't too far off. That was a little bit more severe. But it's when he was a cook, and then he became a master diver and all that; it's kind of like that. That's the school Rutkowski came from too. So if you watch that movie, you get a good idea about Rutkowski. But you had to go do all these things. I knew the basics of diving because I was already certified. But then this is becoming a working diver, which is a lot different. One of the things I remember that you had to do – they took us to this lake, and there were ducks everywhere on this lake. It was colder than hell and zero visibility. You had to

navigate from one end of the lake to the other on your compass. You weren't allowed to stick your head above the water, and we were snorkeling, so you had a snorkel, but you weren't allowed to take your head out of the water. There was duck shit, so we called it "Duck Shit Lake." So that's the one thing I remember the most is snorkeling in Duck Shit Lake. Then they would have you put together a valve, these big nuts, with zero visibility, with a buddy, and you'd be down there in scuba alongside a dock. They put it so you couldn't see, so you had to do it by feel, and that was scary. Then they would have you in the pool – oh, the worst was part of this training is you have to – there were swim tests, but then you have to tread water for a half-hour in the pool. If you're smart, you go, and you get near the edge, and you put your knee on the edge, and you put your hand on the rim of the pool. Rutkowski would come and then step on your hand, and he'd say, "There are no edges in the ocean. There's nothing to grab onto in the ocean. Get back in the middle of the pool." That was hard. For me, that was hard, but I did okay. I survived it. Then I went back to the *Rude* and *Heck*, and then we went and did our first survey. The *Rude* and *Heck*, if you can look in the history, you should – I can send you stuff on the *Rude* and *Heck*. They towed a quarter-inch stainless steel wire between the two ships with buoys and weights. When they found an obstruction, it would stop the ships, and they'd throttle them down to a very low RPM [revolutions per minute]. Stupid guys like me had to go down the buoy line to the wire and then, in zero visibility and bottom currents, hand over hand, and with a buddy, try to find out what they were hung on. It was determined that it was the most dangerous diving in NOAA. They never had a fatality, but, boy, there were a lot of times we were close. Most of the diving I did when I was on that ship was in zero visibility, cold. The Chesapeake Bay in March? *Ugh*.

MG: What would the hazard be? Getting tangled up?

SD: Yes, because the wire's under tension. At the point of the V would be where the obstruction is. So the ship is holding that station, and then when you're on that wire, that wire's going [imitates vibration] from the vibration and the tension. Because it's hung on something underwater, it's covered with slime and algae and stuff; you don't know where it's hung until you get there, and there have been instances – I was on it once when we were on it, and we're getting close, and it went *pfft*. You're holding on with your neoprene gloves and – *pfft* – and I had no feeling in my hands for two days, because I just had a quarter-inch stainless steel wire torn out of my hands. We were in the Delaware Bay, and my best friend and dive buddy – you never wanted to be caught – this is called the bite of the wire – inside the bite of the wire. You always wanted to stay on the outside of the bite of the wire because, if it slips off, the wire could come and take your head off. So my friend got stuck – because there were a lot of currents, and when there's a lot of currents, you lose orientation. He got stuck on the inside of the bite of the wire, and it hit him right on the facemask. It shattered his facemask. But I never was afraid. That was the job. I didn't know. That's what we had to do. So it was not fun work. [laughter] It was interesting work, in retrospect. So that was my dive experience.

MG: Something I meant to ask you about was NOAA was relatively newly formed when you joined. What did you know about the agency and its history?

SD: Not much. NOAA was formed in 1970. I joined in 1976. The guy in charge, the guy that had the director's job, RADM Harley Nygren was the director for twelve years. He was in

ESSA [Environmental Science Services Administration]. So the Corps went from the Coast and Geodetic Survey Commissioned Corps to ESSA Commissioned Corps to the NOAA Commissioned Corps over the years. When they were formed – do you know what other agency was formed by the environmental president, Richard Nixon, in 1970?

MG: Was it the Environmental Protection Agency [EPA]?

SD: Exactly right, the EPA. But we ended up in [the Department of] Commerce because he and Walter Hickel had a battle because we were supposed to end up in [the Department of the] Interior, but we ended up in Commerce. In retrospect, I think that's where we belong because everything we do supports maritime commerce and aviation commerce. In retrospect, I think, yes. It was 1970. I was too junior. Talk about revolutionary; when I was a brand-new ensign, I didn't give a damn about anybody above me.

MG: Did you ever get in trouble with that attitude onboard?

SD: Of course. Of course, but nothing that got me in trouble.

MG: Did you get to know Harley Nygren? I was supposed to interview him, but he passed away before I could.

SD: I was at his burial service. I'd go in the office, and I feel like Obi-Wan Kenobi with all the officers that I've trained through their career. Now they're in charge, and I'm still there. But Harley was Yoda. He was basically like Yoda to all of us. Yes, he was a very personable guy. When I was going from my assignment from the *Rude* and *Heck* to my next assignment – so my commanding officer was a classic Coast and Geodetic Survey officer, (Commander Bob Ganse), and the whole time, he talked about Seattle. So those days, when you got transferred to Seattle, we called it the Seattle tarpits; it's where the elephants go to die. So people that got transferred to Seattle never wanted to be transferred out of there, so they would try to figure out a way – because we had a big ship base there, so you could easily go to a ship assignment in Seattle, take a land assignment in the Seattle area, go back to sea out of Seattle. There were many officers that spent almost all of their career in Seattle. This guy had me so hyped up over Seattle. He'd say it's very much like Venice. There's canals. There's ferries. I'm like, "Really?" So I wanted to go to Seattle. So I took any assignment I could get that was in Seattle. I didn't care. Initially, Harley wanted me to go do fishing vessel safety and insurance in St. Petersburg, Florida. Fishing vessel safety is still a problem for the organization. But he said that wasn't going to work out; you've got to find another position. So then they found this position for me in Seattle, and I got to go to Seattle. A week after getting off the *RUDE* and *Heck* I got married, and then we went to Seattle. When I got married, my wife and I – it's the first time either of us had been west of the Mississippi River when we drove cross country.

MG: Well, let me just back up a little bit, so I understand all the steps. Out of training school, you were assigned to both the *Rude* and the *Heck*? How did that work?

SD: Yes, they're attached by the wire, so it's one command, but there's two ships. So the commanding officer is on one ship, *Rude*, and the executive officer is on the other ship, *Heck*.

Since I was the junior ensign, my bunk was initially on the *Heck*. So I spent a year or so on the *Heck*. Then I got promoted; I was made the operations officer, the third in charge. The *Rude* is the command ship, so I ended up being on the command vessel for the rest of my year and a half. I was there two and a half years.

MG: Part of that assignment involved the stint in the NOAA diving training program?

SD: You had to do that first to become a working diver, in order to be able to be a working diver on those ships.

MG: Was it after that assignment that you were sent to Seattle?

SD: Yes.

MG: Can you tell me how you met your wife?

SD: Oh, yes. I was back in Philly at a wedding, so I was with all my buddies that I hung out with on the corner. It was actually her cousin's wedding. I was in the wedding of one of my buddies, and it was her cousin's wedding. I met her at her cousin's wedding in Philadelphia.

MG: How did you have a courtship being based on the ships?

SD: Yes. Well, this was before I came into NOAA, so I met her in the mid '70s.

MG: Was this when you were still in college?

SD: Yes.

MG: Okay. Can you tell me a little bit about your wife and her background? What's her name?

SD: Susan. She's from South Jersey. Susan Peterson. She's from Deptford.

MG: What year did you get married?

SD: 1979. I got off the ship, and a week later, I got married. So I was engaged for the last year and a half I was on the ship. I got off the ship, and we got married.

MG: That's when you went to Seattle together?

SD: Yes.

MG: What was your assignment in Seattle? Was it a sea assignment?

SD: No. No. Since NOAA was formed in 1970, they had just passed the Magnuson-Stevens Fisheries Act. So the job I did was I trained observers to go out on the foreign fishing vessels fishing within our two-hundred-mile limit. At that time, it was the heyday of massive factory

trawlers fishing in US waters. So in Alaska, it was Japan. They had Japanese motherships that could process three-hundred-fifty-million tons of pollock a day with a fleet of catcher boats. Then it was mainly Japanese and Russian, some Polish and Korean – the fishing fleets that we were in. However, I got married. I get into the program; I don't know anything about the program, and I'm supposed to train these people on how to be an observer on a ship. I got sent to a Polish ninety-meter independent stern trawler fishing for – it's a cod; it's called Pacific hake – off of northern California for a month. Boy, what an experience that was. They were still a communist country, so there was a commissar on board the ship. Normally, in the program, you're out there for two months. You spend one month on one ship and one month on another ship. Man, the ship I was on – they hadn't seen a supply vessel in three or four months. The meat – they were all like knuckles. There was no fresh meat, really. They made fresh rye bread. I basically lived on rye bread and tea for most of – no fresh fruit. So I got transferred to this ship that had just left Ensenada, Mexico, and they had everything. [laughter] They had everything. It was like being on a cruise ship for the second part of that. I got off it in Vancouver, British Columbia. My wife came up with my buddy from Seattle and picked me up at the dock. This was before cell phones ! So it was unbelievable.

MG: What were the names of those ships that you were on that you mentioned?

SD: The first one was called the *Perseus*, which is a star, P-E-R-S-E-U-S. And the other one was the *Marlin*.

MG: What were your duties?

