

**NCSU Creative Services
Centennial Campus Interviews — Hart
August 11, 2004**

Q: Interviewer
Hart: Frank Hart
M: Male speaker

Q: Your full name?

Hart: Franklin Delano Hart.

Q: And today is August the—what is it? 11th? Ready, Bill?

M: Just kind of count or talk or [INAUDIBLE]

Hart: I was born in Harnett County, North Carolina. I'm proud of that.

M: [INAUDIBLE]

Hart: So many people are not proud of being born in Harnett County, but I thought it was a rather nice to grow up, even though the schools weren't too great. But we made up for it at NC State.

[LAUGHTER]

M: [INAUDIBLE]

Q: All right.

M: You're on.

Q: Well let's start by talking about what you did, your career at NC State. Tell us about when you came to State and positions you held over the time that you were there.

Hart: All right, I'll give you a brief overview. I went to school there in 1955, for mechanical engineering. Baccalaureate degree '59, masters '61, PhD '64. That is

to say I finished *all that I promised* [ph] in '64. And then the best offer I had was made by NC State, because I wanted to teach and do research, so I spent 13 years in the classroom and rose to the rank of professor. I took a job as assistant dean with Larry Monteith. That job, I think, was—lasted three years. I took a job as assistant vice chancellor for research, working for Bruce Poulton. He later promoted me to vice chancellor for research, and in that capacity we did a lot of things with the Centennial Campus which we're going to talk about. Later I had a chance, working with, again, Monteith as chancellor to be interim provost for one year and then regular appointed provost for two years. And then I had a five year stint as president of the Microelectronics Center of North Carolina, called MCNC now, and retired from that job and very shortly thereafter retired completely.

That's the basic extent of my career.

Q: All right. Let's go back to the beginnings—pre-beginnings and the beginnings—of what we now call the Centennial Campus. How did this all—what's your recollection of how this all came to be?

Hart: Well, one of the things that was driving most everything we did in those days—actually, two factors—one was the need for space. We did not have space to run the research programs. We had more opportunity to get research, quite frankly, than we had space to conduct the research. And that was one the responsibilities that I had when I was an engineer is try to figure out how to get more space. We did renovations on campus, we looked around to try to find places to build buildings, even tear down buildings, places along Sullivan Drive to build buildings. We in fact even went to the point of having—went through the

programming of a new thing called an "engineering research center," which might be located in a space on campus where the old buildings would be torn down. That was a major undertaking at that time for us, that we would sacrifice those buildings that existed to put in a much larger facility that would serve a greater purpose than the previous old building. But along that time we heard about the opportunity that some space might be available on the Dorothea Dix farm. Farm property would not be used as farm anymore, and that property might be a way to get some of that under the control of NC State where we could plan a major expansion. And, indeed, Bruce Poulton, working extremely hard with a lot of people, backed up by, obviously, myself, Claude McKinney, Larry Monteith, and a number of other people, put forward a very big pitch on that and, ultimately, we did get a first phase agreement and we knew at that point in time that research buildings, in particular for engineering, where it was so critical, would be located on that new campus. And the Centennial part of it was a good name because it was shooting for the next celebration of the public university. And so that's how it started. It was driven by need and [PHONE BEGINS RINGING] a little window of opportunity...

Q: Hold on...

Hart: We'll start that sentence again?

M: Let's see if we can backtrack just a little bit.

Q: Start it with _____, start back with that sentence.

Hart: Yeah. The need existed, and when we saw there was a little bit of an opportunity to fill that need, I think everybody worked enormously hard to finally get that

opening, and we got a shot at some of the land and really, I think, put a lot of effort into making it work from the beginning.

Q: How about the planning process that went into determining what would go there? What was that like? Who was involved and what groups were involved, and how did that take place?

Hart: Well, we had a—an outside group, *the Carney Group* [ph], helped us with a lot of the philosophical programming ideas and what you can do, and ideas about finance and ideas about how you handle things in that dimension, and ways to arrange buildings in the most convenient way. But the idea was to find out where we were going; where were the strength areas of the university in research, where were the needs with regard to construction. And so we had a major effort in soliciting ideas from the faculty—the whole faculty—and generated a tremendous number of really good ideas. The faculty took it very seriously, for the most part, and that was the steel bed and became sort of a blueprint for what we would do near-term and long-term, because it established, at the same time, what the immediate needs were, what the intermediate needs were, and the longer-term needs were. And so that's the way we initiated the programming and as it turns out, as you know, the first building that was on the campus was an engineering research building that catered to precision engineering and microelectronics research. Tom *Dall* and, later, *Mas Derry* [ph], who became the dean later—those two people ran those laboratories. And I'd like people to remember that those were industry-sponsored programs, highly interactive with industry, and that's something that was more difficult in the congested campus that we were

operating in, but it went beautifully on the Centennial Campus and, to my knowledge, still does, where you have that great interaction with industry.

