## KENNESAW STATE UNIVERSITY ORAL HISTORY PROJECT INTERVIEW WITH KATHLEEN A. HALL

for the

CONDUCTED, EDITED, AND INDEXED BY THOMAS A. SCOTT

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Location: Engineering Technology Center, Southern Polytechnic State University

TS: Today the interview is with Kathleen Hall who became a faculty member at Southern Tech in 1973, and was the first female math professor at what today is Southern Polytechnic State University. Kathy, why don't you begin by talking about your background? I know you've got a degree from Loyola. I don't know whether that's the one in Chicago or New Orleans or where.

KH: It's the one in New Orleans.

TS: You were telling me earlier that you grew up both in New Jersey and West Palm Beach. Why don't you talk about your educational background and whatever you want to say about your background?

KH: Okay. I was born in Orange, New Jersey, and lived there until I was four. Then we moved to West Palm Beach because of my health, and I went to Rosarian Academy until the eighth grade. I think the idea behind the rosary is they were made up of little rose petal beads into a rosary, and so then the adjective is Rosarian. It was staffed by the Dominican nuns of Adrian, Michigan. I was there from pre-kindergarten until eighth grade. Then I transferred to Northboro Junior High School. There were four junior high schools in West Palm Beach, and then they all fed into one high school until just a couple of years before I went to high school. I was at Northboro for junior high. At that time we had junior high and not middle school, for seventh, eighth, and ninth grades.

Then I transferred to Palm Beach High School, which was a very old high school. It was constructed back in the teens, and it's a beautiful old Spanish-style high school, architecturally. The four junior highs fed into that, and there were one or two junior highs that went into the new high school down at the south end of town which was Forest Hill. Ours was the one that everybody wanted to go to at that time. I really enjoyed it. I took college preparatory courses, and I won the Bausch and Lomb science award at the end of my senior year. Bausch and Lomb is an eye glass company, and they give a science award to the graduating senior that excels in science. I didn't know I excelled in science, but I had biology, chemistry, and physics. Apparently, my three teachers got together, and they decided that they wanted to give it to me, for which I was very, very grateful. When I was in ninth grade we had an exam for the Pratt & Whitney Mathematics Award, and I got fifty dollars.

TS: Pratt & Whitney, they made engines and are an old company.

KH: That's right. There's a big Pratt & Whitney plant down there in Palm Beach County.

TS: Oh, okay.

KH: It came in the 1950s, and it's part of United Technologies. I was hoping to get the Pratt & Whitney High School Award because that came with a hundred dollars, but Richard Nitkavic got that one. I don't know whatever happened to him, but I did get the science award, and I was very grateful for that. Then I took drafting.

TS: Oh, you took drafting in high school?

KH: Yes, or mechanical drawing.

TS: So you were thinking about engineering?

KH: I was, yes. But at that time they had three new kinds of things they were testing. One was SMSG Geometry, which I really loved. I had a wonderful female instructor for that. Her name was Mrs. Josephine Chaney, and I would always quote her when I was talking to my trigonometry students about logarithms. She would say, "A logarithm is nothing more than a glorified exponent." I always gave her that credit. Then there was BSCS Biology. Again, I don't know why, but the real hard one was PSSC [Physical Science Study Committee] Physics. In those days what they wanted you to do was to discover the physics for yourself, and then after you'd had a chance to discover it, then they would show you how to do it.

TS: What did BSCS stand for?

KH: [Biological Sciences Curriculum Study]. SMSG was School Mathematics Study Group. I had the same teacher for trigonometry and for physics. I had first period trig and fourth period physics. I was the only female in the physics class. I was the only one of two females in the mechanical drawing class, and the other one was not college prep. She just took it because she thought it would be fun. One of the nice things about the drawing class is we had a lot of vocational students in there, and they would help me with the kinds of things like which way the screw went. I wasn't really sure about doing those things.

TS: You were more into the abstract.

KH: I was helping them with their math part. So it worked out really well. I learned a lot from that, and I still have all my drawings. And also, I had a female instructor for mechanical drawing [Mrs. Marjorie Bierce]. So I had some really good role models. But when I got to the physics the problem was that Mr. Blake would grade homework. And he would grade the homework before he'd explain how to do it because this was the discovery part. I would stay up until 1:00 or 2:00 in the morning trying to figure these problems out and not having anything to really go by. I was just hitting my head against a wall. My mother would get up, and she would see the light on in my room. She'd come into my bedroom and said, "You need to go to bed." I said, "But mother, I've got to finish this homework, and I can't do it." So that gave me pause about going into engineering, which is why I ended up in mathematics.

TS: I was going to say, Loyola isn't probably the best place in the world to go for engineering I wouldn't think.

KH: No, but the reason I went to Loyola University—Loyola of the South is what they call it—is because they gave me a full tuition scholarship. I knew that my parents would

have a hard time sending me to school, especially a private school, without help. I really worked very, very hard. I was fourth in my class of almost 500, and I was also a National Merit Scholarship finalist. So I was very lucky in many ways. But when Loyola offered me the scholarship, I had also applied to William & Mary, and I was accepted there, and to Florida State and to Spring Hill College. I looked at Duke, and I looked at some other colleges.

TS: Is Spring Hill in Mobile?

KH: That's right, Mobile. I really enjoyed going to school in New Orleans. It was the best of both worlds. It was a smaller city, but it still had a lot of cultural things.

TS: Absolutely.

KH: And the food was wonderful! Then I went to Clemson University for my master's.

TS: Did you go straight from your bachelor's to graduate school?

KH: I did. I got a bachelor of science in mathematics.

TS: What year did you get your bachelor's?

KH: In 1970. I was there from 1966 to '70, and then I went to Clemson. I had applied to seven graduate schools, but Clemson, for many reasons, was a good pick for me. They had a wonderful graduate teaching program. They did not have enough full-time or even part-time instructors to teach the freshmen classes because that's a big engineering school. So those of us who were going for our master's and PhDs in mathematics had our own classes. When they say TA, teaching assistant, it meant you just got your calculus class, and they said, "Go to it." So that was a really good experience for me.

TS: I guess so.

KH: I taught one course every semester.

TS: Did that start from the very beginning?

KH: It did. Now, those of us who had not taught before—the first semester we were assigned to a professor to wean us into it. But then after that first semester, we had our own classes.

TS: They were on semesters?

KH: Yes, back in 1970 to '72.

TS: I always thought it was a big mistake for Georgia Tech [when the Board of Regents in the late 1990s required all university system institutions to switch from the quarter system to semesters]. It particularly was a problem for the co-op program.

KH: And I think it was for Southern Tech as well because we had so many co-op students for whom quarters worked so well. This was not very long after [Clemson] had gone co-educational. It was a military school [until 1955]. But one of the things I liked was I went from a 5,000-student private school in the big city to a very large public school in a rural setting. The only restaurant we had was Dairy Queen at the time. I lived in a little

apartment off campus, but I walked to campus when it snowed, so that was good. I had a really wonderful experience there, wonderful professors.

TS: Isn't the campus on the site of the home of John C. Calhoun?

KH: That's right. His house is still there, Fort Hill, and Thomas [Green] Clemson was his son-in-law. So many people think Clemson is a private institution because it doesn't say state university, but it was founded as a land grant college [by act of the South Carolina legislature in 1889]. The University of South Carolina, who is our big rival, is considered the party school, and Clemson is considered the school where people are working in engineering and the STEMS.

TS: The serious students.

KH: The serious students. But it was a lot of fun there too, certainly the Clemson fans.

TS: Oh, yes, Death Valley—[Clemson Memorial Stadium].

KH: Yes, Death Valley, the football stadium, so that was great fun.

TS: What year did you get your master's?

KH: In 1972.

TS: Then '73 is when you started Southern Tech?

KH: Yes, I went for a year out to Dallas, Texas, because my college roommate was out there, and I had no money. I was poor. We got \$306.00 a month as a stipend for teaching at Clemson, and that was gross. I had \$271.00 net. I can still remember these things. I paid \$110.00 a month for my apartment.

TS: Pretty expensive apartment.

KH: Yes. Whatever was left over went for my meals and insurance and gasoline and all those kinds of things. I was doing okay. I was coming out even, but it was a stretch. My college roommate had been living at home saving money, so I went out there. I had several job offers from private schools, and I accepted one from a parochial school. I taught ninth graders, tenth graders, and twelfth graders. For the ninth graders I taught a pre-algebra course for twenty students that were not real solid in their math, so I put together a curriculum and really enjoyed teaching them. I [also] taught the regular algebra in the ninth grade and taught two sections of geometry, and then I taught a senior math class. I also ran the math club there, which was a lot of fun.

TS: What was the name of the school?

KH: It was Bishop [Joseph Patrick] Lynch High School, and it was run by the Dominicans of Sinsinawa, Wisconsin. There was a girls' division and a boys' division, and the Dominican priests ran the boys' division, and the Dominican nuns ran the girls division. Since then they've made it co-ed.

TS: Did you teach in both parts?

KH: I taught in the girls' division. I also had a job offer from Ursuline Academy [of Dallas], which is a private Catholic girls' school. That's where Bill Gates' wife [Melinda French Gates] went. She would have been younger [graduated in 1982]. I would not have taught her. Then I also had a job offer from St. Mark's Episcopal School, which was a boys' school. But all things being considered [Bishop Lynch High School] was what I thought was the best match for me. I taught there for one year, but I really wanted to get into college teaching. My department head at Clemson knew that, and he told me that he had heard that Kennesaw Junior College was looking for math instructors.

So I applied in the spring of '73. Herb [Herbert L.] Davis was the division chair at the time. So I flew out here over spring break, and I went and interviewed with him. Then he called me back to interview with Dr. [Horace W.] Sturgis, and that was at the beginning of the summer. I kept waiting and waiting and waiting to hear, and I didn't hear and didn't hear and didn't hear. I had gone to Alaska with my parents. My father had wanted to take a six-week trip to Alaska, driving from south Florida up there and back. I had left my itinerary the whole way and never heard from Dr. Davis, so I left my parents at Lansing, Michigan, and flew back to see what I could find out because by this time I was getting a little anxious.

TS: It was time for them to tell you something.

KH: Fish or cut bait, yes. Finally they let me know that I was number two on their list, and if number one didn't take it . . . Well, number one turned out to be Tina [H.] Straley, [and] she took it. So I went back down to Florida looking for a job where I had grown up, and everywhere I went they said I was overqualified, and they were concerned that I would leave. Well, thanks to Horace Sturgis I did get a job.

TS: Really?

KH: Yes, it was thanks to him I got a letter down in Florida from the head of the math department here at Southern Tech at the time as we called it, saying that Dr. Sturgis had recommended me to him, knew that they had had an unexpected opening in the math department because somebody had left, and that they might want to interview me. Well, at the time there was no money for bringing people in, so you had to pay your own way. My father very kindly paid my \$100.00 round trip ticket to come up here. I came up and rented a car and drove to Southern Poly. I got here at noon, and they were in final exams from summer quarter, so it was very close to the opening of school.

TS: Yes, I imagine they were getting desperate.

