An Interview with

FRAN CHESSLER

OH 499

Conducted by Thomas J. Misa

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By Telephone

Fran Chessler Interview

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Abstract

Fran Chessler attended the University of Michigan as a General Motors Scholar, majoring in mathematics and psychology and graduating in 1970. She went to work at Bell Labs Naperville, working on assembly-language programming to collect call data for 1ESS. She discusses the gender biases in the STA and MTS hiring grades. Promoted to MTS she did a master's at Northwestern University. She discusses affirmative action and the distinct culture of Bell Labs Indian Hill/Naperville. In part owing to connections from the Men and Women in the Work Environment workshops, she moved to the computer center department doing systems programming on IBM computers. She describes an effective management style by her supervisor, Dana Dunn. She moved into a department chief position at Western Electric's network system division, and compares affirmative action there to Bell Labs. In the mid-1980s she experienced unsettled times in AT&T computer systems, then returned to Bell Labs (all in Chicago) as a supervisor. In moving to the business side as senior product manager, she completed an executive MBA at Northwestern University; and retired from AT&T in 2001.

Misa: My name is Tom Misa. It's the 14th of January 2016, and I'm talking with Fran Chessler. This is part of a series of interviews we're doing with funding from the Sloan Foundation to try to better understand the experiences and careers of women who worked in the computing industry from the 1960s to the 1990s. Fran, could you take us back and say a bit about your childhood years in grade school or high school, were there any activities, or hobbies, or even classes at school that particularly attracted your attention and interest and that might have paved the way toward your later pursuit of a technical career?

Chessler: I can't really say there were. My hobbies were the typical feminine hobbies, although I did a lot more reading. And in school I was a jack of all trades. I was good in all curricula and I was a scholar. My math teacher in high school did give me extra attention because she realized I wasn't going to be adequately challenged by the normal class work. So I did have a good founding in math when I went off to college because my math teacher had worked with me extra.

Misa: And where was your high school, may I ask?

Chessler: It was in the Detroit suburbs, Berkley, Michigan.

Misa: When you were taking math classes, were there any suggestions that this was a field that women were welcome in or attentive to? Was your teacher a woman or a man?

Chessler: My teacher was a woman. The one that I'm remembering, at any rate, Mrs. Backus. I don't think she said anything about women versus men, she just recognized that I was the top of the class. And she actually encouraged me to sign up for some classes at a local college because calculus was not in our curriculum. Unfortunately, we were rather poor at the time. I had no transportation to get to the college, so she took me to the side and tried to introduce some concepts of calculus.

Misa: Wow, okay.

Chessler: She also did things like when she was having trouble teaching the class a new concept and I caught on quickly, she would have me teach it to the class because she said that sometimes people who have just learned it are better at recognizing what's difficult to understand so they can teach it better. So she would have me teaching the class and helping the other students.

Misa: That's not a normal experience either, but I'm sure that was a valuable one and I'm sure that was helpful to the class as well. Fran, when you were in that third or fourth year of high school, what kinds of options were you considering for education or training or what might come beyond high school?

Chessler: I always knew I wanted to go to college and how to afford it was very much a concern. I knew I would have to get scholarships. I knew to get scholarships I had to have extracurricular activities. I enjoyed extracurricular activities as much as I could. I knew I

would have to have good grades, but that was no challenge for me because I was always at the top of every class. So academic achievement was a piece of cake. And in fact, I can give you anecdotes. I had one teacher — I think it was junior high school, I can't remember for sure — who pulled me aside and said, 'Fran, for many people we talk about college and encourage them to go to college; for you, that's a given.' She said, 'The question is how far are you going to go in school beyond that? You should be preparing for graduate degrees.' So I had a lot of encouragement at school; not so much at home. At home the picture was I would get married and have children, but at school my teachers were very encouraging to me.

Misa: That sounds like a good network of support. Were there any other people in your wider community that also recognized that you might have some significant academic talent?

