## NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE

AN INTERVIEW WITH LOUIS W. UCCELLINI FOR THE NWS HERITAGE PROGRAM ORAL HISTORY COLLECTION

INTERVIEW CONDUCTED BY GREG ROMANO

COLUMBIA, MARYLAND 31 AUGUST2021

TRANSCRIPT EDITED BY GREG ROMANO

Greg Romano: This is an oral history interview with Dr. Louis Uccellini. The interview is taking place on Tuesday, August 31, 2021. The interviewer is Greg Romano. It's a remote interview with Louis in Columbia, Maryland, and Greg in Buckeye, Arizona.

Louis, during our last talk, we were talking about your time as director of the National Centers for Environmental Prediction. And we can't leave that discussion without talking about the vision and creation behind the development of what became known as and exists today as the NOAA Center for Weather and Climate Prediction, something you said it took 13 years to get done. When we look back at the history of this building, the planning for it began in 1999. You started having budget discussions in 2002. Identifying a location for the building was a big process, as was the bidding proposal in process for the building, selling it to the Department of Commerce, and then ultimately getting the groundbreaking done in 2006, the issues related to the construction, and ultimately completing the building in August 2012. That's a long time. Going back to the very beginning, Louis, what was the reason behind the move? Why did you need to move from Suitland and move the facility to College Park?

Louis Uccellini: I had been in MOD, the Meteorological Operations Division, in 1989 through '94. And during that period, there was talk of -- there's always been talk of moving out of the building we were in, the World Weather Building. It was actually in Camp Springs, which is right next to Suitland, right off the Beltway; right in the middle of, I think, three used car lots, across the street from a gas station where there was a robbery every other month in full view of the windows from the Meteorological Operations Division.

GR: Yes.

LU: Where the Nation's Weather Services began. It wasn't a good environment to attract people, the best and the brightest. It just -- we had trouble holding international meetings. People who wouldn't want to come to a building like that. Single-paned windows [...] the heating, cooling kind of thing, depending on where the sun shone in ... literally. The joke in the building was it was called the World Weather Building because it had the world's climate zones every day from hot to cold. And it just felt like a trap. It wasn't just a matter of attracting the best and the brightest from the research community or -- it was even attracting the -- a workforce within the forecast divisions. So that was something that was certainly an issue, and a desire on the part of many people, even back into the mid-70s. Right after they moved in, there's a memo written from [Frederick] Shuman (former director of the National Meteorological Center), about looking to move to the University of Maryland, which was a process that I think went on for a while, and then a dean at the university said, "No, we're not interested," so it died.

There were other attempts to move; one to move to Goddard Space Flight. While I was in OM in '95, '96, '97, that blew up, literally, in the process. There's always been this interest. And the interest is based around being co-located with a research group, a research and education group, to help facilitate the research to operations process, and also attract the next generation of people to work for us; not just visit us from other places, but to work for us. So there was this strategic and programmatic reason for doing this. And it was also a safety-of-the-workforce

reason. I mean, there were times when there was -- there were people robbed right in the parking lot going out to their cars. Things like that; that's not a good place to be. So there was this strategic reason. You've got to make it programmatic, though, and safety of the workforce, and things like that, that you have to bring together to make the case. But there was certainly a very strong interest in doing that, and that it was a strategic imperative to get it done. So when I arrived in '99, it was right after the failed attempt to get it at Goddard Space Flight Center. And I decided that we needed to give it another shot, because there was an interest in NOAA to relocate components of NOAA, including the Satellite Operations Group, and NMC and other people that were in the World Weather Building. It was recognized that [this] was a place to get out of. So I decided that we would make it a strategic imperative. And then I learned right after it got announced at the AMS said, "Oh, a decision has already been made." And that caused some consternation. That started my path.

GR: And what was that decision that had been made that caused consternation? [laughs]

LU: Well, I heard from [NOAA Deputy Under Secretary for Operations] Scott Gudes that there was a committee that had met within NOAA that recommended that the folks in the World Weather Building move to Suitland, Maryland; and that that was already moving forward. And I told them that I didn't think that was a wise decision, and I was going to have problems with that. I actually just blurted it out, and then realized later I might be the shortest reigning director [laughs] of the National Centers for Environmental Prediction; because Jack Kelly was not happy. Jack Kelly, who was the director of the Weather Service, was not happy that I just immediately struck that down as an option, when NOAA had already, quote, unquote, "decided".

So I found a way of making the case, and that was after I arrived in the office, the week after the AMS conference, which was in January of 1999. I had a sit-down with the people in the [NCEP] front office and I brought this up immediately. Dave Caldwell, who was like the operating officer for NCEP and reported directly to the director of NCEP, said that he was part of the meetings, and the reason that Suitland was chosen was because the person who was running the meetings was out of the office -- the facilities, basically the facilities office of NOAA, took synergy, took the relationship with the research and university community as a basis for deciding the way to move. He took that off the table; that synergy was not a programmatic reason for making the move.

So when Scott Gudes came out and visited me -- by the time he came out and visited me, it was like day three of the -- of my tenure. He came because I said this to him at the AMS conference. He came out and visited me. This is the deputy undersecretary of operations for all of NOAA. It's like the top civil servant position in NOAA; came out and visited me. I had known -- met Scott Gudes and had tremendous respect for him as the director of the Office of Meteorology at Headquarters, so it wasn't like we didn't know each other or anything. So he came out and talked to me. And he said, "Why?" He asked me, "Why aren't you supporting this decision? What is your issue?" And I said, well, they took synergy off the table. They took the need to colocate with research organizations -- or educational organizations -- off the table. If we go to Suitland, we'll be in the middle of nowhere with respect to that factor. A research organization

does not exist where we'll be moving. In fact, they'll have this big fence around us, and people will just go in and out that gate to the metro station, and that will be it. So you'll be at work and then I notice a lot of other office buildings there, and as NESDIS could be there, and I understand all that, but you -- that was taken off.