KH: That was Dr. [Richard G.] Denning. He took me over to the dean at the time. We had a dean because we were part of Georgia Tech. I had never applied to Southern Tech because it wasn't in the list of colleges because it was under Georgia Tech. I didn't even know it existed. He took me over to Dean [Walter O.] Carlson, and the one thing I remember about that meeting is Dean Carlson started talking about semantics and saying it really bugged him when people say "data is" instead of "data are" because datum is singular and data is plural. I always tried to remember to do that! Most of the instructors were off on break, but he called Professor Haddle in to sit and interview with me too.

TS: Professor Haddle?

KH: [Gillian P.] Bud Haddle.

TS: Okay. And Denning was the chair of the department?

KH: Yes.

TS: So there actually was a math department. I know we were still divisions at Kennesaw while we were a junior college.

KH: Yes, and we were a senior college.

TS: That's right. It had been a four-year college since 1970.

KH: Yes. Dr. Denning was finishing up his PhD over at University of Georgia. He was doing his dissertation on something at Kennesaw; it was an educational kind of thing.

TS: Was he getting an EdD or a PhD?

KH: I think it was a PhD, but I think it was on organizational something or other.

TS: Oh, so it's in administration instead of math.

KH: Yes, that's right. That's how he knew Dr. Sturgis because apparently Dr. Sturgis would help him with pointing him in the right direction. He used data from [KJC] students in some kind of study he was doing for his dissertation. Dr. Denning and Professor Haddle and I went in the bottom of Dorm 1 where there was sort of a cafeteria. Of course, I was nervous as anything. As you can see from lunch today, I don't eat a lot, and I eat slowly. So I only had, I think, Jell-o and a glass of tea or something. I had already gone to see the dean, and then Dr. Denning and I got back to his office. Two and a half hours after I landed on campus he offered me the job. The difference between the two institutions as far as . . .

TS: Right, you had to wait two or three months at Kennesaw.

KH: I had to wait over six months for Kennesaw, yes. It was from April or late March until August.

TS: Well the fact that it was late August probably spurred them into action.

KH: This was actually September. And then I had to go back down, get my car, drive up here, and find a place to live. Do you remember Pine Forest?

TS: Sure.

KH: Well, my mother came with me . . .

TS: That's where Sam's is now [west of U.S. 41, not far from the Southern Tech campus].

KH: Yes. We started off at Scottish Inns on Delk Road, but that was so horrible that we ended up going to, I think, the Marietta Hotel here on 41, but that was too expensive, so we ended up at Pine Forest.

TS: Right, there were like motel rooms in the front and then the duplexes in the back, but right on U.S. 41. I actually stayed there once, a couple of times actually.

- KH: Did you? I think they were World War II wooden houses, and my mother couldn't get over the fact that when you opened to the door to the oven, you couldn't get through because it took the whole space in the middle of the kitchen. But I thought they were cute, and they had charm. There are still a few left in the back there. So I ended up getting an apartment down on Windy Hill Road. When I came here, Cumberland [Mall] had just opened, [I-] 75 did not go all the way up to Kennesaw, and it was a beautiful drive from Windy Hill up here to the South Marietta Parkway [Clay Street at the time] because it hadn't been developed, and most of it was woods and Dobbins. When I did go on 75, there was a large median, and many, many times I'd look up and see raptors in the trees, red-tail hawks, red-shoulder hawks. Of course, they're no longer in the median because there is no median there. But that was one of the nice things about being there.
- TS: So it's 1973, September, you move into Marietta for the first time. Why don't you describe what Southern Tech was like in 1973?
- KH: As I recall Southern Tech had 1,800 students.
- TS: That's probably about what Kennesaw was at that time too. We were 1,300 in '68 when I started there.
- KH: Were you? We had only about ten female students. We had a lot of veterans from the Vietnam War. I was 25 at the time. I turned 25 in June, and I started teaching here in September. So I had a lot of students that were older than I, and it was nice because they were more mature. Now, at Clemson I had mostly male students. My last calculus class there was Calculus for Sciences. I did teach Calculus for Business also, but in the Calculus for Sciences I think I had maybe four females, and the rest were males. I went from teaching at Clemson college calculus to mostly males to the private high school teaching all females, back to all males, college level work again.
- TS: What did you prefer?
- KH: I preferred the college level. The senior math [at Bishop Lynch] was really great. They were very good students, and they all went to very good universities, so in that case it was the cream of the crop. But I really preferred the college because I didn't have the disciplinary problems that I had in high school. I looked really young back then. I'm going to bring you the yearbooks to show you.
- TS: I was 25 when I started teaching at Kennesaw Junior College, same story. A lot of the students were older than I was.
- KH: Also, there were only three female faculty when I came on the whole campus. There were about 80 full-time faculty. There was one in English, Dr. Roberta Gates. There was one in Industrial Engineering Technology. That was [Patricia S.] Pat Franklin who taught mostly psychology. Then there was a Cuban emigre, Dr. Maria Bolet, who taught chemistry. She retired soon after I got here because she was older, but she came over from Cuba when the revolution happened, as many of the intelligentsia did in the upper classes. As I recall, I was the only full-time tenure-track faculty member in the math department for twenty years.

TS: I'm amazed at the difference in the culture between Kennesaw and Southern Poly because we always had a large number of women faculty members at Kennesaw. The English department was predominately female. In math there were at least some from the beginning. Linda [R.] May was a math instructor when the college opened, and Charlotte [M.] Dickinson and Evelyn [N.] Gibson taught chemistry. Did you come in as an instructor or assistant professor?

KH: Assistant professor. Because it wasn't a master's of education; it was a master's of science; and that's why. Actually when I came no one in the math department had a PhD. They all had master's. Many of them were MEds or MATs—Masters of Arts in Teaching.

TS: Oh, you had the straight Master of Science [in mathematics] degree.

KH: Yes, I had a tremendous number of math courses, even more than many of the ones that were already teaching here. I came in, and I was number four of the full-time female faculty members. Later the number became five full-time faculty members when you count the assistant to the director of the library. She gained faculty status later, but at the time she was not a member of the faculty—librarians were not at that time.

TS: What was her name?

KH: Nancy Shofner.

TS: And Patillo was the director?

KH: John [W.] Patillo, yes [L. V. Johnson Library director, 1965-1991]. I knew him very well. He gave a lot of parties at Christmastime at his house down in Buckhead. [He was] very, very good, very well educated, and knew so much about art and history.

TS: Right. Why do you think there weren't more women on the faculty? Everybody had to take English and history. You would think they would be hiring some women.

KH: Well, I don't know. I'm trying to think who was on the history faculty at the time. We had two divisions. We had what were called the degree granting departments and the basic departments. The basic departments were math, English, history, et cetera.

TS: Right. You did the general education courses.

KH: Yes. Then the degree granting departments were electrical engineering technology, industrial engineering technology, mechanical engineering technology, architectural engineering technology, apparel and textile engineering technology, and civil engineering technology. All the degrees at that time were engineering technology. At that time we had two degrees, associates and bachelors. We had started out as a two-year institution over in Chamblee. Lawrence V. Johnson at Georgia Tech [was the first director] after World War II. Southern Poly was born the same year I was born, 1948. The Georgia Business and Industry Association asked Georgia Tech to make a two-year program for students coming back from the war because they needed more skilled people. L.V. Johnson started on a shoestring out at the Chamblee location.

TS: He was a very good friend of Horace Sturgis, by the way.

- KH: Yes, yes. Well, he started Southern Tech out there in Chamblee in the old barracks, the wooden barracks [of the old Atlanta Naval Air Station]. Then Cobb County asked [Southern Tech] to come here, gave us this land, and said, "If you will come here, you'll have this land." So it moved over here in the early 1960s, I think it was.
- TS: The Board of Regents approved the move in 1958, and October 2, 1961, is when [the Marietta campus] opened up.
- KH: You've heard the stories. We were on a shoestring forever, and the faculty members would load desks into their cars to bring them over because we had no money from Georgia Tech.
- TS: I still have to pin [Hans A.] Al Troemel down for a date for an interview. but I know he was involved with that.
- KH: Yes, he's forgotten more than I've ever known about the college. So they moved over here, and at that time just had a few buildings. Then you were talking about the lack of females. Many of the instructors were retired military, and you didn't have a lot of retired female military at that time.
- TS: Oh, I see.
- KH: A lot of the engineering technology instructors were engineers. In the math department we had at least two retired military. One had been a navigator and a pilot. I forgot what Don Dunlap had been, but most of them were older. Bud Haddle had worked for the Navy.
- TS: Bud Haddle?
- KH: The one that interviewed me; he had worked for the Navy down in Key West. He was a civilian, but he [worked for the Navy]. I'm not exactly sure where they found these people, but most of them were older. If you came on this campus, [the faculty members you saw were] older white men. The three females were much older than I.
- TS: How were you accepted?
- KH: Well, very well. I'm trying to think if there were any [problems]. I don't think I had any problems. One of the things I did at the very beginning was there was a Southern Tech wives club, and I decided I was going to join the Southern Tech wives club because I wanted to meet the people because I didn't want them wondering who I was—because I was so young then. I also thought that would be a good way to get to know the area. Sometimes I couldn't go to their meetings because they were at night. If I were teaching a night class, I couldn't go. They had a really [active club]—but as the institution evolved the wives club kind of went down.

One of the things you may not have heard of: Because we had an overwhelming male student body, and many of the students were older coming back to school, at graduation not only did they give diplomas to the students who earned associates degrees and bachelors degrees, but they gave PhT diplomas. PhT meant "putting hubby through." They wanted to acknowledge the wives as an important part because they had been running the household while their husbands were both working and coming and taking

night classes. The first quarter I was here my class schedule was 8:00 a.m., 9:00 a.m. and 7:30 at night. Dr. Denning said later on he was going to give me that because he had to cover those classes, and he said, "I wouldn't know any better." Which was true—I was just so happy to be here to teach college level mathematics.

TS: I think if we had the night classes [at Kennesaw Junior College] they didn't give us an 8:00 the next morning.

KH: Yes, because it went from 7:30 to 9:00, and then I really didn't get out of here until probably about 10:00. But I was younger then, so that worked. I was trying to think about the male professors. I think it was probably just a mindset. They wanted people that had some kind of background in engineering. I had worked for US Navy AUTEC for two summers. That stands for Atlantic Undersea Test and Evaluation Center. Their headquarters were in West Palm Beach, but the actual work was done over on Andros Island in the Bahamas. This was is in '68 and '69. The Cold War was still going on during that time, and so there were Russian submarines out there. Of course, we had our own submarines. Andros Island is the largest island in the Bahamas. Right off Andros Island there's a very deep water channel called TOTO [Tongue of the Ocean] not far from land. So it was very easy to monitor submarines in that channel at different depths. What they were trying to do is to make those submarines quieter, so the Russian submarines would not be able to detect our submarines. That's what the Navy was doing. I was in one of the sections that was monitoring the contractors that were working on this. It was RCA and, I forget, some other contractors that were doing the computer work. They were doing real time computing. I had that background.

One of the other reasons, I think, that I was hired was because at that time we had a program for students whose math was not that good, remedial mathematics, and I know Kennesaw had quite a few courses in that, but we had only one, 099. Because I had put together that remedial math class for the algebra for the ninth graders at Bishop Lynch then that was one of the [reasons I was hired]. The other reason I was hired is because I knew Fortran programming, and I taught a lot of Fortran classes. There were times when I taught four in a row, 9:00, 10:00, 11:00, and 12:00. Again, I pretty much developed that course.