SD: To sample the catch, to see what they're catching, so that they can see the magnitude – there's calculations – if you know how much is in the net, if you know the different species that are in the net, then they can determine overall – through a fleet of ten vessels like that, they can extrapolate what the catch is, and then they have limits. They have quotas. The country has quotas on species of fish they were allowed to catch, and there's forbidden fish that they're not allowed to have, which is stupid – salmon, halibut, king crab, things like that. They're not allowed to have those. If they catch them, they have to throw them overboard. Like, why are you throwing them overboard? If you don't make them throw it overboard, they're so sophisticated they could target those species if they were allowed to keep them. It was weird because I'm on this ninety-meter independent stern trawler – big factory, automated filleting machines, BAADER filleting machines. All the fish are flash-frozen and are put into boxes for Gorton's [Seafood] of Gloucester, [Massachusetts]. But, because they were communist, they weren't allowed to pull in to US ports. So they would pull in to Vancouver, and they would send the fish to Gorton's of Gloucester and to the supermarkets in the United States. They were caught in a Polish trawler and being sold – so they're our fish caught on their ship being sold back to us, which was basically bizarre. Yes.

MG: Can you just say how that was connected to the Magnuson-Stevens Act?

SD: I don't think they were controlled before that. That was after the creation of the EEZ [exclusive economic zone], the two-hundred-mile limit. So if they were in our EEZ, then they had to be willing to take on an observer so we can manage the fishery. That's basically what it

was. Then the real interesting one was, in the following February, from February to March, I was on a fifty-meter Japanese independent stern trawler in the Bering Sea – in February and March. No one spoke English. I didn't speak Japanese. I was in a bunk. I'm five-ten. The overhead was about five-and-a-half feet. My bunk was five-and-a-half feet, so I slept in the fetal position the whole time. It was an unbelievable experience. It was great. So, ever since then – they taught me how to cook Japanese and Asian food – that's my hobby. I cook Asian food, and that was the key. It was really interesting trip. It was really a fun trip.

MG: What ship was that on? Do you remember the year?

SD: I have my log downstairs. I know exactly – it's the *Daikichi Maru No. 57*. The year was 1979. My son was born in October 1979. So that was February 1979 because my son was born in October of '79.

MG: You're doing the math. [laughter]

SD: No. I got married in '79. My son was born in October of '80. So it was February of 1980. Sorry.

MG: It sounds like you had a few sea duties in a row. How did that work?

SD: So I went from that assignment, and then I decided I didn't like – that whole [wanting] to be a marine biologist. I was on these vessels with – what we did was we hired, as interns, students from the University of Washington and Oregon State University majoring in marine biology. That's who they sent out to these ships. I got off that ship in Dutch Harbor. I'll never forget the day. I got off that ship on St. Patrick's Day in 1980, and we got to Dutch Harbor. A guy got off another ship. When he got to the land, he knelt down and kissed the land, and said he's never going to do this again. I realized I didn't want to be a marine biologist anymore. So I called the NOAA Corps up, and I said, "I don't want to be in Fisheries anymore." So then the Fisheries – so what happens is, once you were in a fishery assignment, they had the "hook" in you. So I was going to have to go – they wanted me to go to learn how to fish, to be on a Fisheries research ship, which meant – most of the time, our Fisheries research vessels were at sea a minimum of 242 days a year. No one ever wanted – I said, "I don't want to do that." So I called the NOAA Corps up and said, "I don't want this job anymore." They said, "Oh, well, then you're going to have to do hydrography." I'm like, "I don't care. I'll do anything you want." And when I left the *Rude* and *Heck*, I said I never wanted to do hydrography ever again, either. So I said, "Fine." They said, "You're going to have to go on a field party." I said, "Fine." So that was probably one of the best assignments in my career. I was on a mobile field party. We had a baby, a one-year-old, an infant, drove across the country – it was the easiest thing to drive across the country with an infant, because you don't have to worry about where they're going to be fed and where they're going to sleep, and it wasn't a problem. So I got on the field party, and I joined the field party in – we were in Miami. Yeah. It's kind of vague. So what happens is, on the field party I was on, we surveyed down in Florida in the wintertime and then up in the Great Lakes in the summertime. So I got on the field party. We were in Miami, and we were surveying Biscayne Bay. Then we went back to Norfolk. We were based out of Norfolk. They had a vessel. It was called the high-speed *Launch*. It was sixty feet long, and it was a standard Gulf of Mexico crew



boat – *NOAA Launch 1255*. We took it from Norfolk up the East Coast, up the Hudson River, through the Erie Canal, and up into the Great Lakes, and surveyed up in the Great Lakes in lake Huron all summer long. Then, in the fall, we did the reverse trip. That’s an unbelievable trip. Then I was surveying in Cocoa Beach. So we were down in Titusville, surveying the Banana River. Then I got transferred to a field party just like that and had the other Launch - *NOAA Launch 1257*, was permanently stationed in Pensacola, Florida. So I spent a year and a half in Pensacola, Florida, doing surveys offshore, and realized that I really messed up because every Tuesday at nine o’clock is when the Blue Angels practice in Pensacola. I’m like, “Oh my God, “What have I done?” I mean, why didn’t I try to be a pilot? My buddy was a pilot, and he wanted me to be a pilot. I took lessons, but it wasn’t for me. I didn’t want to do that. So I went from the field parties to graduate school in Monterey, California.

MG: Were you on the *Launch* with Skip Theberge?

SD: No, but I know Skip very, very well. I was on that same vessel, 1257, he was on, but he had it way, way before me, like many, many years before. So it was me, (Armstrong?), (Kozar?). I think he was on it like six years or eight years before I was on it. He was around Cedar Key, FL or somewhere around there when he was on it. I think that that’s when he had it.

MG: Does anything stand out to you from those surveys?

SD: Yeah, it was weird surveying on the Great Lakes because it’s weird surveying on freshwater. The weather up there can get really nasty really fast. It’s different than the weather on the ocean – the waves and the swells are really a short period and sharp and high. The work down in Pensacola was just unbelievable. We surveyed 1:20,000 scale sheets [inaudible] was eleven miles. So we went eleven miles offshore, and then we went another twenty-some miles offshore to survey 1:40,000 scale sheets. I would be offshore on a regular day, thirty miles offshore. So the ship did twenty knots, so I could do thirty miles in an hour and a half. But the best part was, when we would go offshore when we wanted to take a break for lunch, we’d just find a patch of Sargasso weed, and you have very ultra-light spinning gear with little yellow bucktails. And we would catch (Schooley?) dorados, dolphins, (Schooley?) mahi-mahi. So we’d come home almost every day with a cooler full of fresh mahi-mahi, which really didn’t go over well because then we had to clean them, so I wouldn’t get home until like seven or eight o’clock at night, usually. And my wife was home with a baby. But those were wonderful days. But it was great. I was in command. I was a very junior officer, and it was a wonderful job.

MG: Your next assignment was going to Naval Postgraduate School.

SD: Right.

MG: That sounds just like a great deal.

SD: It’s horrible.

MG: Horrible?

SD: It's an extremely hard curriculum, a hard course in paradise. So I always said they should have had the school in Wright-Patterson Air Force Base in Dayton, Ohio because there're so many distractions in Monterey that it would be easy for you not to –I was just on a call earlier, and a colleague was talking about how, being in the government, having them send you to school for two full years for a master's degree, and they're providing housing, they're providing your salary, housing, books; you don't pay for anything. We lived in an unbelievable housing unit that's called La Mesa. It's attached to the school. We had a three-bedroom – yeah, we had a three-bedroom rancher. At that time, we had two children. My wife played tennis for the school tennis team, the ladies' tennis team. They played the ladies from Carmel Country Club, from Pebble Beach Country Club. So yeah, living in Monterey and being paid to do it was pretty unbelievable. But I spent almost all of my free time in the library. I couldn't study at home, so I'd go to the library and study. So I would either be in class or studying. Weekends were great.

MG: Tell me what the curriculum was like.

SD: Hydrographic sciences. I got a master's of science in hydrographic sciences, which, at the time, I thought was – I told everybody it was like getting a master's degree in the Dead Sea scrolls. I mean, what am I going to do with this? But in retrospect, it really helped me out in my career because I came up the technical side of the organization, so I was really heavily involved with the technical side, and that whole program was transforming greatly as computer power got better. When I first started – *Rude* and *Heck* – everything was analog. There were no computers there. So I was involved in the technical revolution, going from a semiautomated system to a fully automated system, from a single-beam system to a multibeam system. I was involved in all that whole process throughout my whole career. So it turned out to be an outstanding degree that really helped me. I never thought it at the time, but I believe it now.

MG: I have in my notes that you were a NOAA exchange hydrographer with Norwegian Hydrographic Service in Norway. How did that work?