So a fundamental principle of the modernization of the National Weather Service was that if we had the opportunity to co-locate with a research or educational -- or even the partner of work that's working with the National Weather Service, if we had that opportunity to move, we should pursue that move. I said that was a basic tenet of the modernization. And that tenet was removed for the central component of the National Weather Service that we all agreed has to be -- they have to modernize, they have to become part -- an integrated part, not only of the Weather Service effort for what we were working towards with the modernization, which was not over yet, but also a better linkage with the research community, which was a known weakness of NCEP. I said, "Your leader of that committee took it off the table." He didn't know that.

So he went back and he organized the meeting. And I remember Greg Withee from NESDIS, who was the AA of NESDIS, was at that meeting, because he became a very important part of this. I knew this topic was going to be raised, but nobody else did. So there was no ability -- and maybe this was Scott's approach. So we have this meeting and we sit down. And they were people from the committee. He asked the question, and he said, "Did you take synergy, did you take the opportunity to co-locate with a research or educational entity off the table in the discussions that led to the decision to move the occupants of the World Weather Building to Suitland?" And Greg Withee said, "Yes, it was taken off the table." And the leader of the group was there And Withee was very emphatic about it. So it was -- obviously it was bothering him too because he had a NESDIS component in there. But he wasn't fighting for this, but he had a NESDIS component -- a science component. They were in that building. And so Gudes then asked the leader of the group, "Well, why did you do that?" And he kind of stumbled around, and he didn't realize -- and he -- and Withee then piled on and said, "That was kind of an arbitrary kind of decision too. There wasn't much discussion about it. It was presented as if this was the NOAA position."

So Gudes listened for another five minutes, without asking me, again, about the importance of all this, because I think I had made my case with him. And he says, "All right, we're starting over." So in two weeks we turned it around. But now I had to ... you shot the moose. How are you going to get out of the forest now? But it was very important -- it was a very important principle to fight for, and they had had a discussion about that, but that there were no options locally, and it would have cost too much money to move us to a university on an open bid kind of thing. Then you've got, hey folks were stuck here kind of thing. What are we going to do? So we got a chance to start over. And the one thing that Gudes said to me -- (because the blowup at Goddard involved word getting out before it had actually been approved on the Hill. And one of the chairs of a budget committee really got upset. So he basically blew up -- he called everybody in from NOAA and -- the AAs -- gave them a lecture on how appropriations work, and how decisions are made). That is not good. The only guidelines I had from Scott Gudes was, "Don't pick NASA". It was too raw. That happened in '97 or '98, and it was still too raw. It

was an open wound. And so the option I thought of right away was the university (of Maryland).

And that was interesting, because I ran into some good fortune in that stage of the journey as well. But the fact is the University of Maryland, it was not a given, because there was an attempt to move there in the '70s or '80s like this interest to look elsewhere. But there was a dean, and I forget the dean's name, but apparently the dean not only rejected the idea that the move would help the university, he actually worked to eliminate the Undergraduate Department that existed - Undergraduate Department of Atmospheric Science and Meteorology, that got eliminated at the same time. So that kind of shut that effort down. It was a question about whether the University of Maryland was really interested or not in doing this. So right about 1999 -- I went to the University of Maryland. It was one of my first meetings, and it was an interesting story behind that as well.

GR: When -- what other places did -- were under consideration?

LU: There was an effort right near Silver Spring where they had -- the military had an old munitions facility, White Oak? I think it was White Oak ...

GR: Yes.

LU: There would be a science -- maybe a science part built there. So we looked there. And there was a group up here that's part of Johns Hopkins University, another lab here, more of a Department of Defense kind of thing. So there were other things to explore and do RFIs for. Of course, with respect to the move and the building of synergy, that's extremely important, because when you go through the process of then selecting land to build a building on, you've got to have a certain co-location with these kinds of groups. So we needed to have an option space, and the university was one of those option spaces.

GR: It seems like the selection of University of Maryland, particularly since it -- and I'm recalling my memories of these, that the selection of the M2 Research Park, which is just across the railroad tracks and metro from the university proper, and that NCWCP was an early tenant of that research park. So it seemed like Maryland sort of came together at the right time and the right place.

LU: Yes. Boy, that's a true story. First of all, they just selected a new president, [Dr. C.D.] Mote [who] came in from -- I believe it was one of the top colleges out in California, it might have been Berkeley, and he was all in and building relationships with the federal government. I mean, he was top-notch and if there's a science-service connection, he got particularly excited. Of course, we had to make the case for that. They all look for resources right away with respect to grants, things like that. So he was in place. The position that was not yet filled was the dean. And we all, I recognized right on that we would have to work this up through the chain. And you have to start with the dean. And if you can't sell the dean about why this is important to them, then you have a hard time with it. So we started making the plans. We heard that it was vacant. Eugenia Kalnay, who was the director of the Development Division when I came over into NMC in 1989

is -- was the top modeler. I actually knew her from Goddard Space Flight Center. And then she took over what is now EMC, the Modeling Center and really revolutionized a lot of things there in terms of the modeling, the data assimilation, introduced ensemble models, et cetera. She was at the University of Maryland. She had gone to the University of Maryland as one of their top professors. So she was there, and I started talking to her. And she was the one who clued me in: "Well you can get the chair of the department behind this, but we are still waiting on the dean to be announced and appointed."