Chessler: Not really. I was the youngest of four children, and my older brother and sister would talk to my parents and say how I should be going to school. But other than that, it was completely within the school environment itself. My high school counselor was also another very active participant in that I was in Michigan, and at the time Michigan State was known as kind of a party school. University of Michigan was the top school in Michigan and I was a National Merit Scholar. Michigan State was trying to change its image so they actually sent a recruiter for me. They were trying to get top students to go to State instead of [University of] Michigan. I had a recruiter come and pick me up in Detroit and drive me to campus, and show me around and take me out for meals, etcetera.

Misa: So they were really keen on signing you up.

Chessler: Yes, I had lots of people trying to sign me up. I went to talk to my counselor because I really didn't want to go to State, I really wanted to go to Michigan. There's another anecdote, too. So she called the University of Michigan and said, 'Listen, Fran's been offered a full scholarship at State, she'd rather go to Michigan but you don't announce your scholarships until after she has to decide whether to accept State.' So Michigan said, 'Okay, she's a General Motors Scholar, don't worry, tell her we've got her covered.' So that's why I ended up at Michigan.

Misa: Okay. But that's also useful to have had that high school counselor be just a little bit pushy and to have University of Michigan be able to make an equivalent offer.

Chessler: I had really strong advocates.

Misa: Strong advocates, that's a really important thing. That's great.

Chessler: Yes. Also, I did not want to set limits on myself. I wanted to try to get into one of the Ivy League or Eastern schools. I didn't know diddly squat about those schools, so I said okay, I'll try for Radcliffe because everyone told me I was so smart. So I applied to Radcliffe. I could only apply to one because we didn't have the money for application fees. So I applied to Radcliffe and I was rejected there.

Misa: So you ended up attending the University of Michigan then?

Chessler: Yes, on a General Motors scholarship, definitely. I was in the honors college at Michigan.

Misa: When did you start the University of Michigan?

Chessler: 1966.

Misa: Can you say a little bit what it was like to go there and make the transition? The University of Michigan has had a strong reputation. In the Big Ten, it's one of the academic powerhouses.

Chessler: It was wonderful. As I said, we were very poor. I had come from a hard background and it was great to go to the school and meet so many other women who were at my level of scholastic achievement, and I developed strong friendships. It was a great time. I had a very hard time in high school socially. At Michigan I had a great time socially as well as academically.

Misa: Probably a place you felt right at home.

Chessler: Yes, absolutely.

Misa: What kinds of classes were you interested in taking at University of Michigan?

Chessler: That was always difficult for me because I had taken aptitude tests and I was good in everything. They basically said do whatever you want. So when I started school I had visions of being in English, writing. Then I decided that wasn't so much. Then I discovered psychology and I said wow, psych is really interesting. I had taken a lot of psych classes, and one of my psychology professors pulled me aside. It was the first man who really advocated for me, Professor Best, and he was the best. He pulled me aside and said, 'Okay, Fran, you should go to graduate school in psychology.' And he said, 'But the thing is, the best way for you to get into graduate school in psych is not to be a psych major but to be a math major.'

Misa: Math major, okay.

Chessler: He said there are many more people applying for psychology graduate school than they have openings and coming in with a math major — they're always looking for people who can do statistical analysis and be analytical. He said coming in with a math degree you'd have a leg up on every other applicant.

Misa: That's pretty savvy advice to have that path.

Chessler: Yes, so that started me on a math major. I actually double majored in math and psych.

Misa: Math and psych.