Q: What were the obstacles, political and internal, that you encountered when this was all in the formative stages? Was everyone behind this?

Hart: No. I think there were a lot of people who were silent detractors, some who were vocal detractors. We—I'll give you an example—we lost one laboratory, which I always thought would have been a good thing there. Claude McKinney and I worked quite a bit to get the technology side of the State Bureau of Investigation located on that Centennial Campus, because we felt that we could help them with their technology development needs and the automation, in terms of looking at fingerprints, this, that, and the other. However, there was a group that did not want to mix law enforcement with academic activities, and so we ultimately did lose that one. And no recriminations on anybody's part; it was just a disagreement. People felt "Hey, let's keep it clean." But I personally regret that that did not happen, because I think it could have given our state something unique in all the country, where you have—would have had—a very fine state bureau of investigations closely aligned with technology availability and really smart people on the faculty. So I do regret that. And there were others on the political side who wished very much for that land to be under the aegis of the city itself and, therefore, take care of a lot of the city needs, as perceived by the city fathers. So, yeah, those were some forces that were playing there. But, as we know, NC State has friends, and our friends helped us and, ultimately, you know, Jim Hunt made the grant to NC State University and there was, and had to be,

some property trading that went on to satisfy a number of these issues, and that required the agricultural community to come in strong to help that issue. And so it took quite a bit of giving, taking and giving, and cooperation that probably a lot of people don't even realize. A lot of people had to help, because I think people who had visions could see, ultimately, what that thing could become, and in my judgment it is one of the very unique things in the whole world, our country, and still has chances of improving many fold.

Q: There was a time, or at least some people believe there was a time, when the public perception or perhaps the *N&O's* perception was that the campus was not a complete success. And then there came a time when it began to really crank up. Do you have any comments on how it became a success or when it became a success—when it went from being an idea to really top-notch model for other universities?

Hart: Well, in my judgment—and I remember the incident that you're talking about, but even at that point in time, we had three research buildings, we had the Weather Service on board, which is a beautiful thing to students and interaction, we had a textiles facility I believe was either built or in the process of being built. And there were several other things on the drawing board. We had some *standout* [ph] companies looking, even at that time, and by the scorecard that I was keeping myself, I never thought it was not a success. Now, the rate of growth didn't meet some people's expectations; that's true. But I never had a doubt or any point where I was involved that I thought it wasn't all a success. But I remember that period, and fortunately it didn't last too long.

Q: Shirley Moylan [ph] and, I think, Larry Monteith touched on this, but obviously some innovative methods had to be generated to finance the construction of these buildings.

Hart: Yes.

Q: A lot of people don't understand that the money from these buildings didn't come from the state or from some magic pool of money. How did we go about financing these buildings?

Hart: Well, I'll tell you, somewhere I have a little green sheet of graph paper that I first worked on in 1984. And I worked out what was called a "non-uniform payment schedule" for paying for the first building, and I used what in those days was called—I guess it's still called—"indirect cost reimbursement funds from research," or simply called "overhead." And I discovered by studying that pretty carefully that we could build a building right then with those funds—a portion of the funds that go back to the university. The way you develop your overhead, a portion that is earned, so to speak, by the departments, a portion is earned by the college, a portion is earned by the libraries on campus, a portion is earned by certain personnel, a portion is earned by the university at a higher level for certain things. And so when you look at how all that comes together, you can apportion a certain amount of those funds for space. And that is to say we can rent space with those funds. And, therefore, if you go out and take the provisions that the university had to get a building at a good—you know, borrow money at a good rate—you can use those funds to pay for—to pay it off over a period of time. And my thought was that you do it on a non-uniform basis. You just don't do it on an

estate-line basis; you do it the basis of ability to pay. And I showed that to George Worsley one day, and George said, "Boy, you engineers—you sure have a funny way to look at money!" [LAUGHS] I said, "Well, it's the way the money comes in," and he said, "Well, I think I can sell that idea." And he did. But we had—by the time we got to the first building—I call it "The Precision Engineering/Microelectronics Building"—we had straightened it out and it was not a non-uniform; we had a uniform, conventional kind of payback scheme to pay for the building. And then so the research programs paid for the buildings. And so, once we had that thing working, in order to get—we had the first building paid for—then we had the ability to borrow more money, do that lease, and the second one, you know, we put the NASA Mars Mission program in that one, plus some other things and materials, and those were good, solid programs. And so that one was paid for that way. Then the third one, which included the Weather Bureau—you get a good—you know, we started speaking business about that time—we get a good client in there, like the Weather Service; they pay their bills on time—and so it just went on from there. And then people saw they building buildings, doing things, and the Legislature said, "Well, golly, why don't we put the textile building over there, textile facility over there?" And that was a marvelous thing to happen, and...