SD: Stavanger. We got approached; the people from the hydro office were looking to set – we had traditional exchange programs in hydrography with the Canadian Hydrographic Service and with the British admiralty hydrographic service. So routinely, you would get sent to those places for six months at a time, and they would send an officer over. So you would go, and they would – so we had longstanding exchange programs with those organizations. For some reason, they sent one out to have it in Norway. So it was myself and my colleague they came to us in Monterey, and my colleague said he didn't want to go; his wife was just about ready to have a baby. I said, "I'll go." My wife had just had a baby. So we left Monterey. I had one semester to go to finish my degree. They guaranteed me that I would be able to come back and finish. So we left Monterey early, drove across the country again with the kids. Then, Susan, my wife, stayed with her parents in New Jersey, and I went to Norway. I'll never forget it. I flew out the weekend of the first Live Aid concert in July. I show up in Norway, and the guy I report to says, "Why are you here?" I said, "What are you talking about?" He goes, "This is Norway. They shut down for the summer. They go on holiday." There was nobody there. He said, "There's nobody here in the office. You can't do anything. Why did they send you here?" I said, "Why are you asking me? I'm the guy that got sent here." So they sent me to a small ship, surveying at the head of a fjord, Jøsenfjorden. It was phenomenal. It was just – it was idyllic. It was

unbelievable. You're at the head of a fjord surveying. When a rainstorm would come, you'd have all these waterfalls that weren't there earlier, and they're cascading down the sides of the mountains. It was wonderful. It was a small ship. It was about the size of the *Rude*, so I was used to being on a small ship. I prefer a small ship rather than a big ship. Everybody ate together in the galley when it was time for dinner. Then we sailed it back to Stavanger, and then I went in the office and worked with the cartographers creating a chart. Then I went up to – my second sea tour was on the *Lance* – L-A-N-C-E – and, oh, gosh, I'm looking at something. That's not today. Okay, good. We surveyed up in Svalbard, at the approaches to Spitsbergen. So I caught the ship in Tromsø, and we went up all the way to Spitsbergen – it's eighty degrees north – serving right up to the approach of a glacier and ship hydrography. So I was the assistant hydrographer on that for a month. It was an unbelievable experience. I saw polar bears. I saw everything that you would see in the Arctic. I was up in the Arctic. I got off the ship in Hammerfest and flew back to Stavanger. So Stavanger, the Norwegians – it was an unbelievable experience. My wife loved it there. One of the first crew members on the first ship I was on, he let us stay in his house. He'd just gotten divorced, and he was at sea all the time, so he [said], "Just stay in my house." He had a Volvo in the driveway. We could drive anywhere. I didn't drive much. I wish I did. But we did a lot of touring. The train from Bergen to Oslo is like being in the Swiss Alps. It's just unbelievable. So we did all that. Took an overnight train back around the south coast. When I was on that first ship, we ended up surveying the south too. We went back to Stavanger, and then we surveyed off Risør, near Kristiansand, which is south of Oslo, in the summer. It was unbelievable. It was idyllic. It was like a vacation. So the interesting thing is – a lot of people don't know this – just like Colonel Kurtz in *Apocalypse Now*, I was out beyond all reasonable control. This was before the Internet. This was before cell phones. They loved me over there, and so they offered me a job to stay. Well, we left [on] December 3<sup>rd</sup>. In December, in Norway, the sun rises at 9:30 and sets at 3:30, and it's pretty darn dark. At the time, Norway was just getting into the North Sea oil. It was the highest cost of living in the western hemisphere. If you had to buy a car, they don't produce cars in Norway. That's why they all drive Volvos and Saabs. So you have to pay a massive amount of value-added tax and all that stuff. It probably would have been a great – my wife loved the lifestyle. You go into the center of town; they have a farmer's market every single day. No one locks their doors. And they speak English. They're taught English from grade school. Unlike us in the United States, they're required to learn a second language from grade school on, so there was never a language difficulty. Nicest people in the world. Then I came back. My wife stayed with her mom and dad in Jersey. I went back to Monterey, finished my degree, and then I got transferred to headquarters in Rockville, Maryland.

MG: What was that assignment? And what year are we in now?

SD: '85, '86. I have a whole detailed resumé. I don't know if I ever sent that to you, but I can send that to you after this call.

MG: Okay. That might be helpful. I'm not sure we'll get to everything by 10:45, so maybe I could review it for a follow-up call.

SD: Yes. I don't know if I'm on a call. I'd have to stop this and look in my e-mail. Somebody was supposed to send me a Zoom invite right after the announcement came out. [Editor's Note:

On April 17, 2020, the Department of Commerce issued a moratorium on the use of Zoom conferencing software due to the program's security vulnerabilities.] I was telling everybody, "This is coming." For my company, we're on an eight o'clock Zoom call every day, with all the people that are supporting the Coast Survey. Anyhow, so that was in the Marine Operations office in headquarters, so the operations end of running the fleet. I was responsible for tracking – since I had a master's degree in hydrography, I was responsible for tracking all the hydrographic survey vessels. But at the time, our NOAA fleet at that time was like twenty-some ships. We had a massive fleet – twenty-two, I think, and maybe more. So it was a headquarters job. That's when I bought my first real house in suburban DC, in Gaithersburg, Maryland. We lived in a brand new development in a cul-de-sac with young families with kids like ours. So all our kids grew up – as a matter of fact, our next-door neighbor's daughter was born one day before my daughter – my daughter, who just had the granddaughter in here. So they were like sisters when they were growing up. They were like one when we got there.

MG: She was your third child, your daughter?

SD: This one's second. My third was born in Gaithersburg at that time. Then I got sent to sea. I got sent to the NOAA ship *Whiting* out of Norfolk as the operations officer. So what happens is a lot of people – I learned early on in my career that the longer you stay in the NOAA Corps, you're going to eventually end up in headquarters, headquarters being in the DC metro area. So I saw a number of officers play this game where you get a land assignment in headquarters, locate your family there, and then when you go to sea, go to see out of Norfolk and just leave your family in headquarters. When you're at sea, it doesn't matter where your family is because you're gone. Normally, the ships deploy from April until November. Like when I was on the *Rude*, you're gone. You rarely come back to the home base. You're away doing work. In retrospect, we feel we could have – Norfolk's a nice place, and Virginia Beach is a nice place to live. But at that time, years and years ago, the most senior officers, every time they got transferred, they got a house, and their houses appreciated so that when they got the next house, they moved up, and they kept moving up, moving up. Well, this was when the market wasn't moving that well, so you had to stay in one place in order to get any kind of appreciation out of your real estate. So my family stayed in Maryland, and I went to sea. Then, in the winter months, I'd come home every weekend. I'd drive three and a half hours from Norfolk on Friday and then drive back either Sunday night or Monday.

MG: What was that experience on the *Whiting* like? You were a commanding officer, you said?

SD: No, I was the operations officer.

MG: Operations?

SD: Right. It was challenging – again, a major change in the technology. The ship was going from a standard hydrographic survey vessel to doing survey work, the type of stuff that Skip Theberge was involved in, the multibeam surveys for support of the EEZ mapping. So they put a brand new system on. So I had to be there for the deployment of a brand new sonar system, whole new data acquisition and processing system. It was really technically-heavy-oriented. It was interesting.

MG: Does anything else stand out from your time on the *Whiting*?

SD: Yes. I probably shouldn't say. [laughter]

MG: I understand.

SD: It all comes down to how good the commanding officer is. If you have a good commanding officer, you have a good tour. If you don't have a good commanding officer, it's a tough tour. My first commanding officer was really tough. The second commanding officer was – everybody has a nickname on a ship, and the crew called him Papa One, so he was like our Sea Daddy. He took care of everybody. So it was a good final – but then we stopped doing that multibeam, and then I ended up doing standard side-scan survey approach work. We did some work off of New York. Did a lot of work off the approaches in New York.

MG: On the *Whiting*?

SD: On the *Whiting*, yes. Then I came back into headquarters. We were still in Rockville. I was working in an office with my colleague Nick Perugini on putting a new data acquisition system on the survey ships, non-multibeam – completely different program. So I was gone like one or two weeks a month after I got off the ship. We have three children, and I'm on a land assignment. I'd just been gone two years. My wife says to me, "I thought, when you come to shore, that you would be here." I was on travel. I was going out to sea. We had to implement and install these systems. So I always thought that the grass is greener on the other side. So I quit the NOAA Corps after thirteen years and took a job for a company called Ocean Surveys Incorporated (OSI), in Old Saybrook, Connecticut, doing hydrographic surveys. I was the manager of their hydrographic survey program. I sold my house in Gaithersburg, and basically doubled my cost, but I sunk it into a big house in Connecticut, where the market was going *ppfft*. So if you ever want to invest in real estate, invest with me. I buy high, sell low; I do really good at that. I realized, after about a week or two, I didn't want to be there. I realized that I was going to be behind this desk in this office for the rest of my life. The nice thing about the NOAA Corps [is] every two to three years, you get a new job. I never had a job more than two and a half years long, and you have a variety. You're not doing the same thing. Every job is different, but you're still gaining seniority and moving on up. So I was staying in close contact with my colleagues, and I had a colleague that was in charge of the Office of Personnel Board. He reached out to me, and he said, "If you ever want to come back into NOAA Corps, you better do it now." So I spent twenty-two months in the private sector. I was trying to encourage OSI that they were going to be – NOAA eventually was going to start contracting for this hydro survey work, and the people there didn't believe it because NOAA had never done it before. I came back in, and, lo and behold, I become chief of the Hydrographic Surveys Division, and what are we doing? We're contracting for surveying. Who are they contracting with? Ocean Surveys and companies like Ocean Surveys.

MG: Say a little bit more about that experience in Connecticut and the work you were doing, and then why you didn't like it so much.

SD: Well, in the government, your job is to spend money. In the private sector, your job is to make money, and it's the bottom line. Again, it was a leadership issue. The owner and the president and vice president both owned the company. It was a small company. So I worked every weekend. My first year there, I worked Saturday or Sunday or all Saturdays and Sundays for the first year and not getting overtime. I was management, so you don't get compensated for that. And it was really expensive. When I first got there, there was no income tax, no state tax, and Lowell Weicker became governor. Now I'm paying income tax, I'm paying state tax, so my salary – my spendable salary, after a year, was less than what I started with. So I went to them, and I wanted a bonus and a raise. They said, "What? Go to the governor. Get it from him. Why should we pay you?" I said, "Well, I'm not making as much money." I want to be compensated for that. They said, "Too bad." The worst thing I did was to buy a house. They knew they had me. Once I bought the house, they knew they had me. They encouraged me to come up. They gave me money to come up, do a house-hunting tour. If I would have rented, I could have just walked. So I got beat up bad on that house. Bad, bad. So I came back, and I was working in the Hydrographic Surveys Division. Then I got sent to the *Rude* as commanding officer.