Chessler: With the intention that I would apply to psych grad school. And then in the math curriculum — I mean I took diffy-q [differential equations], and statistics, and stuff like that, and it just wasn't fun for me — but then at the time, Michigan did not have a computer science department when I started my math major so the computer science classes were offered out of the math department. So I took a computer science class and fell in love. Forget the psychology, I just started taking the computer science classes. Oh, this is actually an earlier question of yours, anything from my childhood time — I loved doing puzzles and something about the programming was like solving puzzles for me. I just loved it so that's what I started doing. I can't remember if I was a junior or a senior when Michigan formed its computer science department, but I was pretty far along in my studies. One of the requirements for a computer science major was physics. Well I had not had physics and I didn't want to squeeze it in. I had a small amount of time remaining in my curriculum so I said oh screw it, I'll stick with my math major. And that's what I did. So I did not get a computer science major, I got a math major. I had everything for a computer science degree minus the physics.

Misa: Minus physics, okay. Do you remember were there a number of women math majors at Michigan at the time?

Chessler: I don't think so. Vague memories. I think the women were the smaller number, were the minority in the classes. I remember in my math classes getting to know men, not women, but my memory is very fuzzy.

Misa: Yes.

Chessler: I did have some of my friends who were math-y, and that may be interesting because in the honors college, they had a special dorm set aside for the honors college at Michigan and I became friendly with a small group of women, like four or five of us. And in that five, one of us became a high school math teacher; one of us wanted to be a physicist, she ended up with a Ph.D. in operations research so she's very math-y; another one also had a lot of math classes but she went into English for her career. So there were like three or four of us out of the five who had strong math tendencies. So I don't know if that's just coincidence or if there's some like-associates-with-like factor going on there.

Misa: That's right. Sounds like it's one of those things that you're lucky in a couple of different regards: lucky to have a couple of supportive adults in high school, a savvy psych professor who sent you into math, and then this network of women. What does this mean? It means that you had resources that were supportive and that probably helped keep your enthusiasm strong.

Chessler: And there was the other personal part of that, too, which is my parents were saying get a teaching degree, that's a good degree for women.

Misa: Right.

Chessler: As I said, we had this poor situation, my father had gone broke. We were living in a wealthy neighborhood with no money and I observed in my family how this was really hard on my mother because the old school, my father did not want my mother to go to work. Here we were struggling for money and my mother was not allowed to get a job. I said to myself, there's no way I'm ever going to depend on anyone else for my financial security. So when I was in college, I did have an eye to what would be best for my financial security in the future, what would be best for a career that would give me a comfortable income.

Misa: What did you think about teaching?

Chessler: I wasn't interested at all in teaching.

Misa: Not interested, okay.

Chessler: I was a very shy young lady who could not imagine getting up in front of a roomful of people and speaking. So teaching to me seemed like anathema. [Laughs.] Later on in my career, I did [it]. Corporate careers, you have to learn to be more outgoing

and less shy, and as my confidence was built, there were occasions where I had to teach training classes. I found I was really good at it.

Misa: Yes, people grow into different kinds of activities, sometimes. But a teaching career wasn't something that you were at all interested in. Did you consider doing as your psych professor suggested, doing graduate school in psych? Or was the computer science and the math really something that took your imagination?

Chessler: Once I went into the computer science I was no longer interested in pursuing psychology.

Misa: Okay.

Chessler: I thought it was a better fit for me.

Misa: So you started at the University of Michigan in 1966 and was it something like after four years did you graduate?

Chessler: Yes, 1970.

Misa: What options for you time beyond college did you consider?

Chessler: I was going to get a job right away using campus recruiting, but it was not a good hiring year. There were very few opportunities, but through campus recruiting I had interviews with three corporations: IBM, Sears, and Bell Labs. And I had site visits — visits when the company invites you to come for interviews on-site. I had site visits set up at all three companies and IBM had a hiring freeze right after they set up my site visit, so they cancelled and IBM was out of the running. So it was Sears or Bell Labs and I went for both of those site visits, and definitely Bell Labs was the one that swayed me. And then I had to choose between New Jersey and Chicago area. My older sister was living in the Chicago area and I said I'll go with that.

Misa: Okay.

Chessler: You know I had good fortune, as I said, I had a full scholarship at Michigan for my undergraduate work. I could not envision — I'm basically a lazy person — I could not envision having to work to get myself through a graduate program. I wanted to just work, not have to work *and* study.