TS: I've heard stories at Kennesaw from [Stephen E.] Steve Scherer. He came to Kennesaw in 1974, and [Herb Davis] made him the computer coordinator in charge of computer science labs because he'd used a computer in writing his dissertation. He knew slightly more than the others, but those computers were so slow [110 bytes per second], and they were tied into UGA [originally], and we didn't actually have our own computers for students and faculty on campus at that time.

KH: I know Steve from Georgia Tech. I was the Southern Tech liaison because we had our things taken down to Georgia Tech. I thought Steve was with Georgia Tech.

TS: He got his PhD at Georgia Tech [in 1974].

KH: I thought that he was the liaison from Kennesaw for Georgia Tech. I thought that we were using the same computer down there.

TS: Oh, we probably did [later on]. But in 1974, according to Steve, the three Teletype terminals at KJC connected to a computer in Athens.

KH: What would happen—and it was so frustrating for the students and for me—we had four keypunches, two 026s and two 029s—and you'd punch the cards. Then you'd wrap a rubber band around the cards, and you'd drop them in a drop box. Somebody would pick them up and take them down to Georgia Tech and run them, batch processing, get the output, put the output around the cards, and bring them back the next day. It was a 24-hour turnaround time. So if you made one little comma out of place it would . . .

TS: You'd have to do it over?

KH: Yes. It wouldn't execute because there's two steps: compilation and execution. It wouldn't even compile if you had any syntax errors. It was really, really frustrating. One of my colleagues, Ralph Young, said that one of my students [took my instructions too literally]. We had to be very specific with the students. I said, "Put the rubber band around only once because if you do it twice, it will warp the cards. So put the rubber bands around only once, and then drop it in the slot." So this one student did it the first time, and ever after that he just dropped the cards in—taking everything absolutely very literally, and doing it only once!

But it was very frustrating for me to teach—and for the other instructors too—because the 026 and 029 keypunches did things differently. While the numbers were okay, and the letters were okay, the special symbols were not. If you wanted a plus sign on the 026, you had to press something else on the keyboard, and it came out not as a plus, but it came out as that character up there. It was different on the 029. What I did was I had to teach my students how to read the holes. The 074 combination meant thus and so, and the 084 meant thus and so. Well, it's hard enough for students to learn how to code, much less [read holes in the cards]. It drove me crazy. I asked my department head, and Dr. Carlson said, "We don't have the money for that." I was thinking, "This is stupid." Asking students and professors to work under these conditions was just terrible, and it just drove me crazy, and it drove students crazy. See, we were getting money from Georgia Tech.

TS: I wanted to ask you about the relationship between Southern Tech and Georgia Tech.

KH: As I wrote in my history that I gave [in 2013 after the announcement of the consolidation] to the [Board of] Regents, it was one of benign neglect. There were many stories, sort of apocryphal stories, that somebody would come to Georgia Tech wanting to see about engineering technology, and they'd send them out to Chattahoochee Tech because they didn't even know where we were. Most of the faculty down there had no earthly idea where we were or what we were doing.

TS: Which wasn't called Chattahoochee Tech then. It was Cobb-Marietta Vocational Technical School. So that's what they thought you were, I guess.

KH: That's right. And the first thing that I learned when I came here was what engineering technology was. Engineering technology is on the spectrum of engineering that starts at

<sup>&</sup>lt;sup>1</sup> Please see the Appendix for a copy of Professor Hall's letter dated November 7, 2013.

the technician and ends at the engineer, but is closer on the spectrum to the engineer than it is to the technician. It's similar to medical technology and medical technicians. My college roommate was a med-tech major, meaning medical technologist. When I called her a medical technician one day, she got all upset. She said, no, medical technicians are down here, and they do thus and so, but we have to have all this backgrounds in physics and chemistry and biology.

- TS: The way people have explained it to me is that what Southern Tech was teaching was what Georgia Tech taught pre-Sputnik, and then they became very abstract while engineering technology was the more hands-on, lab-oriented, practical engineering.
- KH: Exactly. And again, there's a place for everybody in the spectrum. The thing a lot of the industries like about our students is they know how to run the machinery. For example, mechanical [engineering technology students] have welding. Now this is not to say those students are going to go out and be welders, but when they are supervising people who are welders, they know what the problems are, and they know what the machines do. A lot of the Georgia Tech students had all this theoretical knowledge, which is wonderful for design work, but if you're on the floor of some manufacturing company, that is a disconnect, and it takes a while for them to get up to speed.
- TS: Right. So Southern Tech's role was always to explain to the technicians what the engineers were talking about?
- KH: Sort of, yes.
- TS: Although I gather that a lot of people get hired for engineering jobs even though the degree might say engineering technology.
- KH: Yes. And again, engineering technology, when I came here, is what engineering used to be in the earlier days. But all the students had to take five math classes, including Calculus I and Calculus II. They had to take three physics courses.
- TS: Which is why you would only have one section of developmental math because if they can't do math they shouldn't have been coming here in the first place.
- KH: Exactly. And then it was finally dropped because the idea was that why are you putting all this money into developmental math when you've got a junior college right up the road that has three levels, 097, 098, and 099.
- TS: Right. And you know, our bread and butter for many years were these housewives who would come back and were petrified by math, but they were wonderful in history classes.
- KH: Yes. And that's one of the things when I was down at the Board of Regents [in 2013] that I felt was a little bit misleading. They said how similar our students were. What they did is they gave the average SAT score for Southern Tech and the average SAT score for Kennesaw.
- TS: But Southern Tech is higher than Kennesaw, isn't it? [Editor's note: For first-time freshmen who matriculated in Fall 2014, the SAT composite at KSU was 1086 and at SPSU 1145, a 59 point difference].

KH: Well, it was and at one time we had the third highest SAT scores in the university system. We've been overtaken by Georgia College. [Editor' note: The average SAT scores of Georgia College & State University and SPSU have been quite similar for some time. In Fall 2014 SPSU was slightly higher: 1145 to 1137, due to higher SAT Math scores at SPSU. Southern Polytechnic was third in the 31-unit university system behind Georgia Tech and the University of Georgia, while Kennesaw State was fifth].

TS: Georgia College is the university system's official liberal arts college.

KH: The liberal arts college of Georgia. North Georgia [College & State University used to be in the top four or five] before they merged with Gainesville. The difference is if you look at the total scores, yes, they're not so different, but our math scores are way up here [583 at SPSU and 539 at KSU in Fall 2014], and your verbal is way up here. If you look at them part by part our math is here, your math is here. [Editor's note: Surprisingly, in Fall 2014 SPSU also had slightly higher Verbal scores—562 at SPSU to 547 at KSU].

TS: Very different students.

KH: Our verbal is here, your verbal is there. But then they also had to take a load of English and technical communications. So the student that left here was a lot different from the student that came in. One of the things I said is, "We didn't always get all the straight A students, but we would get the B and C+ students who might have other qualities that the straight A student didn't have." By this I mean, a lot of our students went out into sales because they had the technical background, but they had the personalities that were not the nerd type personality, if you understand what I'm saying.

TS: You also had a lot of nontraditional students, didn't you?

KH: Yes.

TS: For us, the nontraditional students were superb simply because they were paying their own way, and they were there because they wanted to be and they were determined to excel.

KH: I had many students that went ten years to night classes to finish their degree. There were a lot too who had a two-year degree, and then industry wanted a four-year degree. I was talking with somebody over in the police department in Marietta—I went to the Citizens Police Academy—and they were saying that now they wanted their police to have a four-year degree. It didn't matter what it was in, but they wanted their officers to have that discipline of a four-year degree.

TS: My wife went through the police academy too.

KH: Did she, I wonder if she was in my class?

TS: She was in one of the first ones they had, but she enjoyed that.

KH: I thought it was wonderful. The fire chief in Marietta is one of my students from the 1970s. We had fire science technology here. I had three students that ended up at Marietta Fire Department, and they were Rex Burch, Wesley Breeding, and Jackie Gibbs. As a matter of fact, Mr. Breeding asked me if I had a smoke detector in my apartment, and I said, "No, I didn't because it was an apartment." So he brought me a smoke

detector and installed it for me, which I thought was very nice. This is the sort of thing we had with the students [when we had small classes]. I always knew all my students names; that's the first thing. I learned that from the priests at Bishop Lynch High School because the vice principal would, before the first day of classes, go through the new freshman class coming in. There were photographs of each student on their application, and he would memorize all the names of the students, so when the students came in that first day, if they were cutting up in line, he'd say, "Mr. Lowell, that'll be enough of that, thank you." And the kid would say, "How does he know my name?" I found that you have a lot of control if you know somebody's name. I made sure that I knew all my students' names. I could because we had class sizes around thirty. We didn't have these great, big classes. That's what I liked about it is it was almost like a family, you know, when you first came here.

TS: I always believed in knowing everybody's name even if there were 80 in the classroom.

KH: That's a lot harder.

TS: It's a lot harder, but I just started giving them quizzes the first week, and as I returned them I gradually got to know them.

KH: And I'd call role every day, and that helped.

TS: Nowadays with what they call D2L, Desire To Learn, the students can post their pictures as they register for a class. I taught a class a summer or two ago, and I just asked them if they hadn't posted their picture, to put it there, so I could see it. It helped a lot.

KH: Technology has changed so many things, even since I retired.

TS: What year did you retire, by the way?

KH: I retired in 2002 at the end of summer.

TS: So you made thirty years, roughly.

KH: Yes, it was twenty-nine point, I don't know, four, eight, seven.

TS: Whatever you needed for the retirement system.

KH: That's right, but with the sick leave counted in. I really wanted to go the full thirty years because I wanted to get my thirty-year pin, but because my parents needed so much care, I couldn't continue to do that. There was a mathematical algorithm that our department head who came after Dr. Denning put together about summer classes. We didn't have enough for everybody to teach during the summer, but you wanted to make it fair. If you did not teach you got points; if you did teach you were deducted points; and every summer the people with the most points had the first shot. I did teach some summers, but most summers I didn't. At the last ten years I saved all my points for the last two years, so that I could have my twenty-four months straight, and then that would maximize my pension.

TS: Great. Did you have a math major from the beginning?

KH: No.

TS: No math majors.

KH: The only majors we had were engineering technology.

TS: That's right. When did the math major come in?

KH: I'm trying to remember that. I can't tell you the year. I can look it up and see.

TS: Post separation from Georgia Tech?

KH: Oh, yes. Post separation. And that was a big deal, the separation from Georgia Tech. Tom Samford was a really big mover in that. He was the student body president [in 1978], and he went down and met with the chancellor.

TS: Samford?

KH: Yes. It was shown that first of all we were not getting the attention of Georgia Tech. So many people down there had no idea that we even existed. I didn't know we existed, which is why I never applied here. Then we weren't getting money. Dean Carlson, who was our dean, was loathe to press Georgia Tech for anything because he was still tenured down there, and that's where his loyalties lay. All of a sudden there were a lot of problems, just like the 026, 029 debacle. We couldn't get equipment. We weren't doing right by the students because the equipment they were training on was out-of-date. It just bubbled up as it went. Then the president down there sent out his special assistant who talked with many people one-on-one confidentially. His name was Richard Fuller. I just saw that there is a Richard Fuller that just died and said he was special assistant to the president from Georgia Tech, so it may have been he. I think it was just about two or three days ago [died November 9, 2014] in the paper, his obituary. The reason he sent him out here was to fluff us off, I think, so that we would say what the problems were, and then . . . Well, for the first time ever the Southern Tech faculty was invited to the president's house for a Christmas party.