MG: What year would that have been?

SD: '95 to '97, I think. I don't know. It's in that article. I don't know. I can send that to you. '95 to '97. So then I did – you saw that thing I sent you. I did a lot of really intriguing things on the *Rude*. That was really, really unbelievable, that whole scenario – finding TWA [Flight] 800. Then I came back to headquarters. I was in charge of the Hydrographic Division. So I was the on-scene commander for the JFK [John F. Kennedy] Jr. aircraft search and recovery. So I was up in Boston. I was at Cape Cod at the Otis Air Force Base with the Coast Guard, working with the Coast Guard. Then I was in headquarters for the investigation of the EgyptAir [Flight 900] aircraft.

MG: Those are all things I want to talk about in detail. I didn't know if you wanted to take a break now or dive into some of it.

SD: No, it's up to you.

MG: I'm happy to keep going, but I'm flexible.

SD: I have stuff I can send you on that that is really good. I have a *GPS World* article that my colleague did. I can send you that. That's not a problem. It's really all in there. So I was surveying. We were surveying at the approaches to New York, and we'd just finished a project. That morning, we left Governors Island, and we were going up to Newport, Rhode Island, to start our next project. So we transited up the East Coast, and about 2:30 that day – at around 2:30, I basically went over very close to where TWA flight 800 eventually went down. So we were at anchor in Narraganset Bay. We anchored around 9:30 PM. I went down to my little office and turned on the FM radio station, and I heard this emergency broadcast that this aircraft had left John F. Kennedy and had gone down off of Moriches. So I told everybody, "Get up. We have to go back because we're a federal vessel. It's a maritime emergency. We're all expected to help out." They went, "What?" So it was like another seven-hour transit. I arrived

there at dawn on the day after it went down, and there were parts of the aircraft still burning on the surface. The Coast Guard directed us – they didn't know what we could do. They didn't know why we were there. I reported in, and they said, "Start picking up debris and take it to the Coast Guard cutter *Juniper*." The *Juniper* was tied – I was tied up next to the *Juniper* in Governors Island the day before. That was a brand-new Coast Guard buoy tender. I knew the commanding officer, Tim Sullivan. So anyhow, I was out there. We were out there for half a day, and I got called to a meeting on the *Juniper*. There was a Coast Guard admiral there, Robert Linen, and he said, "*Rude*? Where's the *Heck*?" I said, "Well, we split up a long time ago." He said, "Why are you picking up garbage? Why aren't you surveying?" I said, "You tell me. You're the admiral." He said, "Get back to your ship and start surveying." So we set up a grid, and we mapped the entire debris field in the first twenty-five hours after the aircraft went down. We mapped it all. There were other people there surveying, and they probably took credit for it. The Navy shows up, and they push everybody out of the way. So I had a processing group on the beach in Moriches. We would go in every day by boat, give them data, and come back out. I'd have to go to these big meetings by the NTSB [National Transportation Safety Board]. It was two weeks of unbelievable hard work. No, it was more. It was almost a month because we stopped in the middle. We only have a five-day endurance because of water. We don't make water on the ship. And food – we don't have the refrigerators and freezers to have a lot of food. So five to seven days is the maximum. So on Friday, we went to Newport the weekend in between, and re-provisioned and went back out. It was an unbelievable experience. Then the Kennedy thing was even more unbelievable.

MG: Well, I have some questions about the TWA Flight 800 experience. Didn't the NTSB initially reject your help because they didn't want you to disturb the debris?

SD: Yes.

MG: What made them change their mind?

SD: Well, when I got there, I found out that there was a New York City police boat towing side-scan. I said, "So why is it a New York City police boat can tow side-scan and we can't?" "They just didn't understand the technology. They thought we were doing *Rude* and *Heck* type of thing – wire drag – where we were dragging a wire across the water. Yes, we were pulling a wire, but on the end of it was a sonar system. You need to keep it up in the water column. You can't have it down near the bottom. It's more effective when it's up high and going down like this. So we would not be – unless the aircraft was sitting on the bottom with its nose in the bottom and its tail up in the air, which was very unrealistic because of all the debris that was on the surface of the water – this was the meeting I had at the *Juniper* because the FBI [Federal Bureau of Investigation] was there. The FBI didn't want anybody tampering with the evidence because they thought it was a terrorist act. Once we convinced them that we know what we're doing, and if you want to know where this thing is, you better let us go, then they released it. Yes. I don't know how they got that information, but that's interesting.

MG: What were the weather conditions like at the time? Weren't you put off for a couple of days because of poor weather conditions?

SD: When we made our transit back, yes. The *Rude* only draws seven feet. So if you're in seas ten feet, it's more than your draft; it's really rough. We were out [and] there was nowhere to go. The only place to go for us, because of our size was New York or Newport. There was nowhere else to pull in along that coast. So you have the ocean, you have the hard land up against it, and you have nowhere to go. So you're out there, and it wasn't that far offshore, but it's a pretty tough environment to work in. Yes.

MG: Something else I read about was that there was a picture of a young girl that was inspiration for the crew of the *Rude*. Who was that, and where did that picture come from?

SD: When I came in that weekend, it was in the *New York Times* on the cover. I have it. Larkyn Lynn Dwyer is her name. She's the exact same age as my daughter at the time, and she was going with a class from Pennsylvania over to Paris for a summer tour. It really broke me up. So I cut it out and put it on the bulkhead of the ship and said, "Okay, this is why we're here." I have some great videos. I don't know if you have a VHS [video home system] player. *Good Morning America* came out. They interviewed me on the vessel. It was a great interview. I have all those things, but they're on a VHS. Most people can't look at a VHS any longer, so.

MG: You could maybe get it digitized. It sounds like something good to preserve.

SD: Yes, I would like to do that.

MG: Who was on the *Rude* crew dedicated to this work? It was kind of a small crew. Nine men?

SD: Yes. *Rude* normally has ten people on board. So myself and nine other folks.

MG: Can you just describe a little bit of what you were doing? What did this work look like? What were you recovering?

SD: Well, when we first arrived, when they told us to recover, well, anything that floats, so sneaks, pocketbooks – anything that floats was on the surface – pieces of the aircraft because aluminum is kind of unbelievable. I took a lot of pictures. One of the things that was floating was a piece of the wing. Well, the wing is where the fuel cells are, and the fuel cells are in Styrofoam. So there was a big hunk of wing. I went and called the Coast Guard. I said, "What do you want me to do with this? I can't pick this up." They said, "Tow it back to us." So we towed a big portion of the wing to the *Juniper* for them to pick up with their crane and put it on the deck of their ship. The *Juniper* looked like a big dumpster. They were just taking all kinds of stuff. Coast Guard vessels would come alongside and take the – small Coast Guard boats would take the debris that we picked up, and they would take it. So they were trying to make it a trail of evidence. They were trying to see what it was where it went down. They were trying to decide where is [ground] zero, where [and] when it exploded, and how did it explode. So they wanted all this stuff. One of the most amazing stories that I still will always remember is that there were a lot of TWA seat cushions. They were blue. It looked like they had this silver pattern to them. I didn't know what it was. But I thought, "Man, how cheap is TWA? These things haven't even been in the water twenty-four hours, and they're disintegrating." So I didn't



find out until long afterward that there was five-hundred pounds of costume glitter in the forward cargo hold, and when it exploded and hit the water – you know what that’s like when you have glitter hit water. Every single square inch of my ship was covered with glitter. So we’d try to hose it down. But when you on the deck, you walk on the carpet and the ship. We tried everything. I had the ship professionally cleaned after the incident. So you’d be sailing along, and you’d see something on the water, and you pick up a set of binoculars, and there’d be costume glitter on there. [Telephone rings.]

MG: Do you want to pause?

SD: No. I don’t know who it was. They’re not calling me. I don’t know who it is. So yes, costume glitter. So anytime like when the kids have some birthday card with costume glitter, I go, “Oh, my God, *Rude*. Oh, my God.”

MG: Where did the glitter come from? Why was it on board? Did it belong to a passenger?

SD: The cargo hold holds all kinds of stuff. They were probably sending it from somewhere in New York in the garment district to Paris. I don’t know. Five hundred pounds of costume glitter – that’s a lot of costume glitter.

MG: Did you have to coordinate with communities in Long Island? Were things washing up on shore there?

SD: No, we never went ashore. I went ashore in a small boat to Moriches Coast Guard Base. But I didn’t get involved in that at all.

MG: Okay. What did you learn about the crash? I don’t quite remember what the reason was for the crash.

SD: They said it was a fuel cell. There was a fuel cell, and it exploded from that. There’s a lot of controversies about that. Some people think it was a shutdown. There was a naval exercise happening at the same time offshore, and some people think they saw a missile. There’s a lot of controversy. But the NTSB report, if you look at it, it’ll say it was a fuel tank that blew up. The problem was it was one of the hottest days of the year, and it sat on the ramp for an hour. It took off an hour [later] than it was supposed to take off. So there’s conjecture that – gasoline is more volatile when it’s an almost empty container, and it’s tight than it is when it’s full of liquid. So this fuel cell apparently wasn’t full of fuel, and they believe that it just – there was an explosion. So they had a mockup [with] all the pieces. They put it together, and it was in a hangar out at Grumman on the tip of Long Island. I went out and visited that at one point, later in my career. So I got in there one day.