Misa: Right.

Chessler: Then at Bell Labs they offered — you may have heard about this already from the other interviews — they had a program called STA Courtship, Senior Technical Associate Courtship.

Misa: Could you go ahead and describe your experience with that?

Chessler: You come on at the Senior Technical Associate level, which is not the full engineer's level, not the Member of Technical Staff, a couple steps down. And after a year, if they determine that you have been successful, they send you to graduate school. So that's what I did. Now that's another interesting story. When I was doing the interviewing and I was still on campus, one of my male friends said to me, Fran, you should be getting a Member of Technical Staff title, you should not go in as Technical Associate. I was too naïve in the ways of corporate life to try to negotiate that; I just accepted what I was offered. But that is in fact how many women math majors were brought in as STA Courtship.

Misa: Okay. But somebody at the University of Michigan must have had some experience with Bell Labs because the difference from an outsiders' view of MTS versus STA would be hard to decode, but it sounds like your male friend had some experience.

Chessler: He knew some people who had gone to work at Bell Labs, or something, I'm not sure. He was just a more plugged-in person, in general.

Misa: Can you say a little bit about your early work? What was it like to come to work? This was the Naperville facility at Bell Labs, at Indian Hill?

Chessler: Yes. We were developing electronic switching systems. This was early in the life cycle of electronic switching. The number one ESS had just recently been put in service and I was given responsibility for — trying to figure out how to say this — the programs that collect the billing data on the electronic switching systems. So the programs that collect the information on what number called what number, how long was the call, etcetera. I was hired into that. That's another interesting anecdote. In this one group, where my first supervisor was the one who really wanted me after the interviews, and he put me on that program, gave me the responsibility for that program. But he was an up-and-comer and he was quickly moved off to another position and my new boss, after I was there only six months, turned out to be the guy who had designed these programs initially. So although I theoretically had that responsibility for that program, he always thought that he knew better than me. [Laughs.] So it was not a good situation, but I had a lot of support from people in my group and outside my group, so I managed to plug along.

Misa: About how large was your initial working group?

Chessler: The groups at Bell Labs were probably six to 10 people.

Misa: Would you characterize this early work as more designing or were you doing programming? What would be the character of your technical work?

Chessler: The programs were already written. The technical work would be fixing bugs, going in and figuring out what was wrong with the program and fixing it. It was assembly language programming, fixing bugs, and new features that had to be introduced, designing the new features that would be updates to the program. So fairly small amounts of programming, more figuring out how something — solving the puzzle — figuring out how this all worked, figuring out how to modify it to do this other thing.

Misa: Had you had any experience at Michigan with the assembly language programming?

Chessler: Yes.

Misa: You had, okay, so you were really well prepared.

Chessler: Matter of fact, I think that was the selling point. I had taken an assembly language programming course and I remember when the recruiter came on campus and was asking me whatever the standard interview questions were, I do remember telling him I love assembly language programming. And his eyes just like lit up.

Misa: [Laughing.] Okay.

Chessler: So I think that was definitely one selling point. And then when I went for the site interviews — that was another funny story. I'll tell you the funny stories, I don't care; I've told them so many times.

Misa: Okay, it would be fun to have them be part of the record here.

Chessler: As I said, my first supervisor was an up-and-coming [guy]. He was an executive a few years later. And the way it worked at Bell Labs was you were set up with interviews for four different departments, and at the end of the interviews they would say whether they wanted you or not, and you had to rank order which would be my first choice department, which would be my second choice, etcetera. So the departments would all really make you want them. And in fact, at the end of my interviews, I chose department, say A, and I ended up in department B.

Misa: Okay.