Q: Was that a popular decision, with the cost of textiles at the time?

Hart: Oh, indeed it was. And I think everybody reveled in it, because it gave also an opportunity to do a renovation over in Nelson, because we had a college of management that needed space so badly. It needed its own space and identity.

And so we were able then to finally get a little money to do that from the College of Management, and so—and that happened pretty quickly after it was given the sanction by all the powers that be *at the* [ph] College of Management, and I was always pleased about that. I was provost when that happened and I was always proud of that little happening on my watch, as it were.

Q: In those early days, how did we, as a university, how did we determine who would—what companies or what agencies we would go after or we would accept? How was it determined and who determined who would be on the Centennial Campus in the formative days?

Hart: Well, a little committee, little committee—and the committee was, in the beginning, very formal—but I was on the committee, Claude was on it, Monteith was on it. I think _____, Hothenberg was on it. Hothenberg worked with me too on the SBI thing. Those kind of people. And then what you did is to try to determine if there was going to be opposition to it, and then go find the opposition and discuss it with them and see how serious it was. If it was going to represent a real problem, then, you know, forget it and move on to the next... The other thing that was very important was who could you attract to it? And I remember when ABB was there, and they—ABB had a very strong attraction to some of the research that was going on in research too. And so we were talking to them and we thought we had lost them until we brought up the research buildings, the solid technology. And then we described the technology to this guy, in general terms, and he said, "Well, that's something that we're very interested in. I think we're going to take a second look at this." And the second look became third look, and

then the biggest key to that decision for ABB to come in was the agreement that we signed with ABB on technology transfer from NC State to ABB if and when there was technology that they wanted. It was a most complicated contract. It took me three days to comprehend it, and Dr. *Craig* [ph]—it took her a long time to read through it. But we ultimately got it within satisfaction parameters that we could have it and they could accept it. And then once that was done, it moved very fast. But the key issue was technology, and rightly so, rightly so. But they were very fine people to work with, and that was—ABB was the first big group that came in. There have been many since then. But that's the kind of way we went about it. We had to satisfy ourselves that we could handle the technology interaction when there was such an interaction, with them happy and us happy. And you get to that point, but then—I'm talking about the way they interact with other people on campus, and ABB was the first group that we really worked hard with in giving them gym privileges, paid, for monetary—not give it to them, but they paid for it—but make them feel a member of the community—and also so the library privileges and stuff like that.

Q: How is Centennial Campus different from Research Triangle Park?

Hart: Well, I would say that the Centennial Campus—one of the basic philosophies has always been to foster interaction, and getting faculty. We encourage faculty to get involved with projects, and in some cases it's on a consulting basis. That was fine. That was one of the basic ingredients that I wanted to see there, because what is it to have 2,000 talented people who ABB or some other company do not have access to for an hour, two hours, whatever? And that scared a lot of people,

but it never bothered me one bit that—as long as you're working with a high degree of integrity there's absolutely no problem. And so that's one of the key features and differences. We've got people who can go across the street and work with somebody. And you don't have that kind of operation in the Triangle. There there are sharp boundaries because they are companies who are very competitive and, if anything, they're going to pull the shade on you and just be very, very tight with it. But the beautiful part is that you've got faculty members who have knowledge, ideas, and they can envision things and they can sometimes—just with a question they can solve somebody's problem—"Have you tried this? Did you think about thus-and-so? Did you see so-and-so's paper where he or she did this, this, this?" And that's all it takes to catalyze an idea and take it another step forward along the pathway to making something useful, which has always been a thing I love to see happen. Did I answer your question?

Q: Yes, you did. That's right on the mark.

M: [INAUDIBLE]

[PAUSE IN RECORDING]

Q: We've talked about the beginnings; we've talked about the present. What do you see as the future of Centennial Campus and how it relates to the future of North Carolina State University?

Hart: Well, I think we're a long way in doing a lot of the things that need to be done—that need to be done, but there's a little way to go. And how soon we get there with it is highly dependent on the next leader of the university. And I'll say we've had two good leaders there—Bruce Poulton and Larry Monteith—that helped us a

long way with the Centennial Campus, but we need another person with the same kind of vision that a Bruce Poulton had early on to put us to the next level of development of that campus. And there's a long way to go yet. We need food; we need a food court; we need a village in there. That's got to be done to fulfill all the kind of dreams and aspirations that we all had early on. It can be done, but you've got to have a strong leader to do it.

Q: Perfect.

M: You've still got a couple of minutes.

[LAUGHTER]

[END OF RECORDING]