MG: Were you ever involved in the investigation afterward?

SD: Interesting [inaudible], no. Every other ship that was there had an FBI agent on it. They didn’t have anybody on my ship. We did all the work, got none of the credit, and we never were part of the investigation at all.

MG: Why do you think that was?

SD: I don't know. They don't know us – just NOAA.

MG: Did that work take an emotional toll on you? –

SD: Yes. So when we finished, my wife and we all went on vacation. That was pretty emotionally draining. I had people's licenses in my hands. I had passports. I'd have to put them in a bag and put a position where I got it and send it on. You're picking up pieces – we saw things, and seagulls were out there on the surface eating something.

MG: Well, what was life like and work like for you between that crash and then when, in 1999, John F. Kennedy, Jr.'s plane crashed.

SD: Yes, almost three years to the day. It was crazy. Somebody's buzzing me. And I don't know who it is.

MG: Sure. We can pause. Do you want to take a quick break?

SD: Yes. Can I call my colleague here and see if we're doing this 10:45 [meeting]? I don't know what's happening.

MG: That's fine. I'll leave the meeting. Then just send me a quick e-mail when you're ready to hop back on.

[TAPE PAUSED]

SD: We're good. So what was the question?

MG: Well, I asked you about the years in between the two plane crashes. What were you doing during that time?

SD: I was back in headquarters working in the hydro division. I was the chief of the Hydrographic Surveys Division. Then, when JFK, Jr.'s aircraft went down – it went down on a Friday night – the then commanding officer of the *Rude* – they were working out of Moriches, Long Island on the tip of Long Island. He called me up at 6:30 AM that Saturday. I'll never forget it. He said, "Turn on CNN." I turned on CNN. I see that, reportedly, JFK, Jr.'s aircraft had gone down somewhere off of Martha's Vineyard. So I called the Coast Guard – no, at the time, when there's an accident like that, I ended up calling somebody at Langley AFB. Well, first, I talked to my command and said, "Look, we can find this. We have a ship right there – right there. They can find it." But somebody has to ask us. We can't just go in there and do it. So I ended up at Langley, and Langley transferred me to the USCG division one HQ in Boston, the operations officer. I told him who I was and what we could do. He said, "You get up here immediately. You get on the next plane from DC. We will have a car and driver waiting for you at Logan. You get here, and pack your bags for two weeks." So at twelve noon, I was on a plane

to Boston. I was working for Rear Admiral Richard Larrabee, the admiral in charge of district one. I'm in their operations center. So now I have a ship, and now I had to figure out where to send it. [laughter] So when I left, I was told that we have the capability to do hindcasting. It's done in our NOAA Office of Response and Restoration. So whenever there is an oil spill, they can take physical parameters and determine when that oil spill happened and where it happened. So when I got there, they had already recovered some luggage tags, and some prescription bottles had washed ashore on Martha's Vineyard, so they knew that the aircraft went down and they knew that those things were there. So we sent that information to the people in Seattle. That night, they ran the model, and they come up with this blob, and they said if we go and survey in this blob, they have a ninety percent confidence that will find the aircraft. So now, I'm standing there in front of a chart. I drew a box around it. Blob's in there. I figured, "Well, [inaudible] start," because X marks the spot on the water is really difficult. There's no oil sheen, nothing reported. So I had the ship go right down the middle of the box from offshore to inshore towing a side scan. They got to the end of the line, and say, "Which way do I turn, left or right?" So I figure, "Well, the aircraft was coming from Teterboro. It was going and making an approach to Martha's Vineyard. It probably went down somewhere to the right- - offshore." So I had them survey to the right. So they're filling in the survey to the right. Then we bring in another NOAA ship, the *Whiting*. They come in. They come out of Newport. They're surveying. I have them surveying another area. Then, of course, the Navy has their ship. The Navy always shows up at these things thinking they're responsible and they're in charge. So I was the co-underwater investigation chief. So myself and a Navy commander – Larrabee had us both there doing that. He brought us in, and this was like – I don't know how long we were looking for it – three or four days, maybe more. But this was the entire news cycle in the nation at the time. He brought us in, and he said, "You guys go to your assets on the water. I want you to come up with an exit strategy for me." He said, "We can't continue to do this forever." They already came out and said this is no longer a rescue effort but a recovery effort. This is a search effort for the aircraft. So I'm on a Coast Guard forty-footer going out to meet the *Rude* commanding officer, and he called me on my cell phone. At the time, most of our cellphones were analog, and Fox [News] and folks like that were monitoring our communications. We got in trouble once. The Coast Guard vessels had secure communications. We're NOAA. We don't have secure communications. So I got in trouble once because the commanding officer called me and said, "I think we found something," and immediately, the phones are lighting up in the joint information center from the media, and it wasn't that. So we used to have a code on a ship that, whenever you wanted to pass on information, and you don't want the commanding officer that could be listening to your comms, just put an animal in the – so like, "Man, that's a cloud that looks like an elephant out there." I don't remember what it was. I think it was elephant or something like that. So I'm on the boat going out to the *Rude* to come up with an exit strategy, and the commanding officer suddenly said, "Yeah, there's an elephant down here. I think we need to look at it." That means he found it. So he found it. (The operations officer Eric Berkowitz, one of the most amazing officers looked at the sonar records and said this has got to be it. What happens is, when we know where it's at, you put a marker buoy on it. It's basically weights and a milk jug painted orange. We have a system that, when you go by it, three seconds later, you drop that marker, and it'll go right down. So we put a milk jug on it. Navy came in with an ROV [remotely operated vehicle]. They came down with an ROV. We didn't have an ROV. The weights from that milk jug were right on the wing of the aircraft, which was a real needle in a haystack. It was scary. That was a twenty-nine-foot aircraft in 120 feet of water and

a rocky bottom. How do you know? But I have all those records. I have all of those records. I have the sonar records for that whole incident. I think they're in the office somewhere.

MG: They should be archived. It's important information.

SD: Yes. We're going to do that eventually. We saved them in case anybody ever wanted them. But it was pilot error. That was determined to be pilot error. So I was there for that whole – that was probably the most emotionally draining thing that ever happened to me.

MG: How come it was more emotionally draining than the TWA Flight 800 search and recovery?

SD: Pressure to perform. I mean Larrabee is a consummate gentleman. I have the highest respect for him. But [Bill] Clinton's staff was calling him daily, wanting to know how's this going? This is Kennedy's son. So it was a high-pressure situation.

MG: What was the aftermath of that experience like?

SD: Well, success in the fact that we found it. We didn't expect to find it. It was hard. It was okay. Move on. That happened in the summer, and then that October or November, that's when EgyptAir went down. So I was in headquarters at that point in time, running the assets. The *Whiting* was on that, too – doing that too.

MG: And can you walk me through that?

SD: Yes, it looked like a – what was it? A 767 or 777? It was a Boeing 767. So the TWA and JFK's aircraft were down in a hundred-and-twenty feet of water. You could dive it if you want to. EgyptAir went down off of Nantucket in two hundred and forty feet of water. So the whole critical part is trying to figure out where it is when you get there. When they got there, and they towed with the side scan over it, it looked like somebody had taken an entire 767 and put it in a giant blender and just turned it upside down. It was just little pieces of [inaudible]. That was it. We found out where it was. It's just a complete wreckage site. I don't think anybody ever did anything with that.

MG: What do you mean no one ever did anything with it? You didn't map the debris field?

SD: We just mapped the debris field. Whenever we're doing this, we're working with the NTSB. So we mapped the debris field and gave them the information.

MG: Did the Navy come in on that one too?

SD: Of course. Took all the glory. Acted like they'd found it all and they didn't do – no. No, no. Sorry. I'm jaded.

MG: Well, again, what was the reason for that crash? What happened there?

SD: According to the NTSB report the copilot drove it right into the – apparently, the copilot just drove it right into the ocean.

MG: Really?

SD: Yes.

MG: Wow. Again, any investigations or involvement afterward?

SD: Absolutely not.

MG: Anything else you want to say about those incidents?

SD: All I can say is that, in retrospect, TWA 800 – I don't know how you phrase this – the people in charge at the time will agree. But us doing what we did at TWA flight 800 probably saved the NOAA Corps, because the Clinton-Gore administration during the Reinventing Government movement, they were going to get rid of the NOAA Commissioned Corps. It would have been the first time in the history of the United States that they were disbanding a commissioned service of the United States. It didn't happen. [laughter] And some people think it's because of the effort that we were able to do during TWA 800.

MG: Yeah, I'm wondering if you can talk more about that. Why do you think the NOAA Corps was saved, ultimately?

SD: Well, there were a lot of organizations that we had support [from]. But somehow, they pulled it off. It's hard working in an administration that wants to get rid of you, and you have people out there doing the job. It showed the ability [of] the organization to be responsive and do something that's important for the nation.

MG: Yes. Were there other government agencies that were reduced or eliminated during that time as part of Reinventing Government?

SD: Yes, I'm sure there were, but I just don't remember.

MG: What was your title at the time that was happening?

SD: My title? I was commanding officer of the *Rude*.

MG: Were you involved in the lobbying or the –?

SD: Oh, yes. Before I got to the ship, oh yes. [laughter] Well, you're not allowed to lobby, but we were informing people on the Hill a lot and rallying support from our professional –the American Pilots Association, American Association of Port Authorities, things like that that we do work for and other entities.

MG: I have in my notes that you were instrumental in revitalizing NOAA's aging hydrographic fleet. Would that have been before or after Reinventing Government?