So what I'm going to tell you is a true story. So this is about -- it's probably '99. My -- our youngest child is -- we're going to enroll him in a small private school close by; it was in Howard County here. It was his freshman year, and we went to one of these parent meetings where you go -- a familiarization type of meeting and the like. And we, my wife Susie and I, got there right at the time that they're starting the meeting. They had these round circular tables. They've got this one table off to the side and there's nobody there yet, so (we) sit there. And then, about two minutes later, this other couple comes in and sits right across from us. It turns out this is Steve Halpern, who I didn't know. He tells me they just moved in from Toronto, and he's just accepted a position at the University of Maryland. He's a mathematician. He's talking about the School of -- I forget, it's like Mathematics, Computer Science and he's telling me about his background and I'm telling him about mine, director of NCEP and all that. It was a really good talk. The thing I really remembered about from the meeting was his raspy voice. Because I'm terrible with remembering names, unless I repeat it like 100 times.

Meanwhile back at the shop, I knew that Eugenia told me that a new dean was arriving and to stay tuned. So Dave Caldwell and I - Dave was really the main player working out of my office on this new project - we started talking. How are we going to approach the dean? You know, we've got this old history. Do we bring it up? Eugenia's telling us they got the building guy pretty well locked in, all excited, because they got this new idea for a science park. They've got nobody in it. Nobody's in it at this point, it's just woods. And so we're coming up with this strategy. In one of those meetings, as we go through this week we get this agenda that either Eugenia or the person who managed the building projects was putting together. I didn't like the agenda; the way they had the agenda mapped out. So I changed a few things. It had on there "Draft," and it had this Dean Halpern [on it]. I didn't recognize the name. After we sent the agenda in the day before, we come back and said, "Okay, have we heard anything back on the agenda and exactly how this could be mapped out?" Just trying to organize this whole entree and the introductions and all that. Eugenia would do the introductions, et cetera, et cetera. I get a call. The secretary walks in, says, "You got a call from Dean Halpern," and she kept on saying, "Dean Halpern." So I go, oh, God I just interfered with his meeting and he's upset about the agenda. So I pick up the phone, and I go, "Hello, this is Louis Uccellini." And he goes, "Yes, this is Steve." And as soon as he said that, I recognized his voice. I go, "Steve?" I go, "This is you?" He goes, "Yes, Can you believe this?" Because this turns out this is his first thing he got briefed on, he remembered my name. The thing he remembered about my name was "Uccellini", because how many ... I swear to God, so we talked for about 20 minutes. He says, "Well, look, I want you to come over an hour before the meeting. Let's just talk this out. I want to understand your strategic goals." He's asking the right questions. He's not saying, hey, I like this because I met you at the ... So we had a meeting and we went over the strategic goals. And I told him the story about eliminating the Undergraduate Department. And I said, at some point, I hope we can get back to that issue about the undergraduate part, because if you want people to get hired by us. It's one thing getting research grants, but you also want students that can connect with us. It usually happens at the end of graduate level. And the only way you're going to compete with the graduate schools is to have a feeder program within your own institution.

So we had all those discussions. He goes, "This is a done deal," right? Now, nobody -- the person who's going to get the briefing on the buildings and how this thing about the research, Eugenia, nobody knows we're having this meeting. We walked in -- and oh and this -- Steve always had -- you know, if he -- something happened in his office that was worth celebrating, he pulled out the right-hand drawer and there's this great bottle of whiskey. So he says, "Okay, we're celebrating this." Boom, we each take a shot. We walk in there arm in arm. Eugenia's jaw dropped down and Steve starts the meeting and he said, "Okay, we've already agreed to the principles of this project, and we've committed ourselves to making it happen." That was his opening statement as an introduction. The guy nearly dropped his pointer. The guy was already standing in front of the charts. Because of course, we were 15 minutes late, right, getting into the meeting. You can imagine this whole thing. How often does that happen?

The next step the university was going to do, because they wanted to sell this research park. They're very good at lobbying the Hill and Mote is the master at this, apparently, and it showed. They set up this meeting for none other than Senator Mikulski. Because we're in Maryland, and she's very interested in science-service areas. She's at Goddard, National Institute of Health, and now this. So they set up a program, what did they call it? Opportunities for Better Partnerships with the Federal Government. And they made sure that my talk was given during lunch; because they know the senator ... I guess they send their staff to all the talks. But then the senator shows up for the last one, especially if it's over lunch. Because then they get a chance to make a little speech, because their aides were already briefing them on what's been shown so far and all that. So who gets to brief Mikulski in this setting? Me! And one of the things I did was introduce Eugenia -- Eugenia introduced me, right, so now Mikulski sees this woman that's a professor there. When Eugenia's stepping off the stage, I ask her to come back up to let Mikulski know that Eugenia's a giant in the field. And for her to say this is a really important message. Mikulski comes up and hugs her -- [laughs] because Mikulski is the one who -- with Kay Bailey Hutchison -- started the -- basically the women's Senator movement where they would always have lunch together from both parties and -- that "Let's build up. This should be more of us," and et cetera, et cetera. And then I give my speech. Then she gives her speech and basically tells the university that they need to support what she just heard, because this is the kind of science-to-service that she wants to see. She was a big fan of the Weather Service, by the way. She was the chair of our Appropriations Committee. So this all fell in place like in a month, maybe two months. That's how we got it off the ground.