TS: The Georgia Tech president?

KH: The Georgia Tech president. We didn't have a president; we had a dean; so yes. All of a sudden they were starting to pay attention to us, but in the shallowest way, shall I say. I mean, it was a nice gesture, but we needed more than to be invited to the president's house for a Christmas party. We weren't really included in anything down there with the exception of football tickets. You could buy football tickets, and you could park down there if you had a Georgia Tech sticker. Those were the two. Now Steve Scherer and I did park down there because we went every month for a meeting at the computer center because we were doing the liaison work for the faculty. At that time they had what they called five star users so I was ST\*\*\*\* and then under me were three star users ST-something-something-something-\*\*. So it would be STMAT for math and STEET for electrical engineering technology and so forth and so on. So they could manage the accounts for the users under them. So it was a hierarchical structure.

TS: So everybody wanted independence from Georgia Tech because you weren't getting any attention and you weren't getting any money?

KH: Yes. And the chancellor apparently agreed with that when he saw the numbers, and we were not getting representation at the regents' level.

TS: Right. Didn't have a direct voice.

KH: That's what we're now going back to [with consolidation].

TS: I understand.

KH: So that's why I say, "That model did not work for us." But I don't think that any of the regents even remember this history because they weren't there. Isn't there something about if you don't remember your history you're doomed to repeat it?

TS: Well, somebody said that once upon a time.

KH: That's what I thought. Who was it? Do you know, Tom?

TS: Santayana? ["Those who cannot remember the past are condemned to repeat it."]

KH: Oh, George Santayana? I just saw it recently in something. Well, anyway, that's what happened. So there were a lot of faculty members that were scared because they thought that we wouldn't be able to make it on our own.

TS: Oh, really?

KH: Yes. What was interesting to me is these were the faculty members who were just recently hired and especially the liberal arts faculty. They were all a flit and a flutter. What was really interesting to me is within about three or four years they were all gone. Those of us who remained were committed to making it work because we knew what we had. What we were having problems with is the administration not doing the advertising needed, not going out and getting students and letting people know what we were.

TS: Right. And Development I guess as well.

KH: Development, yes. Very little development.

TS: So on July 1, 1980, separation from Georgia Tech becomes official, and on September 1 Stephen R. Cheshier comes in as the first Southern Tech president.

KH: I was on the presidential search committee.

TS: Were you really?

KH: Yes. I can tell you this. I liked the way we did it the first time around rather than the second time around, and I'll tell you the difference. The first time around we had a huge presidential search committee. We had student members. We had community members. We had faculty. We had staff. Well, what happened, as the weeks went by, the student members didn't show up, and the community members didn't show up. There was one community member in particular who came in who was a big wig, and told us how we should do everything, and then never came back. But we just kept plugging along. Bud Baker, who was the registrar, was in charge of the committee. I think he did a very good job. We decided upon a two-day scenario for interviews where the person would interview with the faculty, with the staff, with the administrators, and so forth and so on.

Then the first night he would go out to dinner with a couple of members of the presidential search committee. And all the seven finalists were male.

During the day we had two of the wives who did not work, one from the basic departments, and one from the degree-granting departments, who had been long-standing here, who were members of the wives club, and who knew the area. They would take the wife out looking at houses, showing her the shopping kinds of things, the schools, the things you'd like to know if you were moving to a place. The head of the English department was Robert Fischer. His wife was Nancy Fischer. She was from Chicago, went to Northwestern, just delightful. Then my friend Barbara Summers who was the wife of the head of the electrical [engineering technology] department [David E. Summers]—he had been a student here [earned an associate's degree], had finished up at Georgia Tech and got his master's at Georgia Tech and then worked at Scientific Atlanta and then came back here [in 1962] to teach. So the two of them—you had the two departments—would take the applicant's wife out and around during that day. Then the spouses of the people on the search committee who were going to dinner would also come along. So they could have an informal dinner that night and ask questions that way. Then the next night there would be a reception in the library seminar room. At that time we had one sorority and six fraternities.

My job was to be in charge of the reception and also get volunteers from the fraternities and sororities to work each one of the receptions. We had seven and seven, so that worked out really well. I still remember the first ones that worked. I think it was Lambda Chi Alpha worked the first reception. They were all dressed up so nicely. You never saw them this way, all dressed in suits and ties and everything. They were doing the punch from the punch bowl and serving things and clearing things. One of the students dropped the ladle in the punch bowl and says, "Oh [expletive]!" I looked at him and said, "Okay, just get it out of there." But that was fun for me. I think everybody had an opportunity to interact with not only the candidate, but the spouse. Then also after the candidates left, we sent out sheets that were anonymous, and they could give them to any member of the committee. Then we put them all together and kept those until at the end of that. Then we looked at all of those. I'm trying to think who the chancellor was at that time. I think it was somebody from Georgia Tech.

TS: Vernon [D.] Crawford, I believe.

KH: It was; it was Vernon Crawford. He was the one that Tom Samford spoke with, so he really knew what was going on.

TS: And I think Crawford had a son that had been here?

KH: I think so, yes. The second time when Dr. Cheshier was leaving we had Stephen [R.] Portch, do you remember him?

TS: Yes, absolutely.

KH: Well, he was not my favorite.

TS: Okay.

- KH: Shall I say? I though he just zoomed in, and he was a change person, but I just thought he did it at the expense of the people. What he decided was that he was going to have the interviews down at the airport, and nobody was going . . .
- TS: Right, secretive.
- KH: Very secretive. Nobody was going to see beyond campus or see anything like that.
- TS: Lisa [A.] Rossbacher in her interview talks about how she didn't ever meet with the faculty before she had the job.
- KH: Not only that, but I think there were only two faculty members on the committee, and these were not leaders of the faculty. These were not people who had been around a long time. I think it was more an emphasis on diversity than it was on leadership and people that really knew what was going on, shall I say. There was one alum. I think there were only six members on the committee. I think one of the regents was on it. I can't even remember who was on it. I do remember when Dr. Portch came out here and introduced Lisa, he said one of the things that he was very impressed about was that she had gone to Princeton. He said something about that's where she got her PhD [in Geological and Geophysical Sciences (1983)]—and he said that means a lot getting something from a school like that. And I'm thinking he's just dissed all the PhD people from Georgia and Georgia State. Yes, it is a prestigious school, but that doesn't necessarily mean that somebody who graduates from Princeton is necessarily better than somebody who graduates from Georgia State. I thought that was a very inappropriate remark. I will say this: I think that Dr. Rossbacher grew a lot into her job. But Dr. Rossbacher, I think, herself, will probably say she was not a people person, and it was very difficult for her at first, I believe. It was difficult for the faculty for that reason.
- TS: Right. Well, of course, she came in after a controversy. Do you want to talk any about what happened with Steve Cheshier, or if you don't want to talk about it that's fine.
- KH: No, I can tell my viewpoint. I was not a department head, but I did know a lot of department heads. One of the things I really prided myself on was keeping in touch with the technology departments, not being in my own little world of math. Now, of course, I was in touch with the basic division because we were doing similar things, but I always wanted to know what the technology departments needed. What do I teach in my differential equations class that will help the electricals? What do I teach that will help the mechanical students?

For example, Robert Carter who was in the electrical [engineering technology] department, was a stickler. He wanted that leading zero before that decimal point because if you didn't then that decimal point could wander off. Instead of having 0.8 percent, it could look like 8 percent, if you didn't put that leading zero in it. So I required all my students to put that leading zero, which they appreciated when they got over to Bob Carter's class, whom they called RC-squared because he was Robert C. Carter—that was RC-squared. Well, Dr. Cheshier had come in with a wonderful application form, but when he got here he wasn't changing things. In many cases the people in the administration were not a good fit for their positions, and he was loathe to change them, I believe. For that reason we were working our tails off, and we saw these people leaving

at 3:00 o'clock to go to some other thing that they were doing. We weren't getting the students. That was a big problem.

TS: I think that's what [Dr. Daniel S.] Dan Papp meant when he said that Cheshier was too nice a guy to be president—he wouldn't fire anybody?

KH: Well, yes, and there are times when as a president you have to, for the good of the institution, or move them out of that position and into some other position where they can't do the damage that they're doing. I agree with Dan for that, yes. But I also think that [Cheshier] was here too long. I think that if you're here for seventeen years [1980-1997], that's too long for a presidency. I would think that in ten or twelve years you should be able to get in, do what you want to do and then get fresh blood in.

TS: Right. Of course, we had one for twenty-five years at Kennesaw.

KH: I know.

TS: So he goes out. Did you have a math major by that time?

KH: Yes.

TS: Okay, so sometime during his tenure between 1980 and 1997.

KH: Yes. And there was controversy about that because the Math Department had a department head for twenty years.

TS: Who was that?

KH: Dr. [Simon A.] Stricklen. He was the first PhD in the department. He was here when I came, but he was going to Emory working on his PhD. But he was the first PhD in the department. The department—I will say this—did not really want him as department head, but when he went down and interviewed with Dr. Crawford, Dr. Crawford was so impressed by him that he told Dr. Carlson that he thought that Dr. Stricklen would make a wonderful math department head.

TS: Right. And he had a PhD.

KH: And he had a PhD. But by that time there were other PhDs in the department too. But we were not pleased as a whole. He was very good in some areas, but in other areas it was problematic, and after twenty years with the same department chair and the same problems year after year after year . . . I can understand Dean Carlson—this was before Dr. Crawford was chancellor—if Dr. Crawford says he likes this person, they say . . .

We were asked to write to the vice-president for academic affairs about the different people that came in to apply for that position. I tried to be as diplomatic as I could. We had two internal candidates, Dr. Stricklen and [one other]. I said that I thought that Dr. Stricken was a better fit than [the other internal candidate] would be and that here were the strengths and weaknesses that I saw, but that I preferred an external candidate instead, and I said why. I ranked them. Well, years later, when [the academic vice president] left, he went into his files, and anything that had Math on it he just sent back to the Math department. In other words he sent them back without even looking at them or having anybody go through them to see if there was anything confidential in them.

TS: Wow.

KH: I mean, this is just an extreme example of why the faculty as a whole did not trust the administrators.

TS: Well, how was Dan Papp as interim president?

KH: Oh, everybody liked him very much, and they wanted him to be president. He did have his application in, and then he withdrew it. I'm not sure why he withdrew it, but I do know at one point he was in line to be chancellor of the State University System of Florida, and then he withdrew from there. But Florida is a mess.

TS: Yes. I have an interview where he explains why he left Florida.

KH: Oh, do you?

TS: Yes, he was going to be the chancellor, and it was so political that he just got on a plane and flew back to Atlanta.

KH: Down in Florida?

TS: Yes, right.