SD: No, after.

MG: So it really went sort of full swing, where the NOAA Corps was threatened for reduction or elimination, and then you got to really ramp up its fleet.

SD: Yes.

MG: Can you talk about how that happened?

SD: Well, that happened for a number of reasons. The first was that, when I got selected, the administration was behind us. So under the George W. Bush administration, the NOAA director was Vice Admiral Conrad Lautenbacher, who is probably one of the smartest, competent, nicest gentlemen I've ever met. He fully supported what the NOAA Corps did, and he was adamant that we needed to – ships of the type that NOAA makes and uses have a lifespan of about twenty-five years in normal industry. We have two ships right now that are fifty-two years old, the *Rainier* and the *Fairweather*. The age of the fleet, I think, when Lautenbacher took over, was – the average age was like thirty-some years old. So that's the revitalization. I was in charge during us building our brand-new fleet of fisheries research vessels, etcetera.

MG: In 2003, did your title change then to Deputy Undersecretary of Commerce?

SD: Oh, no, no. I was the director of the Hydrographic Surveys Division as a NOAA captain. Then I was selected to be the director of the Office of Coast Survey. The only job I ever wanted was the Office of Coast Survey job. At the time, it was a captain's billet. I was chosen by then-administrator Margaret Davidson, who was the head of NOS [National Ocean Service], to be the director of the Office of Coast Survey. A month after that, I was selected to be the director of the Office of Marine and Aviation Operations – a month later. So I never went to the Office of Coast Survey. But at the time, NOAA officers were nominated by the president and had to be confirmed by the Senate. So they didn't know what to do with me. They decided for me to go downtown and work for the Deputy Undersecretary of Commerce for Operations, General Jack Kelly. Supposedly, they thought that the Senate would confirm me in three months. So I call it my Gilligan tour because it was supposed to be a three-month tour. The Senate took a year to confirm me. So I went down there for a year. You're a senior staff member. I was the executive assistant to the number three in NOAA, and so long hours, twelve-hour days, typical staff work. But it was really interesting. The nice thing about it was I got to work with the NOAA leadership directly, and I was going to be working for them directly, so I got to know my boss very well.

MG: Jack Kelly?

SD: I said to the secretary, "I'm going to be working with him. Once a month, can he and I just have lunch?" She said, "Sure, I'll put it on the calendar." So I got to have a sit-down with my boss once a month, who was a retired vice admiral, to tell me how he wanted me to act as a rear

admiral. It was a wonderful, wonderful experience. The nice thing about the job was I'd spent all my time working in one small segment of NOAA – basically, Coast Survey or National Ocean Service. When you're downtown, you're looking at all of NOAA. You're seeing all of NOAA. You're interacting with all the administrators and everybody. So it got me the ability to have a top-down look of the organization. Then, when I got confirmed, I was an office director, and I was dealing with all the office directors, and I knew them all because I'd interacted with them. So it turned out to be a great assignment in order to prepare me to be a director.

MG: Those lunches you were having – was that with Jack Kelly?

SD: No, Vice Admiral Lautenbacher

MG: What was he like personally?

SD: [laughter] I loved him. A lot of people hated him. I loved him because you always knew where you sat. He'd tell you what he thought. He's an outstanding – he's a smart, hard-driven guy, no matter what you've heard about him. I don't know if you're talking to him, but he was the director of the Weather Service. He was in charge of the Weather Service modernization. He's an Air Force prior one-star brigadier general, so he takes names and kicks butts. It was a lot of leadership lessons. He asked me what did I think of the assignment? I said, "It was like leadership graduate school, Jack. I had to deal with you every day." But he never ever beat up his staff. He was smart enough to know that they're here to support him. I'm not going to treat them like dirt. Oh, he yelled at me a lot. But I've had a lot of people yell at me a lot. He used to yell at me, and I'd laugh, and he'd get even more mad at me because of the way he was yelling at me. I would just laugh at him. I mean, what could he do to me? You're going to take my promotion away from me? No. You can't do anything to me.

MG: You knew you were only there temporarily anyway, right?

SD: Yes. That's right.

MG: The position you were nominated for was for director of the NOAA Corps?

SD: Right.

MG: Who was your predecessor?

SD: Evelyn.

MG: Fields?

SD: Yes. You should be interviewing her. She's got to be interviewed.

MG: Yes, this is an ongoing program.

SD: Yes. You need to interview her – close colleague. She’s in Tampa. I’m sure she’d be great. They just did a thing. It came out from the NOAA diversity – that storybook or whatever it’s called – sometime last month. I can send it to you. It’s outstanding. She’s in there.

MG: I will check that out.

SD: It’s like a story map type of thing.

MG: Okay, yes. That sounds vaguely familiar. Then, what was this new position like? You were also simultaneously appointed to the Mississippi River Commission.

SD: Yes. So we did that because, since the beginning of the Mississippi River Commission, somebody from the Coast and Geodetic Survey has been on there. [laughter] I took it down. [Editor’s Note: RADM Debow is referring to a framed picture of the Mississippi River Commission.] I should have left it up. This was what was behind me before. So this is myself on the Mississippi River Commission. I think that’s in St. Louis or Memphis. So three Corps of Engineers generals, myself, and then three civilians is [who’s] on the commission. That’s the makeup. They have public meetings, and it’s really intriguing. When it came time for that to come up, I said I wanted to do it. So I’m the first director of the NOAA Corps that did it. But as time has gone on, the Coast Survey position that was a captain’s position is now a one-star admiral’s position, and so that person is the one that sits on the Mississippi River Commission now. But that was an unbelievable experience because my whole career has been coast-wise. This is all inland, so I had no idea what the whole inland marine transportation infrastructure was like. The USACOE vessel based in Vicksburg, MS, the MV *Mississippi* – twice a year, you go on it. In April, you go on the highwater inspection tour. So they may go from St. Louis down to Baton Rouge, Louisiana, on the Mississippi. Then, in August, you go for two weeks in August [on] the low-water inspection tour. The first year I was on there, we went from the headwaters of the Mississippi River in Lake Itasca, Minnesota, down to Houma, Louisiana. So the vessel was in St. Paul, Minnesota. They have a G2 jet, so we flew up to the headwaters. So they had all those guys there. We were all standing in the headwaters of the Mississippi River, and then we went down the Mississippi from St. Paul, Minnesota, and the Upper Mississippi River Valley. It’s like the upper Hudson River Valley. It’s idyllic. It’s not brown. It’s crystal blue water. The brown comes in from the Missouri [River]. The Missouri’s called the Big Muddy, and that’s when it hits the Mississippi. Then the Mississippi is brown all the way down to the Gulf of Mexico. But above there, it is beautiful. La Crosse, Wisconsin, Dubuque, Iowa – unbelievable. We’re pulling in every night. We pull in every night, and then they have public meetings during the day, and then we transit. So it was an unbelievable experience. I still interact with two or three of these gentlemen. They’re lifelong colleagues of mine.

MG: Being director of the NOAA Corps, what were your duties there? Can you describe your role?

SD: Your first title is Director of NOAA Commissioned Corps and then Director of Office of Marine and Aviation Operations. So they had some promotional problems before I got there. So they’d frozen promotions, and we had to come and get our act together to get the promotions cleared. So when I took over, my first issue was that. We had a fatality of a civilian on one of



our ships, and the other one was to increase our safety awareness. So the first two jobs I was given was [to] fix the promotions and fix your safety culture. That's a hard thing to do, and that was the first thing I did. Then, of course, we have a ship construction program. So we'd bring in about thirty officers a year – two or three classes a year. At the time, they were trained at Kings Point, again, like I was. So we'd have graduating classes – you'd have to go up for the graduating classes – and a lot of ship commissioning. I commissioned a number of ships. We got ships back on line – the *Fairweather*, and a couple of other ships. I got to ride one of our ships through the Panama Canal because it was going from the – the yard was in Mississippi, and it was going to Alaska, so I got to ride the NOAA Ship Oscar Dyson through the Panama canal. I got off in Panama City. I visited a lot of vessels. Oh, so that trip down the Mississippi that year – 2004 or '05 – I don't know. When was Katrina? I don't remember what year Katrina was.

MG: 2005.

SD: '05. Sounds right. So we're going down the Mississippi River, and I'm tracking this storm. We have a big-screen TV in the conference room, and I'm tracking the storm. We bottom out at Morgan City, Louisiana, on Friday. The mayor says, "Oh, I'm glad you all are here. We're going to have the Shrimp and Petroleum Festival this weekend." I said, "Sir, you're not going to have anything. You better evacuate this place right now." "What are you talking about? They always tell us to evacuate. Nothing ever happens to us down here." I said, "Sir, you better." NOAA knows within three to five days where that hurricane's going to come ashore, and it's because of those jets I had up there, our hurricane hunters. So I called my operations center in Tampa, and I said, "What's the possibility of me flying up into the hurricane?" They said, "You be here tonight, sir. We're going up at 0800 tomorrow. You're going in." So I flew into the eye of Hurricane Katrina on our NOAA hurricane hunter, which is probably one of the most unbelievable things I've ever done in my entire life. It was scary. It was exciting. [Hurricane Katrina] had just come across Florida. Remember, it came in off the Atlantic Coast, came across Florida and into the Gulf, so I was in it when it had just arrived in the Gulf and had two eyewalls, and it was reforming. So [it was an] eight to ten-hour mission. The flight meteorologist said this thing is going to be huge tomorrow. That would have been Sunday. So I flew in it on Saturday. They said, "Sir, you have to stay." So when you're in an aircraft like that, the pilot and the copilot sit here, and then there's two seats behind them. One is the flight engineer, and then there's another seat. That's where I was. I was right behind the pilot. I called my wife up after we landed, and I said, "I made it fine. I'm here." She said, "Oh, good." I said then, "I'm going to stay. I'm going up again tomorrow." "You're doing what? You just flew into an eye of a hurricane. You're coming home. You've been gone for two weeks on the river. We're having a big barbecue, and you're cooking. You're coming home." I'm like, "Oh, okay." So the next day is when those unbelievable pictures from our aircraft were taken. They actually were taken by Admiral Mike Silah, who's the present NOAA Corps administrator. He was the pilot when I was onboard there. This big thirty-mile eyewall – so when you're in a thirty-mile eyewall, you fly into that, you're flying around in a thirty-mile radius. It's crystal blue above you. It's crystal blue below you. You're in this – it's called the stadium effect. You're seeing all these billowing clouds going all the way up like this. It's unbelievable. It was the most unbelievable thing I've ever done. I'm so glad I did it. I'd do it again tomorrow if I was allowed.