But we still have to go through this selection process, which means we've got to get a project established in GSA. That takes about a ... that first bit of money for the project review in GSA actually was initiated by Steny Hoyer, who is also now becoming a leader in the House, who

actually graduated from the University of Maryland. And he loved this project. I got to brief him with Mote about a month or two after that. It just kind of fell into place. Actually, that briefing to Hoyer occurred after 2000/2001 timeframe that I got to brief Hoyer. And he's the one who got the money in GSA to start the study project. And by that time, the Bush administration had come in, so we had to go through everything all over again [with] the new NOAA administrator, the new chief of staff, which was Scott Rayder, and resell the project, go to the Department, get them to accept the project. That took another year, and then we can get the money through GSA. So we're talking about 2001/2002. But Hoyer was very effective in getting the initial budget. Then Mikulski became the chair of the overall budget, and she made it her project. So we kind of ... you make your own luck. But there was good fortune in first gaining the university acceptance that this was something they wanted to see happen on their watch with the president and the dean. The dean actually becoming the forcing agent within the university, and then getting Hoyer interested in it and getting GSA funding, which we needed to get the project started, and then get the Department of Commerce interested in that as well.

GR: The planets all aligned.

LU: Yes.

GR: Certainly as you said, you make your own luck, but a lot of things happen at the right place at the right time. And you meeting Steve at the school certainly didn't hurt. So you have a location, and --

LU: Ah, not yet. Not yet.

GR: Not yet; okay.

LU: There's a little story there.

GR: Okay.

LU: And if we could just take a break in the recording.

GR: Okay.

LU: I've got to get a drink of water.

GR: All right.

(Break)

GR: Before the break we were talking about the process of determining the location of NCWCP. And you were about to talk about a story that, involving the, sort of the final steps to getting that location figured out.

LU: Yeah. So, we were asked to explore option space and we came back to NOAA towards the end of the Clinton Administration [saying] that Maryland looked very, very promising. So that's in the Democratic Party. And, of course we get, in 2000, George Bush is elected President, so there's a change in the parties, and of course, you get a change in the players now throughout NOAA and the Department of Commerce. It took a while, of course the new administration came in in 2001. So, we're sort of on pause, although we're trying to make the case within the Weather Service. And by that point, we had convinced Jack Kelly, the Director of the Weather Service, and Scott Gudes, that it was important to get into a research environment. I had to make the case for synergy by showing for those weather service offices that did co-locate on campus or with a research group, that their performances went up, their rate of the "Research to Operations" (R2O) processes went up. Changes were accelerated for the better. So, programmatically, it was advantageous. So, I had to go through [and show] all of that. And then, Jack became a big proponent of the building. He was sold. And when Jack Kelly is sold, you make that effort; he finds every way to move things forward.

So finally we get a new Undersecretary, Conrad Lautenbacher, 3-star admiral, and a Chief of Staff, Scott Rayder, who I'd heard about -- he came out of OAR -- but I never really interacted with. Turns out he's a force of nature, anybody who knows Scott, right, he's just a force of nature. So, Jack Kelly gives me a call, and this is like the first day or the second day that Lautenbacher now is literally in the office. He said, "I set up a briefing for you for Lautenbacher and Rayder," like tomorrow afternoon or tomorrow morning, whenever it was. Oh, it was right about lunchtime the next day, because I remember, because Lautenbacher was eating his lunch when we went in there.

So, Jack fits this meeting in, and you can imagine, you know, it's like the first, second, or third day or something, you know, all these things that the new NOAA administrator has to go through. It's an enormous set of responsibilities here that they have to sort of wrap their heads around. But on the way down there Jack said, "You know, when somebody gets into a new position, usually whoever gets to them first with a great idea has an advantage." So, we went in there and I still remember, the boxes were still in the office, I mean, he hadn't emptied his boxes. There was nothing on the shelf, the table was clear, and he's eating lunch. Scott Rayder is sort of working in the background, he had the computer set up, and he's got the screen, he's looking at stuff coming in as I'm talking. So, I pitched the building, and the reasons. I go through a lot of the stuff here without embellishing it. It was very short. You've got, hey, you've got 45 minutes. You've got 45 minutes, right? So, sell the building, sell the project, but it's out on a university campus.

Scott Rayder knows from OAR that there's always been a problem trying to locate on one campus, because there are giants in the field that want, in different universities, that want whatever you're going to do on their campus. So, there's always going to be this battle, likely within UCAR, the University Corporation for Atmospheric Research that is there to basically to support the Meteorology Departments, and NCAR ... the whole academic enterprise. Well, it turns out in the process of building support for this project, I got a letter of support from Rick

Anthes, who was the head of UCAR at the time, the President of UCAR. And he was all in, because he really knows the Weather Service and knows how important it was to get the components of the Weather Service in that building -- What was now the National Centers for Environmental Protection -- into a better place. So, he wrote a very strong supporting letter.

Scott Rayder was listening carefully even as he was multiprocessing and all that. And he says, "I," and he spoke up when Lautenbacher asked him, "Okay, what's your view, Scott?" He says, "I have a problem with this, because I don't think the university community is going to like us being this close to just one university. This could be a problem." And I said, "Well, I don't think so really Scott, because," oh, and no, I didn't say it that way. I said something like, "I anticipated that could be a problem." You know, there was Dick Reed out at Washington, John Dutton at Penn State, they've all at one time or another have said exactly what Scott was saying. So, I said, "So, which is why I worked to get the support of UCAR for this project, and I have the support of UCAR and its President Richard Anthes for this project." Scott goes, "Did you get that in writing?" I said, "Yeah, it's right here," I pulled it out of the folder, and I handed it to him, and he's reading it. And he says to Admiral Lautenbacher, "This is gold." It's basically what he says. He says, "We can make this work." And basically we walked ... Jack Kelly and I walked out of that room both agreeing on two things, if you're going to sell a project to Conrad Lautenbacher, you'd better have his Chief of Staff in agreement, and secondly, they're in.