KH: The reason I know about that is my parents' house is in West Palm Beach. I still have that, and when my parents were still down there, I'd go down four and five times a year. I'd read the papers, and I'd listen on the news and keep up with what was going on. In the meantime, Dr. Denning was only here for my first two years. Then he became department head of mechanical. Then he moved down to the University of Central Florida, which at that time was called Florida Technological University. I guess about five or six years later he asked me to come visit while I was down in Florida at Christmas. What I didn't realize is he wanted to hire me down there in the engineering technology department, but I'd have to get a second master's degree. I thought about it long and hard. It would have been an upswing in pay at least for the first year or so, but I didn't know that I wanted to go back to school and teach at the same time because I had these health problems. When I overextend myself, I come down sick, and then it's just a vicious cycle. Also, they didn't have nearly as good of a pension system in Florida as we have. You put less into it, but you get a lot less out. At that time it was way out in the boondocks, and there was only a two-lane highway going from Orlando to Florida Technological University. So I turned him down because I decided I'd have a better social life if I stayed in Atlanta, and I really liked my colleagues. I liked exactly what I was doing, and there I would be teaching more of the engineering technology than math, and I really like the math. I appreciated it, and I thought it was a wonderful sense of confidence in me, but I really decided I was happy where I was.

TS: Was it a big deal on this campus when Southern Poly got university status in '96?

KH: I don't think it was as big a deal as separation from Georgia Tech.

TS: Yes, I wouldn't think so.

KH: In '96 with the Olympics there was a public relations firm hired. One of their suggestions for getting students was to change the name to Atlanta something or other,

Atlanta Technical University. They said because of the Olympics, Atlanta, you know, everybody knew about Atlanta now. Well, you've got Atlanta Technical School down next to Atlanta Metropolitan, and we thought it was a terrible idea. The faculty was very upset by the naming. Finally, Steve Cheshier agreed that Southern Polytechnic would be a better choice, and then he said we could still call it Southern Tech because that's what everybody knew us as—Southern Tech. But then Lisa came in. Did she tell you about the twenty-five cents?

TS: Not in the interview; I think I know where you're going with that.

KH: Yes, she said that she would fine everybody twenty-five cents if they called it Southern Tech and not Southern Poly. Well, she was over at the Math Department one time in a meeting with us, and I was talking about in days gone by something had happened. I said "Southern Tech," and she said, "That'll be twenty-five cents." I said, "But Dr. Rossbacher, at that time it was called Southern Tech." So she relented at that time, but, your know, it's hard—I have a friend in high school whose name was Mitch, and when he came back for a reunion, he had changed his entire name. Instead of Mitchell he wanted to be called Aaron. Well, if you'd called somebody from the eighth grade on Mitch, and then you have to go to Aaron? I mean, it's hard.

TS: It wasn't really that big a deal then to gain university status?

KH: No, it really wasn't that big of a deal for us.

TS: I guess where I was leading with all of this is you retired in 2002. How had the campus culture changed in that almost thirty-year period, do you think, with students or job expectations or relationships among faculty or anything else?

KH: Well, I mentioned the goat shed at one point; have you heard that term before?

TS: No.

KH: Okay. Before there were sororities and fraternities there was a tradition where we had the Goat Night.

TS: Oh, yes, I have heard about Goat Night.

KH: Well, Goat Night was where you had relay games and all these things. Apparently, somebody got mad at the administration. This was before Dr. Cheshier. We're talking about in Carlson's day, before I came. They said they were just a bunch of goats over there and tied a goat in front of the Administration Building. Thereafter, the Administration Building was known as the goat shed. You talk about the goat shed, but most people now have no earthly idea what the goat shed means.

TS: Right. No, I hadn't heard that, but that's very appropriate.

KH: And let's see, what are some of the other things? In those days it was like everybody got together to do things, but as the campus grew, we grew apart. Though we were divided into basic studies and engineering technology, it was still small enough that almost everybody knew everybody else. But then we were divided into schools. What ended up happening is we had more and more layers. As you know, administration sort of blossoms. That meant more committees. You had committees in your department, you

had committees in your school, and you had committees of the entire university. You were just committeed to death. When I first came, I was on the Minority and Female Consortium. We met down at the Board of Regents. We had few minorities in the whole university system, other than the historically black colleges, and females [at Southern Tech] were, as you know, almost non-existent. Ben [C.] Sparks was the head of mechanical, and I don't know exactly why he was on it. I was on it because I was a female. We were trying to give ideas as how to do things.

I was also on the curriculum committee, and my office mate was Frank Taylor who was in the Physics Department because Math didn't have enough math offices. When I came, Frank said he would share his office with me. I was in an outer office, and he was in the inner office. It was supposed to be a department head's office. So everybody would come in and think I was the secretary. That got old after a while. Then he said that when he left I could have the inner office, but what happened is the head of the Physics Department retired, and Frank became head of Physics. So he moved into that office, but then Harry [M.] Schenk wanted the inner office. So I never did get the inner office. I went into one of those small 10' by 10' outer offices that they built on the outside. There's another funny thing. When I first came here, we were supposed to get our pictures taken for the yearbook, and [the memo] said, "Faculty, please remember to wear coats and ties." Just little things like that. I mean, they just forget about us.

TS: Right.

KH: I told you I went to the [World War II] reunion, and the author [James D. Hornfischer] of the Last Stand of the Tin Can Sailors: [The Extraordinary World War II Story of the U.S. Navy's Finest Hour (Bantam Books 2004)] spoke. There were midshipmen there from the Navy that were doing oral histories of the survivors, and he was speaking about that at the luncheon. He said, "All these young men that are here from the Academy and so forth and so on . . .

TS: Young men?

KH: I'm thinking, there are two females here. Afterwards I went up to him, and I told him my story about the coat and tie thing, and he got very offended. He said, "Well, it was just an oversight." I'm thinking, "Yeah, but, you have two female midshipmen here. You just excluded them by saying 'young men' from the Academy." If females don't point this out, it's not going to be pointed out. But as time has gone by, the Math Department is almost equally male and female. However, I will say this, at the time that I graduated from Clemson, there weren't that many females in graduate school.

TS: Right. So not in the job pool.

KH: Not in the job pool, yes.

TS: But that's changed now.

KH: Oh, yes. Much.

TS: I guess you got promoted on the normal schedule all the way to full professor. By the time you got through was there any growing pressure to do research?

KH: Yes, there was. It's interesting because I used to go down to Georgia Tech for the state mathematics seminar and dinner when they'd have it at Georgia Tech. I will say this, when I first came here I went down, and I audited some computer classes down at Georgia Tech because I wanted to get familiar with the culture down there, how they did the courses. I didn't take computer classes in graduate school. I just took math courses. I was talking with somebody at the dinner one night and said something about my promotion, and he said, "Oh, I remember that. I was on your promotion committee." My first promotion [to associate professor] went down to Georgia Tech. I thought, well, that's nice. I guess it was okay. In 1980 I went to work part-time for Lockheed Georgia in the research department, and I worked there for eight years. I worked there during the summer and then part-time during the school year, usually two evenings a week. I'd finish up here at 4:00 o'clock. I'd be here from 8:00 to 4:00, and then I'd go over there at 4:30. That's right near the Georgia Tech Research Institute. We were actually in the same building.

TS: Off Atlanta Road?

KH: Off Atlanta Road, yes, where the high speed wind tunnel was. They were doing acoustic research and also aerodynamic research. Most of the people there were PhD aeronautics or astronautics, and they would give a lot of papers at AIAA, American Institute of Aeronautics and Astronautics, and most of them were not native English speakers. My office mate was Egyptian. There were two Egyptians, two Israelis, and a Czech. These were high-powered international people there. My boss for a time was [Andrew S. W.] Andy Thomas, and Andy Thomas ended up being an astronaut. He's from Australia, and was up in the space station with the Russians for a good long time. It's strange to see your former boss up in the space station.

TS: Absolutely. We had to add the NASA channel to our TV for my wife. She's kind of a junkie for anything that's astronauts.

KH: Well, I did a little bit of this and a little bit of that. I did a lot of coding, Fortran. What we were doing in the area I was working in was trying to reduce the drag on the plane, the geometric, because this was right at the time after the Arab oil embargo, and aviation fuel had skyrocketed. So you wanted to do everything you could, so you're not using so much fuel.

TS: Cut costs, correct.

KH: It turns out that you're most efficient right around the speed of sound. It's called transonic. You model the airflow mathematically. Subsonic, you model it one way. And supersonic, you model it another way. To get from subsonic to supersonic right around transonic you've got to meld the two together. It's a very difficult problem. That's what we were working on. Doing it in three dimensions, it turns out that in one it uses partial differential equations that are elliptical, and the other used a hyperbolic differential equation. The transonic is where the two come together. You've got to find the most efficient configuration that will give you the best solution, so that you have the least amount of drag. That's what we were doing over there.

TS: Do you get any papers out of that?

KH: I was on one paper, and I was noted in another paper. I wasn't exactly a go-for, but I took the things that they didn't want to fool with and cleaned them up. Also, I found errors in the code that had been written before. It started out in Fortran II and then went to Fortran IV and then went to Fortran V. The code itself was this thick.

TS: This thick being about a foot and a half?

KH: Yes. So when I went up for full professor, I had two of my colleagues over there, both of whom were PhDs in aeronautics, one from Virginia Tech and I forget where [the other one] was from, and I asked them to write me letters of recommendation, which they did. A lot of what I did was helping them get ready with their papers. The other thing that I did was proofread a lot of stuff. Their English was very good because they had gone to American universities for the most part, but there were a lot of little things. I remember the first day I was there they had spelled [a word] "scaler," and it should be "scalar," as opposed to a vector. A scalar just has magnitude. A vector has magnitude and direction. But it's those little things that can trip you up. And you don't want to look foolish in front of an audience of . . .

TS: Sure.

KH: So, I would do a lot of proofing, and I also did a lot of intermediary work. For example, my Egyptian office mate didn't like to talk on the telephone because he had trouble understanding. So he'd tell me what he needed, and then I'd call out to California where the Cray computer was that we were doing our calculations on. Then I'd figure out what the thing was that had to be done. They tried to hire me [full-time] too. Which was, again, nice, but I didn't want to be in an office all the time. I wanted to be out with students. I really love teaching.

TS: I would think that would be good practical knowledge to have some idea where students might be getting jobs in the future and maybe the kinds of math that could really be helpful to students.

KH: Yes. And I could bring it into my classes because students said, "Where in the world are we going to use this?"

TS: And you could tell them.

KH: I could tell them. I worked at Lockheed for eight years. And the only reason that I stopped working—there were two of us who were consultants, one from Georgia Tech and me from Southern Tech—but Lockheed decided to move all the research facilities out to Rye Canyon in California. Many of the researchers left Lockheed because the cost of living in California is so much more, and their wives didn't want to leave. But it was a wonderful activity that I could [cite] for research and professional development that I did. As I understand it, at the time there was one person who voted against me on the local committee, and that was because she was required to go get a doctorate, and I didn't. Dr. Carlson had wanted me to go get a doctorate, but I would have had to go over to Athens. Again, I'd have to be working and traveling, and I thought, "I can't do this because physically I'm not able to."

TS: Right, couldn't you have gone to Georgia Tech?

KH: I guess I could have but it's still . . .

TS: Too much pressure?

KH: Not only that, but I was, and I'd like to think I still am, a person that was in my office a lot to help students. Not only did my students come, but a lot of other people's students came because there were people in the department who would teach at 8:00, 9:00, and 10:00, have an office hour at 11:00, and be gone. I just couldn't say "no" to students. It's different with, let's say, English. I mean, there's no real problem in English unless you can't write a sentence, and somebody has to explain to you about subject and predicate. But in math the class goes so fast.