MG: That was your first time flying in a hurricane.

SD: Yes. First and only time. Two days later, after it hit Louisiana and Mississippi, we went back. From a 10,000 feet high, they go into a damage assessment to try to see how their forecast models work. So I was there on the aircraft, and we flew the entire path of the eyewall. Oh, I have pictures from a couple of thousand feet of complete devastation of Mississippi – Gulfport, Mobile – unbelievable.

MG: What were those days following the storm like? What happened?

SD: Yeah. Everything was fine. No problem.

MG: Does anything else stand out from that time, and that position? This is towards the end of your career with NOAA.

SD: Well, you know, you're at the top of the organization. When I quit after 13 years, and I came back, I said, "I'm never quitting again until I go to the top." Basically, I did, and there were a lot of reasons for that. I had the opportunity to – when Margaret Davidson selected me to be director of Coast Survey, she said, "You're going to be the director, but you need to go to charm school." I said, "Well, I've already been to charm school." She goes, "You're not charming enough." Margaret was a trip. I said, "What do you mean?" She goes, "I'm sending you to Harvard." So Harvard at the JFK School has this program – Senior Executive Fellows program. It was unbelievable. That was a real life-changer for me because they – it's case study. It's the way Harvard teaches. You have case studies, and you dissect the case. The class was huge, but all the people – and they were all people taking – they were part of the SES [Senior Executive Service] development program in NASA. A number of my colleagues were NASA people that had to take this course in order to compete to be in SES. It was unbelievable. I came back from that, so all the senior officers that I thought should be leaders, they went to that course. I said, "You're going to that course. You go to that course. You go to that course."

MG: How long was the course?

SD: A month. You spend two weeks there. You're allowed a weekend off, and then you have two weeks. It's an unbelievable course. Everybody said charm school was FEI, Federal Executive Institute in Charlottesville. That's put on by OPM [Office of Personnel Management], I think, and a number of the instructors from the Harvard class teach at the FEI. So one of the best colleagues that I have from the Harvard experience is Dan Fenn. I don't know if he's alive any longer. He's pretty old if he is. He was the personnel director for the John F. Kennedy administration. He was the personnel director. He said, "At the time, it was a BOGSAAT." I said, "What's BOGSAAT?" "Bunch of guys sitting around a table. That's how we got things done." The staff of the White House was not like it is today at all, not even close. So yeah, he was an unbelievable guy. That was a great experience. So you're the leader of the organization, so I would go up and talk to the training class about leadership. All of the assignments ran through me, so I was in charge. Like Harley Davidson, if there was an assignment, I was the one that had to approve or disapprove the assignment.

MG: You also attended the FEI in Charlottesville?

SD: Yes.

MG: When was that, and what did you get out of it?

SD: It was about the same. I think that it was – it was a number of years earlier. I think the Senior Executive Fellows program is like the FEI class on steroids, so it was the same but different. I was really ready to go do this Senior Executive Fellows program because it was great.

MG: Well, what do you think you got out of the Senior Executive Fellows program?

SD: Well, it's a senior leadership development program, so it teaches you – you have a course in negotiations. You have courses in all different kinds of things that become skills that you need as a senior leader. I think it made me a better leader.

MG: Yeah. Do you wish you had done that earlier in your career?

SD: Oh, of course. That's when I came back, and I told my colleagues, "You need to do this now, so don't wait until you're like as far along as I am." I was a senior captain at that point in time. So commander level is probably the better time to do it.

MG: When were you promoted to rear admiral?

SD: I was promoted to rear admiral in May of 2004. I spent a year from 2003 to 2004 downtown working for Jack Kelly.

MG: You ultimately retired from this position in 2007. Is that right?

SD: October 2007. I could have stayed in it. But it was going to be during a change of administration because Bush was term-limited, so he was not going to be able to be reelected. So myself and Admiral Lautenbacher and my hand-picked successor was Admiral Jon Bailey, who was my personnel director during my tenure. I said he would be the best person for this job, and Admiral Lautenbacher agreed. So I opted to retire early in order to get him in place because, at the time, the White House had a good relationship with the Senate. So I got him in place before there was a change of administration. So he pinned on before the administration changed. He was already the two-star admiral when the Obama administration started.

MG: Something we forgot to talk about was the *Bow Mariner* and the recovering of that wreckage.

SD: I was not directly involved with the *Bow Mariner*. I know all about it. But I wasn't on the *Rude* at the time.

MG: So, not much to say about it?

SD: No, other than I know the whole story, and I know its sister ship. I know what its mission was. It was taking coal from Newport News up to Falls River. The *Marine Electric* is its sister ship. It's the same type of thing. So yeah, I know all about it.

MG: The year you left NOAA was the two-hundredth anniversary. Were you involved in any of the celebrations?

SD: Heavily involved all those two-hundredth anniversary things. Yes. I've known Cheryl forever. I've known John [Oliver] forever. So yes, we were heavily involved in that. Lautenbacher was a big proponent of that. I went to many different events related to that.

MG: Any that stand out to you?

SD: Yeah. We brought the *Thomas Jefferson* into Alexandria as part of the celebration. That was a wonderful event. There were just so many events that I went to. We had to make sure we held the banner up. I was at an event in Hawaii. I was at events all over the place. The big event was wonderful, the big celebration. It was great.

MG: Is there anything I haven't asked you about so far?

SD: I don't think so. [laughter]

MG: Well, you've done a number of interesting things since you left NOAA, including some work at the University of Rhode Island. Can you walk me through those years?

SD: Sure. So when I had the RADM Director job, I basically did what a lot of people don't do. I didn't have a plan when I retired. I worked right up to the end, and then I retired. So I was involved in the beginning for us setting up our the Center of Excellence at the University of New Hampshire, the Center for Coastal and Ocean Mapping – Dr. Larry Mayer, and Andy Armstrong is the civilian. Larry said he will always have a seat for me when I get out of the NOAA Corps in that place, because it's a university, and he'd find a grant and put me on the grant. So I got to retire. My wife said, "We're not going to New Hampshire. Our family's down South. I don't want to go." I'm like, "What?" So he had a colleague that he worked with, Dr. Kate Moran, and she was at the University of Rhode Island Graduate School of Oceanography (URI GSO). She was starting up a new program, a Center of Excellence for Offshore Renewable Energy. She wanted a director, so she got money through a grant from the state and got me hired. So I was director of Center of Excellence for Offshore Renewable Energy at URI GSO. We completed all the marine spatial planning effort to install the first offshore wind farm in the USA off Block Island. I was a co-PI [principal investigator] for the Ocean SAMP [Special Area Management Plan]. If you want to look into that, you can see all the – I'm the co-principal investigator for that. I was in charge of all the science studies that supported that effort. Midway through that, URI GSO had an NSF [National Science Foundation] research vessel, the *Endeavor*, and the marine superintendent quit. So Kate Moran came to me, and she said, "Well, you used to be an admiral in charge of a fleet. Now you're in charge of our ship." Well, if you're in charge of one ship or in charge of twenty ships, it's the same thing. It's the same thing – maintenance, salary,

crew, logistics, scientists. So that took up all my time. I was still working on the offshore marine energy stuff. But the Ocean SAMP led to the five turbines that existed off of Block Island. It's only one in the nation where we have offshore wind. Now, it's getting bigger. It's going to be much bigger by 2030. But that was the basis for us to put in the first-ever offshore wind farm.

MG: Yes, that's really exciting.