Scott Rayder, being this force of nature that he is, immediately got to thinking about how best they could start making their presence known aloft, within the department. So, they met with Sam Bodman, who became the new Deputy Secretary of Commerce. It turns out he has a PhD out of MIT, and I'm not sure if it was in Meteorology or Environmental Sciences, or, but it's close. And he really, he knew the community, okay, he really knew the community. So, they briefed him, and he wanted to visit the existing facility. And we were told in advance, he's going to look at everything, including the basement. So, everybody wanted to clean things up, because this is really the first time the Secretary of Commerce is coming to the World Weather Building, ever. I said, "No." I said, "We could straighten things up, but I want him to see it the way it is. I don't want him walking out of here saying, "Uhn, it looks all right to me, what's their problem?" Right? So he comes in, and oh, and one of the things that they wanted to change was the window, by the coffee clutch that overlooks towards that gas station that went through, you know, a series of robberies and stuff. There's a bullet hole in that window, looked like it was probably from a pellet gun, it wasn't from a high-powered rifle, or they would have shattered everything. But the story was that somebody was looking out the window when something was happening, then, boom, this thing happened, like, you know, "What the hell are you looking at?" kind of a thing. Anyway, they wanted to take that window out, I said, "No, no. No, no, you're leaving that in too, because I've also heard he was very much in tune with the safety of the workforce, which is why he always inspected the basements, and everything else was, are you focused on safety? So, he came in, we gave him the briefing, programmatic briefing, and the need out of this building. We gave him a tour, the last thing he saw was that bullet hole. We walked around the fourth floor where he was, boom, there it was. We did the tour first, I gave him the briefing, and then it was his turn to speak. And he gave us his background, how much he knew about what we did, how important it was to connect with the scientific and education

communities. And having a building that's safe and serves the function of the organization. He was very, very good, you know, in this regard.

Well, what I didn't know is that he, they have a security detail, they drove in a limo, and it turned out that Lautenbacher and Scott Rayder drove with him. Remember, Lautenbacher's a 3-star admiral, he's a man of authority already. And apparently, when they got in there they say, "Get these poor bastards out of that building. You know, "Just get this done," right? Or something like that. Rayder has the exact quote, but he told me, "Listen, you sold that building, and we got our marching orders on the way back."

So this is now the 2002 time frame, because there's an election in Maryland that brings us a Republican governor, Ehrlich, after we sold this to the Democratic Administration, and it was clear that Ehrlich was starting over with all the agreements made by the previous administration. So, Lautenbacher set up a meeting at the University of Maryland, with (Maryland Congressman) Steny Hoyer, and then sets up a meeting, so it happened in that 2002 time frame with Steny Hoyer, to make sure that the university is locked in. And then, we would go to the Capitol to meet with Ehrlich, and then Mote came along with us. It turns out that it was Scott Rayder talking to the Chief of Staff of the Governor, of Maryland, that got the project sold anyway. By the time we got in there, it was like we spoke for like 10 minutes each. Ehrlich was already in, and we spent the next, you know, 40 minutes telling stories, basically, about how we got where we were. That's how we got the university as a key place, and then, Sam Bodman then went back to have a meeting with the politicals on the hill, both on the House side and the Senate side to ensure that he could get support for this. And he declared the project, once he got that, declared the project. I got a phone call after the meeting, from Jack Kelly, who I think was still walking away from the meeting and said, "We got the project, you're the project lead. The orders from Sam Bodman and Steny Hoyer are find the place you want to be at, that's up to you."

So, that's what I did, started working with the GSA and the university, and they put in the bids. We walked the locations, turns out that there was nothing, they didn't even have the ground graded for their science park. Nothing was there. We walked through the woods, went over a stream, came in from a back parking lot, walked through the property with Dave Caldwell and one other person that was from Mote's office. And I said, this is where we're going to be, and I pointed to the ground in the woods, which is exactly where the building is today. You know, it just happened that way. We got it done. It took a while, we had to get the study, the project study. It was interesting with GSA, because there was a meeting set up with NOAA with GSA, and they came to that. And the GSA individual, the project managers, a group who's in charge of project management and all that, said to me, "Good luck getting this on the priority list." Well, it turns out, two things happened. Bodman raised our building from number 35 to number one on the DOC priority list. And Hoyer's three, you know, \$3 million dollars in GSA came with congressional language that said, "Make this your highest priority." That same individual was back in my office in three weeks, and his first question to me was, "How the hell did you make this happen?" [Laughter]

And I just said that the stars were aligned or something like that. And he didn't believe me of course, but that's basically what happened. We basically took it from there, and we went through some, we did have to go through the process for site selection. It was clear that the thing that sold that location from everybody's perspective was the connection with the University of Maryland, and the programmatic advances that could be expected from this, that couldn't be from the other sites that were being provided as options. That's what led to the final decision. I wasn't even invited to the meeting for the final decision. But the final decision was that, based on the programmatics. So, Jack was absolutely right, the very first thing was, you've got to sell me from a programmatic point of view, because you're going to have to sell everybody from a programmatic point of view. He was, it was absolutely correct. That's what got that sold. So, that was the land. So, that was the land part that we finally nailed down in the 2002, 2003 time frame.

GR: So, then you go to choose a builder ...

LU: Right.

GR: ...and working with GSA that's, you know, that's going to be part of their role. I'm curious about your involvement in the discussions in terms of priorities for what you wanted in the building itself, that ended up with, that resulted in the, you know, the designer of the building was HOK, it's done a lot of other federal buildings well-known in the architectural community, and then, the initial builder was Opus East. And I'm curious about what your goals for the building were, you know, now having established the site being on that campus. Talk about the goals.