But, in answer to your question, yes, there was pressure to do research. And I tried. I knew I could not do the PhD program because my health would not allow it. [If I entered a PhD program], I could not do a good job in the classroom, and I refused not to do a good job in the classroom. That was my first priority. I went into teaching to teach. Now I did do professional development. I went to the joint mathematics meetings many Januarys, which is the American Mathematical Society, which is mostly the research arm of math, and then the Mathematical Association of America, which Tina Straley was the executive director of for many years [2000-2011]. I would go to the different seminars, and sometimes I would go to the mini courses that they would have on certain things. So it's not that I wasn't trying to keep up with my curriculum development and those kinds of things, but I did not want to go through the PhD, the rigor of that. I did present papers at the Southeastern Section of the MAA [Mathematical Association of America] and also at ASEE [American Society for Engineering Education].

TS: I understand.

KH: So I thought, "If I don't get promoted, I don't get promoted." But I did feel that I had something to bring to the table for the students. You asked me about our faculty awards. I received three Outstanding Teaching Awards. These were not just one person [a year]. Some years there were as many as five. The last one I received there were only two of us. So I have three plaques, one under the name of Southern Technical Institute, one under the name of Southern College of Technology, and one under the name of Southern Polytechnic State University—which is nice. Then the student government awarded me outstanding faculty, which is awarded to only one faculty member each year, back in something like '79. So I have a few plaques for teaching, which is nice. It always feels good to be appreciated. And we had student evaluations. In the Math Department we evaluated every course every time. We didn't do it just once a year for SACS to come in. The one I can remember the best is the students said, "Professor Hall is like Channel 5: Dedicated, Determined and Dependable." I said, "That's the first time I've ever been compared to a television station." That used to be their tag line: "Dedicated, Determined and Dependable."

TS: Right. I remember that. That's great.

KH: Of course, you can't please everybody all the time. We had one dean candidate that I liked very much, [a finalist for] the dean of Arts and Sciences. He came in, and they were asking about student evaluations because students can be very—how shall I say it—

critical, yes, and not always objectively critical. He was probably in his late fifties, early sixties, and he said in his entire teaching career he never ever turned papers back later than the next class period. He said he would stay up until 3:00 in the morning grading to get them back. Now, I have done that too, but I can't say that I've always done it for the next class period. I've done it as soon as I could, and most of the time I did it for the next class period, but not always. He said he still had on student evaluations, "Never turned papers back promptly." He said, "You've got to take those with a grain of salt." I thought that was an interesting comment.

TS: Do you think students have changed any over the years?

KH: From when I first started, yes. When I first started they were older. We had all the Vietnam vets coming through on the GI bill. As years have gone by, we've had mostly younger students in the day classes. Now in the night classes we still get the older students. In some ways that's good. I remember there was one student who always came to my 7:30 Friday night class who had been at Happy Hour.

TS: So he was happy.

KH: Yes, he was happy. I think the Math Department was the only department on campus that had 7:30 Friday night classes. We had Monday, Wednesday, Friday classes because at that time, in the quarter system, we had ten weeks of five days a week math classes, so the night classes had to go three nights a week.

TS: So an hour and a half each night?

KH: Yes, an hour and twenty minutes with ten minutes in between.

TS: So 7:30 to 8:50?

KH: Yes. But when we taught at night we usually taught 6:00 to 7:30 and 7:30 to 9:00, so we'd have three hours straight, which is a lot when you're standing the whole time. It would get to my back when you're writing on the board the whole time. I used to go by the English classrooms, and I'd see the English professors sitting at the desk and talking about stuff, you know. I'm thinking I never sat down once, except when I was taking role maybe. But I really liked my blackboards, and one of my students in one of my trigonometry classes brought me colored chalk. I used it ever after that. It was wonderful. In my differential equations classes I always asked for the classroom that had three chalkboards because you could use five boards for just one problem. If I was at one board, I could say, "Look back over at the pink circle over there," and it was real easy for them to look, rather than say, "Look at formula four." You know, they're looking around saying where is it? Pink circle you can get it. A lot of times students made suggestions that I really appreciated. But now we're getting a lot of good students out of high school, especially female students who are getting more and more interested in the STEM courses. I'm really pleased to see it. One of the things that I found interesting is that I tended to draw a lot of female students. I didn't really think about it. I don't think of students as male or female so much until all of a sudden I realize that I've got a lot of female students. I don't know whether they felt that I was more approachable or what, but I was pleased with that.

TS: Sure. Well, you were a role model.

KH: I would hope so, to some extent.

TS: Great. Well, let's talk about this last year a little bit. I've been asking everybody about the consolidation and when they first heard about it and so on. You were telling me some stories at lunch earlier today about how you jumped into action very quickly when the announcement came. So why don't you talk about that for the tape?

KH: Well, I felt it was a terrible idea for both institutions. Do you remember the Kentucky Fried Chicken thing? "We do one thing; we do chicken right?" I think when you try to be all things to all people it dilutes the quality. The pressure is coming from the legislature, and ironically it's from a member of the Cobb legislature who is the chair of the [Higher Education Subcommittee of the House] Appropriations Committee down at the . . .

TS: Earl Ehrhart?

KH: I think it is he, yes. I say ironically because it's the Cobb legislature members that wanted us over here in the first place—that wanted Southern Tech here. It's ironic to me that after we fought so hard to get out from under Georgia Tech, and after we were able to get a better administration team here through various means, and our enrollment was growing even though the university system was down—Southern Tech had the highest percentage increase last year [of any unit of the University System of Georgia] . . .

TS: Six percent or something like that [6.9 percent growth from fall 2011 to fall 2012; 5.6 percent growth from fall 2012 to fall 2013].

KH: Yes, and we're a STEM school. We are one of the STEM schools that has the highest minority enrollment and female enrollment. We've worked really hard at that, and being consolidated into another institution is diluting that. I don't believe it's going to save any money at all. I think there's more fat in the UGA budget with all their millions of dollars than there was here.

TS: Probably so.

KH: I just think it's a terrible idea. Somebody said to me who has been intimately involved with the school, "They know not what they do." They don't know what they have done to the students here, to the people who have been here for thirty years and are still working to try to make it better—we've gone from 1,800 students to 6,786 [in fall 2014]. To go from a school of 6,700 to be part of a 30,000-student [institution] is a sea change. When a student had a problem, I could walk over with him to the admin building and knew all the people over there. I'd go, and I'd be their advocate—I'd say, "So and so has this problem"—because they knew me, and they knew that I would reciprocate with them. They'd look into it right away, and we'd get it solved. If I were still teaching here, I couldn't do that now. I don't know the people up there, and there are so many more in the registrar's office up there. The student can't walk across campus now. The student now has to go up there [to Kennesaw].

This is why I want to give you the thing that I sent down to the [Board of] Regents because it has all of this in it. I'm thinking about the student who doesn't have a ride, the student who takes a bus here from downtown Atlanta in the morning. Dr. Papp said there will be a shuttle running every fifteen minutes. I'll believe it when I see it. Even if there is a shuttle going every fifteen minutes, students here could take three classes in a row and then go to their afternoon job. You can't do that if you have a class here, go to a class up there, and come back to a class down here. I asked Dan when he and Lisa spoke to everybody on the Tuesday after the announcement came out. I was waiting to ask a question, but I wanted the students to go first. I was in the auditorium. I didn't want to interrupt the students. I finally got in line. There were two lines on either side of the rows with the microphones. I was still six people back in line. There were still all these students wanting to ask questions, and Lisa stopped it and said, "We have to go to a press interview." Well, apparently there had been an e-mail sent out that afternoon earlier that said it was only going to be from 5:00 to 6:00, but many of us didn't know there was going to be a stop time. We thought it would go until all the questions ran.

So I thought, "Now wait a second." I have all these questions written down. I still have them down in my notebook here. So I jumped up on the stage because I knew if I went around, they'd stop me. So I just jumped up on the stage and I said, "Dan, Lisa." He came back, and I asked him if he knew that my friend Larry had died [Laurence J. Logue, PhD in Physics, who had been the department head in both Physics and Mechanical Engineering Technology]. He knew Larry too, who had died in my house. He said, yes, he had heard, and he was sorry.

I said, "Dan, can you give me four things that this consolidation is going to be good for the Southern Tech students?" Just four things. He said, "Well, I can't give you four, but I can give you one." I said, "Okay, what's the one?" He said, "Well, the Southern Tech students will now have a larger group of courses from which to choose." I was just dumbfounded because I'm thinking, "You haven't been here in fifteen years." I could just see what he was doing. I remember when he was here he told members of his staff, "You can argue inside all you want, but when you go outside, whatever decision is made you have to support that decision." I'm thinking to myself, "He knows a lot of what I'm saying is true. He can't admit that publicly." And I said, "Well, that's an awfully positive spin on it." And Lisa said, "Well, you asked him for something positive." Then he was whisked away to the press conference.

I came back, and I did research on our engineering and engineering technology students. Our engineering technology students get two electives, one of which has to be an elective in their major field. That leaves what? One elective. How is that going to help our students when you have all this panoply of courses up there? Are they going to jump up and down and say what a wonderful number of courses from which I have to choose? Or are they going to say, "There are thirty courses here on campus from which I can choose. I can take another math class. I can take another computer science class. I can take an art class if I want or art history." We have lots of different classes from which to choose, and if they're going into a particular area, they can take something that will dovetail with that area. They can already take a course up a Kennesaw as it is now and transfer it back

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<sup>&</sup>lt;sup>2</sup> The letter can be found in the Appendix.

- here. So what's the advantage to our students? I don't see any. There are lots of other things, but they're in my letter that I'll tell you about.
- TS: Tell me about the letter you wrote to the regents and how that all came about?
- KH: Well, the Tuesday before it was announced we had our scholarship dinner, which was a very, very nice affair. It was over at the Marietta Hilton.
- TS: I wanted to put that on the tape too that you've done so much with scholarships for Southern Poly students.
- KH: Well, I started a scholarship in the name of Professor Wendell Hardwick—James Wendell Hardwick. He was in the Army Air Corps in World War II in the European theater. He was a navigator. I don't which kind of bomber it was. They flew over Africa in support of the missions there and also flew over Europe and dropped bombs.
- TS: Like a B-17 maybe?
- KH: Yes. Then when the war was over, he came out into civilian life, didn't like it at all, and went back this time into the Air Force. He wanted to be a pilot, and he had not exactly twenty-twenty vision. The doctor told him to squint, and he passed him for pilot, so he flew planes for the Air Force. Then when he retired, the then [director] here, Hoyt McClure, who came before Carlson, was a childhood friend of his. They had grown up together in Savannah.
- TS: Hoyt McClure lived over on Kennesaw Avenue and was very much involved in the community.
- KH: Very much, yes. At that point he said to Wendell, "Why don't you come and help us out in the Math Department," because of the navigator skills that he had. So he went to Georgia State at night and got his master's down there, and then he taught here. When he died, I requested in his obituary that donations be made to Southern Polytechnic State University Foundation for the James Wendell Hardwick scholarship. Then one of the people next to my office had a lot of health problems. He looked like a Santa Claus. Have you seen these Santa Claus cards where you're down in Florida with the tropical shirt on? Well, he had a big, long beard, and big hairy hair, and he was an atypical Southern Tech math professor, but very good at what he did. He was good with the kids. I donated to it, and I tried to get other people to donate to it. But he wasn't here all that long, so his money went into the—
- TS: What's the name of that scholarship?
- KH: Barry Flannery [Memorial Scholarship]. He was really a good guy, and I got along very well with him and he with me. But the one that I really feel most proud of is the David E. Summers Endowed Scholarship. He was the Electrical Engineering Technology Department head for a long time, and he was the most respected faculty member on campus. He also did a lot for athletics. He kept the score book for the basketball games and he was the faculty liaison with the NAIA. When he retired, he said that he did not want any retirement party, and if somebody gave him one, and he walked in the door, he'd walk right out again. So nobody gave him a retirement party. But he had esophageal cancer, and we knew he did not have much time to live. Bob Hays called me

up and said, "We need to do something for David." Now, I was hoping we could name a building for him. Tom Samford, Bob Hays, and I got together and said, "How can we do this?" Tom Samford said, "Well, you know there are new guidelines from the Board of Regents that you have to have so much money to name a building after you." Then we really decided that David would much rather have a scholarship in his name. So we met with the people in Development and started getting the scholarship thing going. Now Bob had since died, but Tom and I continued working on getting the scholarship up to the level where it could be considered endowed.