SD: So then, at the time – what happened was my wife works for a bank here in Maryland, and she was up there. I convinced her that because she's a dependent, she could go back to school – she never got her college degree. She never finished because we were bouncing around the country, and she was raising the family. I said, "Well, you can go and get your degree." She's a seamstress – and Rhode Island [School of Design] is part of the URI system. So she worked it out with her company that she would work part-time from Rhode Island and go to school. So I bought a house right on the main campus, a little Cape Cod, walking distance to the academic halls. She worked four hours a day and went to classes four hours a day, or studied, and was doing really, really well. They they got a new head of HR [human resources], and the HR head [said], "Why do I have a senior HR specialist in Rhode Island for a bank in Maryland?" So they said, "Come back by September 1<sup>st</sup> or you're fired." I said, "You know, honey, I've never fired an outstanding employee." She had been with the bank like fifteen years at the time. I said, "Call their bluff. Tell them no, you're staying. Thanks." They called her bank, and they said, "We're going to give you a promotion. Come back. Be here by January 1<sup>st</sup>." So she left. She came back. So she was living in MD – so now I'm living up there, she's living down here. As my colleague said, "That's not going to last a long time." It didn't. So I applied for and got the Holy Grail of government jobs at the National Science Foundation. Since I was running the ship – the ship operations person in the NSF headquarters was retiring. It's a nonsupervisory GS-15 job. It's called the Holy Grail of government jobs, and I applied for it and got it. Well, I realized when I was up there that almost all those professors at those schools do outside work as consultants all the time. They even have their little companies that are specialists. Say, if you're in the oceanography program, they have their little oceanography firm that they run things through. So I was doing some consulting work for this firm that works for NOAA, IMSG [I.M. Systems Group, Inc.]. So I get selected for the job at NSF, and I call the president at IMSG. I said, "I can't work for you anymore. I'm going to be a fed." He goes, "No, you can't do that." I said, "No, I'm coming back to Maryland, but I can't work for you anymore." He said no, "You're going to come back here and be my chief operating officer." So he offered me a chief operating officer job of a company. It was two years of pure, unadulterated hell because I never was trained to run a company. I worked for NOAA. I was an voluntary indentured servant for thirty years. It was tough. It was tough. It was during a big government shutdown, the first one, the sixteen-day shutdown. We had four hundred and fifty employees. I couldn't pay them. We couldn't pay them. If you can't bill the government, you can't pay your employees, and that's when I got to be – the guys at Coast Survey knew I was in hell, and they said to Lynker [Technologies], "We know who we want. Go hire him." So I got hired by Joe Linza, and I worked for Lynker. Now I'm the vice-president of Lynker, but I told Joe, "I don't want to have any fiducial responsibility. I don't want anybody reporting to me." So I basically am a technical advisor at Coast Survey, and I'm in the perfect place. I love my job. I love going into work. I

hate this teleworking. It drives me crazy because I'm a hands-on, interpersonal kind of guy. But the company's fantastic, and we're doing a good job, and hope it lasts a long time.

MG: What was the title for the NSF position?

SD: I think it was something – ship operations. I don't know what the title was. It was director of Ship Operations or something like that. And that's a painful job, too, because that's always a budget – all ships have the same [issues]. It's crewing, salaries, fuel costs, logistics, mobilization, demobilization, having to deal with scientists that, when they get on the ship, they think they own the ship. *Pfft.*

MG: There are a couple more things that I want to ask you if you have five or ten more minutes. I'm curious to hear about how your family life unfolded, your children, and where they are today?

SD: So we were always worried about that. We've heard horror stories about service brats. But I can tell you that from – my son was born in Seattle, my middle daughter was born in Monterey, and my youngest daughter was born here. I found that they're very adaptable because they get yanked out of this school, and they have to go here, and they have all different sets of friends. But at the end of my career, we settled in Montgomery County in Maryland, and so my daughter's best friends are the girls she went to high school with, and my son's best friends are the guys he – he didn't go to high school with them. He went to DeMatha [Catholic High School] because he was a talent in music. So he went to a private parochial high school, believe it or not. My youngest daughter's best friends are here in the Maryland area. I think that they've all done fine. They all have done fine for themselves. My son is an IT contractor. He lives in Alexandria, and he's got a little boy that's three. My middle daughter is here. She's a nurse practitioner, so she did very well. She always wanted to get a car. When she graduated from high – when she graduated, she wanted a car. Well, I told all my kids, if you get a full ride to college, I'll buy you a brand-new car when you graduate from college. My logic is a brand-new car is like one year of tuition, at the most, so I could do that. So my daughter was adamant that I was going to get her a new car. She wanted a brand-new Jeep Wrangler. So she tried everything. She's very smart but was never going to get an academic scholarship, very athletic but was never going to get an athletic scholarship. So she came to me, and she goes I'm going to go to the Naval Academy. I said, "Over my dead body, you're going to the Naval Academy. But you can go into Navy ROTC [Reserve Officer Training Corps], and you can pick a great school. Then you have to serve." So she became a Naval officer and went to Villanova, and went through their nursing program. So she was a Navy nurse. So she's had a number of assignments in San Diego, so we got – oh, my God – when she was in San Diego, we could fly Southwest [Airlines] direct from Baltimore to San Diego for ninety-nine dollars each way. We would go out there like every three months to visit her. I love San Diego. Then she deployed during the second Iraq War to – was it the first Iraq War or second? She deployed to Kuwait. She was in, basically, a MASH [Mobile Army Surgical Hospital] unit 20 miles from the Iraq border. She was only seeing troops going into countries, so she was giving people anthrax vaccines and stuff like that. She had a nine-month deployment, which was tough for us. But she did fine. Then she wanted out. So she was going to go back to San Diego. All she ever wanted to do was emergency medicine, and they've always put her on like maternity wards and stuff like

that. She didn't want that. So the only emergency room assignment – and she wanted it for the least amount of months, and then she was quitting. They sent her to Guantanamo Bay, Cuba. So we got to go and visit her in Guantanamo Bay, Cuba, which was unbelievable. [laughter] She wasn't with the terrorist side of the base. She was with the Navy base side. She was at the Naval hospital. She liked it, but she didn't because you're on a small part of an island and there's not much there. So she did that for eighteen months, and then, luckily for her, because she served, post-9/11 GI Bill – she went and got her master's degree at George Mason as a nurse practitioner. I didn't pay a dime for any of this stuff – not a dime. I made it up to her at her wedding.

MG: Good deal.

SD: My youngest is now in Boston. She got a nursing degree from Northeastern. She's a nurse at the bone marrow transplant clinic at Children's Hospital in Boston, Massachusetts. We're holding our breath, but she's in a pretty sterile environment. [Editor's Note: RADM DeBow is referring to the risk of exposure to coronavirus during the COVID-19 pandemic.] She's not going to – they have all the protocols there because of the clinic that she's in, but she still has to get there.

MG: Yes. That was something else I wanted to ask you about. I'm doing remote interviews for the first time because of coronavirus, and so this has really flipped everyone's world upside down. I want to ask how you're managing and what life is like because of it.

SD: I've been doing it since March 12<sup>th</sup>. We had the NOAA test in DC to see what it would be like if people could telework without any issue– and then the Coast Survey said, "Don't come back for four weeks." So that was March. So I've been teleworking since March 12<sup>th</sup>. I'm glad I have a diversion like this today. Sometimes it's hard to fill up the day with things that are worth doing. Today is actually a pretty busy day. I have you, and then I have a one o'clock [meeting]. It's different. I get out. I ride a bike every day after work. I try to ride a bike every day after work. I'm an outdoors kind of guy, but I have my nurse daughter here, who won't let me out of this house because she says I'm in the high-risk area. In a way, it's good. I'm good. A two-year-old will really keep you busy. They'll keep you running around, so it's fun. We mess with her. I go out and play with her. It's good. She's a typical two-year-old. You know what it's all about.

MG: Yes. Well, is there anything you want to say, reflecting on your career or NOAA as an agency?

SD: Well, when I quit, and I came back in, I found that – I've told everybody that NOAA, in all its faults and all its blemishes and pimples, is a kinder, gentler organization than being out in the private sector, out making money. Maybe you're not going to make as much money, but NOAA, in general, has a great mission. It's all about the leadership. I know the NOAA Corps is in good hands, because Mike Silah is a wonderful guy, and Nancy Hann is a wonderful person. I had a great career. I worked hard at getting myself into a position so I could be competitive to do the job. I was only there [for] three years. There's always so much more you want to do, and you

just don't have the time to do it. Nothing massively bad happened on my watch. Oh, yes, the base burned down.

MG: What do you mean?

SD: Just like we have a base for ships in Norfolk, our ships were based in Lake Union in Seattle, and it burned down on July 4, 2007. I will never forget it as long as I live.

MG: What happened?

SD: That's why all the ships are in Newport, Oregon, now. It was a strong windy night. The fireworks were going off. People suggest that there were fireworks being shot off on our pier, but it turns out that the investigator found that there was an electrical outlet that parted and it's [inaudible] covered piers, and it just went up like a tinderbox, and we lost our base. Nobody got killed. One of the ships we were getting rid of got a little bit scorched. So that was a pretty traumatic thing that happened on my watch. Yes. But things happen. No, it was a great job. Great organization. I love the fact that I'm able to still interact with the Corps. I love the fact that I'm still able to interact with the people that I was their mentor through their career. They have a lot of respect for me. They like having me there. I mean, all this stuff that comes up, nothing's new. It's like Jack Kelly used to say, "Just put it in a file, put it in a file drawer. Two or three years, just pull the file out. It'll be the same. Don't ever throw anything away. You're always going to have to refer back to it." And it's absolutely true. It's absolutely true.

MG: Well, I think I've gotten to the end of my questions unless there's something I'm leaving out.

SD: No. You can always contact me if you want to follow up. I'll send you that *GPS World* article.

MG: That'd be great.

SD: I don't know if you're ever in DC. After we do this, I can give you my – I have my news clippings from the TWA. I have it in a big photo album. That news clipping with the girl – it's in there. A lot of the letters I received is in there. Somebody has that. I lend that to people. I know who has it, but I haven't seen her since March 12<sup>th</sup>, so she's got it somewhere.

MG: Well, that would be great. I hope that's sooner rather than later.

SD: Yes. [laughter] No kidding. Me too. Well, take care. Nice talking with you. Have a great weekend.

MG: Yes. This has been such a treat. Thank you for all your time.

SD: Yes, okay. Thank you.

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

Reviewed by Molly Graham 6/24/2020



Reviewed by RADM Samuel P. DeBow 7/31/20  
Reviewed by Molly Graham 8/2/2020