LU: Yeah. So, there's a couple things that were happening. Two buildings, in the intermediate time there were two buildings built. One was for NSA, that was near the area that I stood. I was a little bit further east. And then, the Earth System Science Interdisciplinary Center from the university got approved and built. And, these buildings were more a functional design in the point of being what we would call a box building kind of thing, a quick design, quick-build kind of thing. We approached this from the point of view, and it was the architectural firms and the builders, they had a contract with a builder that would guarantee a build in three years or something like that. But the point is people had to bid on it, and there were about six different bids, all with the same constraints, all with the same constraints budget wise. In other words, we had, there was a set number for us, you had to, sort of like putting a down payment on a lease kind of thing, and ensuring that the resources will be there, ensuring that whatever infrastructure we have to bring to the building in terms of data in, and moving data out would be there. All that had to be done, but there was this, these boundary conditions that people had to bid into.

Well, we got the design, we got all of these box designs, box designs from the five of them, and with guarantees, this, that, and the other thing. And then, we got this [from] HOK, right? Yeah, and it was a beautiful building, it was an absolutely beautiful building. Now, in terms of setting up the criteria for the building, we again went back to the programmatics. We had operational units, we had the research units, we had NESDIS STAR. OAR was brought in, a research

laboratory into that building, there's a lot of research done there. And the R2O that we do not only within EMC, but we would have the OPC, Ocean Prediction Center, Weather Prediction Center that does applied research and research to operations. And then, the whole modeling thing, which everybody focuses on, you know, is how will we be doing our modeling? How are they going to connect with you? So, we made those programmatic issues very clear as part of our criteria for success. The way that HOK designed the building, and bringing in the conference center in the way they did, for international meetings and the like, it's a beautiful conference center. And then, hooking up with Opus East, Opus East guaranteed that they could build that building, bring that to closure, within the same budget parameters. They won! I wasn't part of the group on the building selection part either, they didn't invite me to that meeting either, but Dave Caldwell was. And Dave Caldwell was also involved with the site selection, they knew from a vision point of view, and from a programmatic point of view what the right thing was. So, you know, he made the strong point in the building selection that that building would meet the vision and the programmatic goals better than any of the other designs that were provided. That apparently carried the day, so that's how we got that building. And that's how Opus East was chosen, to actually build.

So, that brings us to about 2006, so we're already now seven years into this, that we finally have a ground-breaking ceremony, where all the politicals can come and make their speeches. We get into the sand to do the ceremonial groundbreaking. Sam Bodman shows up ... we kept up with each other, because he also helped us get the computer, the parallel processing computer, and was a big part of that on the tail end of that implementation. He shows up in his entourage with all his [security], and I see him coming out, and I start walking towards him. And these big security guys, because he's ... I think he's the, he's actually the Secretary of Energy. So, he's protected, I mean, he's got three cars, he's got one in front of him, he's got this, and he's got one behind. And I start walking up towards him like, he's still the Deputy Secretary of Commerce, and I've got these guys [Grunting]. And he comes out of his car, "Oh, Lou! How you doing?" And then he waves off everybody, and we go out and talk, and he goes, I apologized to him it took so long. And, oh, it's just, "No, I'm just glad you're getting it done," and all this stuff.

So, they all show up at this groundbreaking in March of 2006, so you can see we're already seven years into this, with the idea that this was going to be done by 2008 or nine, okay? And, it was just an amazing feeling being at the groundbreaking ceremony, and the university was there by that time. They were announcing the creation of an undergraduate Meteorology Department to feed into their graduate level, and Steve Halpern really made that happen. Steve Halpern was also very important working with Tony Busalacchi to get that ESSIC building built, again, built so fast. And Tony always brags that he got the building first, but I always tell him, "Mine looks nicer." So, Halpern was right in the middle of that as well, and recreating, and I got to tell you, that was an amazing signal to NOAA that they were all in on the programmatic aspect of this. So, it was really a great ceremony there in March of, and a beautiful day, I think it was like 80 degrees in 2006.

GR: Yeah, I remember that day, DL Johnson was the director, and so, I came out with him, and it was a beautiful day. I felt hot, if I recall correctly that day.

LU: Yeah, it was hot inside that tent, yeah.

GR: And you, I think you had also mentioned it was the same day as --

LU: The storm of the century.

GR: -- I believe it was March 13th, so the Storm of the Century.

LU: Yeah.

GR: So, it was, you know, very different from, back then. So, construction starts in May of 2007, a little bit of a year after. And the construction stopped in December 2008 when the building was 80% complete. Talk about what happened there.

LU: First of all, you mentioned it's 2007. It took over a year to get going, and it really started raising some concerns, because usually after the groundbreaking, a month or two, they're ... it was really a slow roll towards the construction. So, it finally started, and then they really got going, they really got going. And, a couple of things were happening on the NOAA side, too. There were, you know, the CIO, there were folks from the CIO, GSA, looking at what was going on and all of that, and really looking at, bringing in new people that were being briefed on this building. And two of the new people that came in basically said, "They can't build this building for the price they said." They can't do it; they were saying it's impossible. But, "No, no," they said, "Well, then, we've got to hold them to it. We've got to hold them to it. So, sure enough, in 2008, they come to NOAA with this bill, I think it was like 30 million more or whatever. They related it to the change management, to the changes that were, you know, every project has a change, and you've got change slip, and we know it's going to add to the bottom line. And we were looking at those changes of being in the 1 to 2 million dollar range, and then they come and say, "No, no, no, you owe us 20 to 30 mil for these changes." And, you know, people go ... [exhales sharply] "Whoa," and you know, whoa, that, you know, that's not going to hunt, right, dog's not going to hunt. So, sure enough, they stopped work and they filed a suit. And I forget the exact day that they filed the suit in a court, federal court.