TS: I knew Bob Hays. I went out and talked to his East Cobb Kiwanis Club a time or two. He would invite me out on occasion.

KH: That was nice. He was something wasn't he? I'll tell you he almost killed me one time. Bob and I were both on the presidential search committee when Dr. Cheshier was hired, and he was the overwhelming campus favorite. He was not my first pick, but he was the campus's first pick, and we were trying to do what the campus wanted. We were going down the Board of Regents, and so Bob said he would drive. Never again would I ride with Bob Hays! It was in January or February or March. It was when it was cold and wet and rainy, and I thought I was going to die on the expressway. He was a terrible driver! Peggy, his wife, told me afterwards, she said, "Well, I could have told you that."

TS: So why didn't she?

KH: Yes! So we get down to the Board of Regents office, and then the chancellor met with us and everybody. I guess there was something like three of us from the committee, three or four of us came down, and they asked us, "Is he the choice of the campus?" And we said, "Yes"

TS: Cheshier was your choice?

KH: The campus's choice, yes. But then he wanted the other two names in unranked order, as they do. So, back to David's scholarship, we got together, and I said to them, "We really should do something for David before he dies because he's going to be gone before too long." Tom Samford got a dual degree in mechanical and electrical, and he was the only one who was on the dean's list and on academic probation at the same time. At the time the computer . . .

TS: The dean's list and academic probation?

KH: Because what would happen is the computer that was set up by one of the electrical faculty members only counted up to 999 quarter credit hours. When it went to 1,000, it went back to zero again, you see. So it looked like he had so many quarter credit hours and so many credits, and when you divided one into the other you got the zero or the one or the two. So he was on the dean's list because he'd received an A in each of his classes, but he was on academic probation because his overall GPA was, according to the computer, so low. Anyway, Tom said that we're having an industrial advisory board committee meeting this Tuesday from 12:00 to 1:00, and that might be a good time to do it because all the Electrical and Computer Engineering Technology advisory board members will be here. We could do it at 1:30 [after the advisory board meeting], and everybody would be here. So I called his wife, Barbara, and told her what the deal was.

Then I called everybody I could think of, for example, one of his friends from Scientific Atlanta. He came because he had been good friends with David back in the Scientific Atlanta days. I got on the telephone and called everybody I could think of. David, this says a lot, did not want anybody from administration there. He only wanted it in the electrical building with electrical people or close faculty, staff, and friends. Anyway, we got [Barbara and their children and] all these people together in one of the downstairs labs in electrical. I had the plaque made up. I've done so many plaques, I can't tell you. I made about eight nominations for outstanding faculty awards and not only in my department, but in other departments, and every single one of them won. Even though I hate to write I can do it, and I think I can make a case for people. So anyway, I made the plaque up, got it over there, and it was a very, very, nice ceremony. He died I think only about seven days later. We were just in the knick of time.

TS: I'm sure he was pleased.

KH: He was very pleased, and now he has a scholarship. We had to get \$25,000 to have it endowed. He died July 2<sup>nd</sup> of 2007. Wendell died July 2<sup>nd</sup> of 2001. David died six months after my father died. My father died New Year's Eve of 2006. Now the endowment [for David] is over \$50,000, and so it will be there forever.

Back to when we found out about [the consolidation] and how I got involved in it: I know that Lisa must have known about it at that time [the night of the scholarship dinner], but, of course, she couldn't say anything about it. I heard from one of my friends on campus that it came out in an e-mail on Friday, the 1<sup>st</sup> of November. I signed on the students' petition on Sunday, the 3<sup>rd</sup> of November, and then Tuesday was when Dr. Rossbacher and Dr. Papp met with the campus community. It was Wednesday when I started working on getting the regents' names, and that's the day my computer broke down. [Also on Wednesday] I met with students, and they told me what they were planning to do. Then Thursday I stayed up all night writing.

TS: So that would be the 7<sup>th</sup> of November?

KH: Yes, and then I brought it in to SPSU to be typed up because I couldn't do it on my computer.

TS: Which had crashed.

KH: Which had crashed, yes. I had had to go over to the home of one of my colleagues, Ahmad Abusaid. We had a very eclectic math department. Ahmad Abusaid was from Palestine, Jose Vinelli was of Italian descent from Uruguay, Shangrong Deng was from China, and Andrew McMorran was from Scotland. So you have Palestine, Uruguay, China, and Scotland, and I forget what else, but we were a very international department, which was kind of neat I thought, to have all those different nationalities. I went over to Ahmad's house. He doesn't live too far from me. I said, "Can I use your computer to get the addresses of the regents, and your printer too?" So then I brought them back to my house, and that's when Barbara wrote the addresses on the envelopes for me. I went back to school to check with the students to see what they were planning to do. Then I came home, and I wrote through the night to compose the letter to the regents. Then [on] Friday the 8th I took the letter over here to SPSU, had it typed up, missed the 5:00 o'clock

deadline on the post office, went to the UPS store that I always go to, and it was closed for remodeling! I got there at five minutes of 6:00 and then had to go another UPS store that was open until 7:00. They got all the addresses in and sent it off at a cost of \$202.50 to me. So there we were on that. It should have gotten there on Monday, November 11<sup>th</sup> because even though it's Veterans' Day, it's not a holiday for UPS. I wanted to get it there before the meeting on the 12<sup>th</sup>. Of course, they were meeting down at Clayton at the archives at 9:00 a.m. on the 12<sup>th</sup>. I couldn't have it delivered on the 12<sup>th</sup> because they wouldn't even get it by that time. I was on a really tight schedule. Then I did go down to the meeting to see what was happening and see how the vote went and if there was any discussion on it.

TS: Was there?

KH: Very little; very little. One of the things that made me upset was that the bylaws of the Board of Regents say that if you want to speak at a meeting—and it's not given that you will speak—you have to be given permission to speak, and you have to put it in writing at least fifteen days before the meeting.

TS: But you found out only twelve days ahead.

Well, actually eleven if you go from the 1st to the 12th, yes. Even a non-math person can KH: understand that's an impossibility. In math we call that the null set, meaning there is no such thing. For example, give me an even integer between one and one and a half. There's no such thing. That's the null set. So what's the set of possibilities? Null; it's nothing. But they did allow three of the student government students to speak for two minutes each. They spoke beautifully. They had gotten help from the English department. Each one of them talked about the fact that in our curriculum students are taught cost benefit analysis in a thorough, data-driven [way]. We asked for the data, and the foundation asked for it after the fact. The answer came back that there were no particular data. It was just a common sense thing that it would save money. Now, that was on Tuesday. Monday night I went to the Marietta council [planning] meeting. One of our secretaries knows one of the council member there. It was an agenda meeting [prior to] the actual meeting [on] Wednesday, which would have been after the fact, of course. The students were meeting with another representative here on campus, so I said, "I'll go to that [Marietta agenda] meeting. It was supposed to be a short meeting.

TS: This is a Monday night meeting?

KH: Monday night meeting before the Tuesday [regents'] vote. I had asked to speak to this issue. It started at 5:00 o'clock, and it was after 9:00 o'clock, and they were still on agenda items. I hadn't eaten. I was hungry. So then Councilman Anthony Coleman brought it up that one of his constituents had brought this up to him. [Mayor] Steve Tumlin knew that I wanted to speak on it. He said that I could have five minutes. Well, I started, and I just blah, blah, blah; I just went through all the things that I thought were terrible, and they had no idea. They had no idea whatsoever. Now, Steve is on both foundations, both Kennesaw and Southern Poly, and he didn't want to get involved in this. He said he had just had breakfast with the chancellor. I'm thinking, "Here we are in politics again." Do you remember, surely you do, the whole idea of the regents was to keep it out of politics?

TS: Yes, back to Gene Talmadge and his interference with the university system in the early 1940s.

KH: Yes. Well, isn't this interference by [Rep.] Earl Ehrhart who said in the *Marietta Daily Journal*, "It's about time the university system cut some of the fat"? Now, I don't consider us "fat" [and disagree with that reason for] merging us with Kennesaw. Nothing against Kennesaw; you guys do wonderful things with what you do. Your business school is top notch. Your nursing school I know from the people that took care of my father—it's hard to get into, and it turns out wonderful nurses. Certainly, there wouldn't be nearly enough educators of elementary schools if we didn't have the [Bagwell College] of Education at Kennesaw State. But I still don't see that it's a reason to merge the two of us.

Well, the one engineer on the council at the time, Jim King, said, "Now, let me get this straight. This means if we were part of the university system, somebody comes in and takes away our charter, and we're no longer a city anymore?" I said, "That's right." He finally got it. They were just dumbfounded. He said, "Well, what do you want us to do?" I said, "Well, if you'd like to make a statement, I'm not asking you to tell them not to do it, but if you could make some kind of statement that said, 'Could we hold this off for a while until we get the data together and see what's really happening?""

I could see that Steve Tumlin was turning around in his chair like this, almost with his back to me. I inferred that Steve was not happy with this idea. When Jim King was asking the question I was two seats up. I had stepped away from the lectern. Thunder [Tumlin] told me to come back to the podium. Now, I have a large voice. There weren't that many people left, and you could hear me from anywhere. I went back and I said, "I think it would be an appropriate thing. If you want to do this, fine; if you don't want to do this, fine. I'm just telling you what my opinion is." So Jim, I think, wanted to put it on the agenda vote to ask the regents to hold off. I said, "You understand now, if this goes through there's no more University System of Georgia institution in your city because everything's really up at Kennesaw."

Steve said, "Well, we don't know that this is true. This is just her opinion." Her opinion! He knew full well who I was. I didn't say anything more after that. Before this whole discussion started, I went to sit down, and Jim King said, "I have a question." I went back to the podium, and he said, "Do you teach boundary value problems in your courses?" I said, "Yes, in the differential equation courses. Why do you ask?" He said, "I had a math professor that was just like you." I said, "Where did you go to school?" He said, "Oh, it wasn't you; you just remind me so much of her." Where did this come from? Then Thunder asked me some non sequitur question. He said, "Now what was it you corrected my English on?" Wendell Hardwick, being a friend of Hoyt McClure, had left everything to Hoyt's children, and Hoyt's brother's children, and to me. There were three and three and one, so there were seven of us. Hoyt had Thunder do the probate. Thunder sent me this thing to sign, and it said, "Because James Wendell Hardwick died intestate, blah, blah, blah . . . . " He didn't die intestate; he had a will. So I called up to the firm, and I asked about it. They said I better come over and talk about it to Mr. Tumlin. I came over, and I talked to Thunder, and he said, "Oh." And he scribbled out the "in" part, and he said, "Now you can sign it."