GR: I believe it was May 2009, where they filed for damages.

LU: May 2009, right. So, that's right after the 2008, September 2008 implosion of the economy, right, with the whole housing and other financial markets. Well, it turns our Opus East was doing something like low-balling bids. Either suing or using project money from other projects to finish the projects. And then, they would use their projects to sell, "look what we did." But, this was becoming obvious that they were in a financial problem here, because they had about 65 projects ongoing, and almost all of them were in financial trouble, including ours that they had this federal thing in. So, right after they did this thing, filed the suit, they went ahead and filed for bankruptcy. It's like, it was almost, the way I viewed it was they were using new money coming in from new projects to finish and fund. And that might have been the reason why it took them

so long to get started on our project. They filed Chapter 7. Now we're looking at 2009. My brother Walter is in business for building large buildings, mostly for housing for the elderly, but for other things too. In fact, he told me later he actually thought about bidding on this project when it went out for an RFI. I'm glad he didn't. So, basically everything shut down. You got the federal suit, and you got this bankruptcy suit, and it's Chapter 7, it's not Chapter 11. And Chapter 7 is pretty rough, it can be a pretty rough experience, not only for the business, but for the people who have projects that are ongoing. Because, it's up to one judge to make a decision as to whether the project is worth keeping going. So, but it took a while, I asked my brother, how long is this going to take in your, view? And he said it could take up to two years to get through the courts on this. He was off by about three months, it took about a year and nine months, or whatever.

During that period, they not only lost the federal suit that they had filed for damages, but they also lost in the courts itself for Chapter 7. They got crushed. And it turns out there were only two projects that the judge actually selected to continue, based on the analysis that there was somebody who would move in and be able to pay the bills. So, there was some extra cost to NOAA, I don't know the exact, what the exact number was, but now we're like, 2000, I'd say 11 time frame, maybe 10 going into 11, that we get that money and a new company, as part of the Chapter 7, a new company comes in and basically finishes the project. And here's their checklist of things they have to do, these are the things they're going to do. They've got to sit down with NOAA and agree to that checklist. So that took some time. So, the next company was Skanska. And now, what's really interesting is, I had a hard hat, so I got my Opus hat, and I swore to them that I would give back the hat after the project was over. Well, they were gone, right? So, I talked Skanska into getting a hard hat too, and they were really even more emphatic, and I think they're still around, so I've got to be careful about showing this. But, they wanted their hard hat back as well. But the point is, these folks were phenomenal, this Skanska, they ... apparently this was their expertise, to take a distressed project and bring it to fruition. So, we were just delighted that they were starting off again. Dave Caldwell and I are the main group, the main two now that, been there from the beginning, still there. Other people kind of fell away from the different parts of NOAA.

We go into the Obama Administration; this is a project that everybody's tracking now. Mikulski is the chair of the whole budget, the Senate side, anyway, she's the majority lead on that. She's tracking this, I think the extra money that we needed for the project, of course. We worked with her staff. They're always tracking this, very much interested. And we finally got it done in 2012, where we could accept the building in June or July of that year, I believe it was in that time frame.

Then, NCO would be moving in first to get the infrastructure of the building in. Ben Kyger was bragging on how he was going to be the first person in the building, officially in the building. They had a day where NCO could actually go in with their blueprints and everything and start work in the Data Center, and build out from there. What he didn't know was that Dave Caldwell and I made a pact that Dave and I would be the first ones in. So, we got there. Ben set up a meeting for seven 'o' clock in the morning, we got there at 6:30 in the morning, and set up a

card table in the Data Center. Dave was sitting at the card table when they came walking in with their blueprints. Ben sees them, you know, sees Dave. And then I walked out from behind one of these big poles ... he couldn't see me when he first walked in the door and I said, "Well, what kept you guys? The meeting started here at 6:30 in the morning, as the first official meeting in the new building." And I said, "Oh, I'm sure glad you brought the coffee and donuts, because we were getting a little bit hungry and thirsty here." Ben was just flabbergasted, he just, you know, he started laughing. He says, "Oh, you got me. You got me." So, we sat through that first meeting where they were going to be mapping out the whole wiring system. And it was like you got to imagine these experts at NCO, and the contracting support they had, to be able to do this in the new building. It's sort of like the world, they got their world in their hands. And to build the data center the way it should be, it was really a sight to behold. Dave and I left after about two hours, and the next time I was at the building was in August. I came in, I was back and forth, you know, inspecting, but I officially moved in, in August of 2012, 13 years after we started.

GR: Yeah. And, I recall the ground, the moving in ceremony if you will. I was at GSA at the time, and I recall this was shortly after GSA had had its own little scandal and there was some concerns about even being part of that celebration.

LU: Right.

GR: I came with then [GSA] administrator Dan Tangherlini, and I'll never forget you coming up, "Is Dan Tangherlini here? I want, I need to talk to him." And so, it was kind of like old home week for me too, so it was --

LU: Yeah, well, it was, and the thing is, okay, so remember I, this Halpern story, right, then meeting him.

GR: Mm-hmm.

LU: I have a close friend here, we were, you know, our sons played hockey together, we got to be really, close family connection. He wound up in the Washington City Administration, running the Mental Health Department, Cabinet level department for the city of Washington D.C. So, he got to know, he works directly for the mayor. He got to know Tangherlini, so he asked me to drop his name to Dan, so that's why I needed to see him, and we had a great discussion. Of course, both our names got butchered in the ceremony by the folks that were introducing us, and we're like, we predicted that would happen. But, it was real funny when he found out that we had this common denominator.

And even with Hoyer, there was, and meeting him at the University of Maryland for the first time, I, with that meeting that was set up, so he could get, he could talk with NOAA and the department at the same time, or the university at the same time. They had a little breakfast spread. I made a point of going up and talking to him up there, and it turns out that the manager of our hockey club was one of his college buddies. They might have even been roommates. So, I dropped his name and Hoyer was like, and Hoyer was a little standoff-ish at first, but as soon

as I dropped his name and told him all the great things we did together, because apparently they were characters on the campus when they were on the campus. And this guy was still kind of a character when we did hockey travel and all that other stuff. We actually held up that meeting for about 10 minutes. Lautenbacher and Mote were sitting on one side of the table, Hoyer asked me to sit next to him on his side of the table. That sent a signal. Scott Rayder asked me, "What were you guys talking about?" I told him, I said, I just, we talked about this mutual person, and what a great time we've had in the hockey club and all that. And he told me to say hello to him, and as soon as I mentioned his name it was like, wow, you know? And, so these personal connections were just really, really amazing. And it served a purpose, and each one it just loosened up the atmosphere with respect to the meeting we had at Maryland. And then, with Tangherlini, it's like there was a little tenseness among, you know, nobody knew each other really. Rebecca Blank was acting Secretary of Commerce and she was meeting me for the first time. Of course, Jane Lubchenco was there, knew me, but had not really met, we hadn't really enacted in that much detail. So, these kind of things kind of, tend to soften up the exchange and things that need to be done.

You know, there was something about this story, you had mentioned earlier when we were talking about the building, about February 9th being a key date, obviously in the history of the weather service. You know, I was going through the list of things we had done, was there a February 9th that popped up in the list of dates with respect to the building?

GR: Yeah, that the, that that was the date that the Federal court dismissed all the remaining claims filed by the developer Opus East, they dismissed it on February 9, 2011. And as we know, February 9th is an auspicious date for us, because that was the founding in 1870 of the first agency that would become the National Weather Service. But I think you also mentioned it's also an auspicious date shortly after the opening of the NCWCP in August 20, in 2012. Something about something happening around February 9th in 2013?

LU: Yeah. So, you know, February 7th I was announced [as Director of the National Weather Service], February 11th was my, February 10th was my first official day on a Sunday. February 11th was the first day I gave my All Hands talk, my introduction to, from Eastern Region Headquarters, all after a major snow storm, by the way. What's interesting is that, it was on the 9th of February that I went back to my hometown on Long Island, which is where I grew up, obviously, but was also where Eastern Region Headquarters was, where I was going to be doing this opening. So, I made a point of going back to my hometown and reflecting on, literally living, staying with my cousin who was on the plot of land, the farm that my grandfather owned. And, I stayed there that night thinking about ... my grandfather built the building I slept in. And, you know, he was an immigrant from Italy, my father was the firstborn here, so I'm the grandson, you know, of this immigration movement. And here I am the Director of the National Weather Service. It was pretty, it was a pretty profound moment, all around February 9th, which, you know, it was the day that Grant signed the law that created what is now, February 9, 1870, is the National Weather Service. So, it's kind of interesting that day keeps on popping up.

GR: Well, we've spent a lot of time talking about the building and its tortured path to getting

built. But, it's been completed, and it remains a beautiful building, and an important, an important part of NOAA and certainly the National Weather Service. Before we close up, I --

LU: And I would, yeah, and I would say it's been an amazing success in the programmatic areas that we highlighted that would happen. So, the research... First of all, people are elated about working in that building versus, you know, feeling trapped in the World Weather Building. People want to come to work there, people use this as a reason for elevating themselves in other places and coming out of this organization, working in this facility. The research, the operations have certainly been enhanced with the Joint Center for being firmly established, Joint Center for Satellite Data Assimilation, so, you've got that NESDIS, EMC connection. The various operational entities have test beds, they've worked close with the academic community, we've established student programs, Bill Lapenta, you know, grabbed the golden ring with respect to saying, let's get these student programs going, was really making it happen. And he tragically died [in] 2019. We've got this program named after him now that's this summer student program for all, and we've got all of NOAA involved. So, we now get up to 40 students that are programmatically been brought in. Maryland's side of the bargain, you know, we co-funded two data assimilation professors, and now Maryland pays for them entirely. And data assimilation is a big part of our modeling, so, Daryll Kreist, who is now actually leading our data assimilation effort out of EMC. You know, was at the, got his PhD, and worked there for a while. And of course the undergraduate department. Anybody who looks at the University of Maryland undergraduate department and sees these students coming out, and their performance within the AMS, the meetings and all that. And, being part of the summer programs, and working with us, and in ESSIC, with the cooperative institutes there that now it's like a, conglomeration of four or five, or six different universities are part of this, what was CICS, was the Cooperative Institute, are being managed out of that building. It's really ... it's doing what we wanted, and the Conference Center is absolutely beautiful, it's just stunning. And we have attracted a number of meetings there pre-COVID, but international meetings as well, including those supported by the World Bank. So, it's done everything we had hoped and dreamed for. I'm glad I got at least six months to sit and see before elevating to the Weather Service job. You know, I've been on it, got it. It was clear we were, as we've talked about in rough shape, and there was a lot of challenges there, but it was worth the effort. Everything has been worth the effort, from what I've seen.

GR: Well, I think that's as good a place to leave that subject. So, I think we'll stop there for the day. Thank you Louie for that really entertaining and really insightful discussion about the building. I know that the people that are there, are really appreciative of being there. Having been to the World Weather Building several times, and having lived down in that area, I can appreciate why that was a non-starter for you. But, I think that it also showcases, and as you have talked about on many occasions, this is a great example of synergy with the community that the Weather Service continues to do. So, thank you very much, and we will call that one a day.

[SESSION ENDS]