I'm thinking, I'm a math person. I like details. I like things to be nice and orderly, and I wasn't going to sign something that wasn't true. So he said something about correcting his English, and I said, "Mayor Tumlin, I didn't correct your English, but you had said that Professor Hardwick had died intestate, and he had not. I'm a math person. I like to have everything tied up nicely and have it correct before I sign anything. I did a lot of proofreading when I was over at Lockheed for eight years, and I scored higher on my verbal than I did on my math on the SAT, so this is important to me." And that's what I did. I'm sure I'm not his favorite person anymore, but why did he have to ask me that? Anyway, when Jim King seemed to think that it might be a good idea to go on record about it, you could see Thunder turn away from him, almost turning his back. And Jim says, "I'm getting the idea that even if we do vote on such a thing it will be vetoed." Thunder didn't say a word. Then he said, "We have no dog in this fight." I was thinking, "We're in the city of Marietta. You all wanted us here, and now you're saying you have no dog in the fight?" So I had done what I could.

I saw him several weeks later at a Wendy's after an agenda meeting, and I said, "I'm sorry that we had to disagree about that, but I do want you to know that I voted for the SPLOST for the Franklin Road [revitalization]." He said, "Well, we didn't really disagree." He didn't say "any dog in the fight" this time. He said, "We didn't have any standing here." I didn't say anything more about that. But that's how I knew that he knew who I was. Anyway, I did get all the letters plus the petition that I signed. I wrote this six-page manifesto about the history and why I thought it was a bad idea.

- TS: Well, if you can find it, it would be good to add as an addendum to the oral history.
- KH: Oh, yes, I meant to bring it today.
- TS: Well, we're a year down the road now from the announcement of the consolidation. Have your feelings changed any?
- KH: Not a whit. As a matter of fact, they've even gotten worse in that what I'm hearing from the campus is that this consolidation is very different from the other consolidations in that it is not like each school gives up its identity and becomes a new school. It's that we are being subsumed into another institution. Many people have left. I have no family members now after my parents died and after Larry died. I really don't have anybody to count on. This was my family, and it's no longer my family because so many people have left to go to other institutions or retired. The Math Department apparently is having a terrible time with your math department agreeing on curriculum for the very reason that our curriculum is very different.

I can remember Dr. [Edward] Vizzini, who was our dean of Arts and Sciences, saying that somebody said, "Calculus should be calculus should be calculus. It shouldn't be any different. If you take calculus over here, it's the same as if you take calculus over there." Well, one of the differences is the sophistication of your students. If the calculus that's taught at Georgia Tech is not the calculus that's taught at South Georgia College, for one thing you have a lot more students [at Georgia Tech] who have higher SAT scores who can absorb more quickly and who are able to maybe intuitively go beyond, whereas students at South Georgia who didn't have maybe as good a background, can't [do work at the same level]. Maybe they cover the same topics, but it's different.

One of the things I say at the very end is that the thing that made Southern Poly different was that every course in every curriculum was geared toward the STEM. We interacted with our engineering technology counterparts to see what they needed and how we could help them get their students to where they needed to be. You're not going to have that as part of Kennesaw because, first of all, geographically, even though we're only ten miles, it's a world away. It doesn't lend itself to people interacting with one another to be geographically separate. I also think it's sad for all the students and their families who sent their students here, so they would have a thirty-person class size and not an eighty-person class size. When I was down at Georgia Tech auditing those classes, I was in a cavernous thing of 250 [students]. You don't get the same personal attention that you do when it's . . .

TS: It's not possible.

KH: It's not possible, no.

TS: Well, they're still going to be teaching classes on this campus, aren't they?

KH: Yes.

TS: Hopefully they'll stay smaller.

KH: Well, what has happened even on this campus—have you heard about these clicking things where students . . .

TS: If somebody asks a question you answer it with your clicker? Is that what you're talking about?

KH: I first saw it at the University of Maryland when I went up there for a conference. They had an IBM classroom set up. What it was is if you don't understand the concept, you hit something on your desk, and the professor can see the green versus the red and see if there were a lot of people that didn't understand it. The red was bigger than the green and all that. I said, "I know where my students are going to have trouble. I know it from the thirty years of experience of teaching these topics." Just by looking at their faces, their body language, I can tell. Which is why I don't let them wear caps in the classroom. I always told them that after the first day—they didn't know it the first day, but after the first day—they had to take their caps off. I said, "I used to run track in high school, and I can really get back there fast. If I get your cap off your head before you get your cap off your head, then I get to keep it." It was so funny because the other kids would say, "Take your cap off! Take your cap off!" But if they have their caps on, and they're looking down, I can't see their eyes, and I can't see what's going on. Also, that's a perfect place for putting crib notes for a test.

TS: Oh, I hadn't even thought about that.

KH: You hadn't thought about that! Oh yes! And also it's a perfect disguise for looking sideways because you can't see where their eyes are going on a test. So they were talking about that. But one of the professors here said, "Well, I can't do that now because I've got over forty students in my class, and it's a long, narrow classroom. I can't see to the back."

- TS: So it's already gotten larger.
- KH: It's already gotten larger, yes. And it's money is what it is. One of our retired architecture professors said that about a month after the vote, he and a group of architects went down to speak with the chancellor to ask, "Why is this happening?" He said that the chancellor said that it's because we have to cut money, and we just don't have any place to cut it, so we have to merge. But [when] he came into [his position], his promise was that he was going to merge institutions. He said it's going to save us four or five million dollars. But he hasn't shown where it's going to save four or five million. I did read that Macon State College and another merged . . .
- TS: Yes, Middle Georgia College. [Editor's note: In fall 2014 the new institution, named Middle Georgia State College, had an enrollment of 7,927. The main campus was in Macon with branch campuses in Cochran and other middle Georgia communities].
- KH: When you have two small colleges that aren't too far apart, and one's got 500 students and one's got 1,000 students, that's not such a big deal. But where you have mission-specific institutions like Southern Tech and North Georgia and the Medical College of Georgia, which is now [Georgia Regents University], and you merge those with a different kind of institution . . . again, it's the dissolving factor. You take away the brand name.
- TS: People at Augusta State are still not happy about that consolidation.
- KH: Not only that but the Medical University is not either. Right after that I went down to my graduate school officemate's son's wedding. She lives in downtown Charleston, and they have the Medical University of South Carolina there. Well, everybody knows what the Medical University of South Carolina is. I spoke with my attorney who was the first athlete from Southern Tech back in the late 1960s to be picked up by a major league baseball team. When I was telling him that our teams had gone away, he said, "Do you mean there's no more athletics?" I said, "Not on the Southern Tech campus." In athletics, at least, when we were part of Georgia Tech, we had our own colors; we had our own mascot; our own teams; but those are all gone now. If one is cynical, one can think about the football team. Now, I have heard differing stories. One is that the students voted for the athletic fee for the football team; others that their representatives voted for the athletic fee.
- TS: Well, there was a student vote. It was an online vote [in November 2010], and it passed by a substantial margin [55.5 percent in favor of the fee]. But they were voting for a \$100 dollar a semester football fee to take effect two or three years down the road, which is to say that probably half the people who were voting knew that they weren't going to be at Kennesaw by the time the fee went into effect.
- KH: Well, you take 6,500 students [on the Marietta campus] who never voted on this, and you multiply it by \$100 dollars a semester . . .
- TS: And now they're going to have to pay it.

KH: Okay, one dollar a semester, that'd be \$6,500. Ten dollars would be \$65,000. A hundred would be \$650,000 times two semesters [a year]. You're at \$1.3 million plus the summer semester.

TS: No, summer doesn't count.

KH: Summer doesn't count? Okay, but still \$1.3 million is a lot of incentive to absorb 6,500 students. I'm thinking if one were cynical . . . . What I'm saying is that I've looked at all sorts of areas. I don't think it's good for our students. I have a friend whose husband works at Kennesaw, and he says the people up there can't understand why we don't want to be part of them because they're so wonderful. The chancellor even said in the *Marietta Daily Journal*—he was asked by the reporter, "Why did you choose to go with Kennesaw's name instead of Southern Polytechnic's?" He said, "Well, Kennesaw is a nationally recognized institution."

TS: I saw that.

KH: You saw that? And [the reporter] said, "Well, maybe Southern Polytechnic faculty and students think that they are nationally recognized." His quote was "I can assure you that is not the case." Now, we are part of a consortium of polytechnic schools, and we held the first two meetings here on [the Southern Tech] campus in 2011 and 2012. Then the next two were up at Wentworth Institute of Technology [Boston], and there's Rensselear Polytechnic Institute [Troy, New York], etc. Well, I don't think that's going to continue. The other thing I was reading this weekend [at the reunion of World War II veterans] in San Diego is the scholarships that were given to military colleges, including North Georgia College—they had recipients because of their military tradition. Well, is that continuing? I don't know.

TS: I'm not the one to answer that.

KH: But you see what I'm saying. It's like, okay, you've got turkey, and you've got mashed potatoes, and you've got green beans. Or you've got roast beef, and something, and something. Then you take the roast beef off the bone, and you put it into a pot with potatoes and carrots, and you end up with a stew—which is not bad—but it's not the original roast beef. Is that a good analogy?

TS: It is. I guess Southern Poly was part of Georgia Tech for thirty-two years, and then was independent for thirty-four years, and who knows what's going to happen in another thirty years.

KH: I would like to think we would become independent again, but at the cost, not just in money, but of a lot of the intrinsic things. When I taught over in England, I taught at the Polytechnic of East London for a term. One of the things that people over there mentioned all the time is that it's not the cost of something; it's the value. I said in my letter, "I thought that Southern Polytechnic gave wonderful value for the money that the state put in for us." Especially since we're a STEM school and have been all along, and this is the big thing now, getting people that are technologically educated so that know the difference between "scaler" and "scalar" and can understand the vocabulary. It is a very specific vocabulary with mathematics and physics that you don't get in a general education. And I come from a liberal arts background. Loyola's a liberal arts university

with twelve semester hours of theology and twelve semester hours of philosophy as requirements to graduate. One of the saddest days of my life is when they're going to take that sign down outside on I-75. I want to get a picture of the sign before it comes down.

TS: You ought to.

KH: When you have spent your entire life building something up and then see it wiped away, it's like a tsunami. You've had no say in it, and you've had no opportunity to present any arguments. I think "they" did it this way because they didn't want any arguments, and I think they knew that there would be valid arguments. Yes, it was—what do they call it—a preemptive strike. I think they did a preemptive strike. You know, when we asked Lisa about the possibility of merger at the retirees' luncheon and she said she couldn't imagine that they would . . .

TS: Well, she probably didn't imagine it at that time.

KH: No. I would be interested to read her interview.

TS: It's online. You can read it.

KH: Well, have I given you some feeling for . . .?

TS: Absolutely. This has been great.

KH: I hope I haven't bored you.

TS: No, this has been wonderful. Maybe this is a good place to stop.

KH: That would be fine. Thank you so much for the opportunity, Tom.

TS: Thank you.

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