Chessler: Well, after I got there, one of the people in department A who had interviewed me, found me and said we don't understand what happened, did you pick our department? I said yes, I told you I was going to pick your department and I did, but I ended up in this other department. And he said we wanted you [and] we don't know why you didn't get into our department. Well, I solved the mystery. It was department B that had me for lunch that day, and this supervisor [who] became my supervisor was the head of the interview team. If you think about it, I was at the University of Michigan in the

1960s. He asked me this question about, oh, have you seen all those protests on campus? The sit-ins and all that stuff? What do you think about all that stuff?

Misa: Oh, okay.

Chessler: And he was laughing about it like it was silly. Well, I had been active in the protests so I said no job was worth it to me and I launched into him. [Laughs.] I just really went into a rant about all the reasons that these sit-ins were called for, and the causes we were fighting for.

Misa: Right.

Chessler: Well, that impressed him and he pulled all kinds of strings to have me in his group.

Misa: Oh, so that rant actually played into your benefit.

Chessler: It turned out he was the guy who liked to see people who had spunk.

Misa: Stand up for their own opinions.

Chessler: Yes, that's what he wanted.

Misa: So he was laughing but in a way, it was a kind of a funny test.

Chessler: He laughed, then he got a response he didn't expect and he liked the response.

Misa: Right. Okay.

Chessler: And that's how I ended up in that group.

Misa: That particular group, that supervisor.

Chessler: There were multiple groups in the department. He not only pulled me into the department I had not picked, he pulled me into his group in that department.

Misa: And how long did it take for you to find out that curious story. I mean, was it a couple weeks, or months afterwards?

Chessler: It was definitely within the first month or two. I can't remember. It was a mystery to me how I ended up in the department I hadn't selected. Basically, when you come in from a computer science degree and you go to multiple departments lecturing you on electronic switching as part of the interviews, you have no way of determining which department would be better than the others so it was kind of a flip of the coin for me anyway.

Misa: Well I guess that's a bit of a lesson also in being honest and sticking up for what you believe in. You were willing to suffer the negative consequences but in fact it turned out to be a [pause]

Chessler: Turned out to be positive.

Misa: Can you say anything, Fran, about what it was like at Bell Labs as an early hire being a woman? Was it your sense that it was a good place for a woman to be?

Chessler: When I first joined, I'd probably say yes. I would probably have said yes. And I'm thinking, was this a good place for a woman to be? I was naïve, as I said, about the corporate world, and I didn't pick up on the little things that made it less good for women than it could've been. I did not pick up on it immediately. I mean there were things that were clear to me; the STA versus the MTS thing that I talked about earlier. I ran into men who had very similar undergraduate work to me who were hired in as MTSes, so that struck me early on. And when my boss changed in six months, my new boss had some very old school notions about women and those became apparent to me rather quickly as well. Things like he would take the guys out to a strip club for entertainment or whatever — I'm not exaggerating, that was on business trips — he would do that. But with me, he would correct my language if I said 'yeah' instead of 'yes.' 'Women should speak properly, Fran.' There were things like that. And then I had the issues of having lack of equivalent responsibilities to men, but that was also [because] I was an STA and they were MTSes.

Misa: Right.

[Post Interview Note: After the interview was completed, I remembered more about the environment in those early days. These are some specific instances of difficulties I encountered as a female computer programmer in the male engineering environment:

- "Go to" experts who would not share system information with women, or would belittle or talk down to you when you persisted with questions.

- The engineer in charge of night shift "batch testing" lab sessions for small projects, who encouraged or required male engineers to come in to the lab and run their own tests, but who would run the women's tests himself rather than allowing us to come in. This deprived us of a valuable learning experience.

- There was inequality in assignments, but it was unclear whether that stemmed from a bias against women or non- engineers. Regardless of the cause, women's assignments were often of secondary importance or maintenance/support roles, and I was slotted into maintenance of one minor program.

- An executive who was angry about a customer complaint in my area of responsibility, but would not talk to me about it for fear of yelling or swearing in the presence of a woman. Fortunately, one of the men I worked with heard about it, and advised me to go see the executive about it and drop a few swear words to make him feel comfortable. (That worked great, and I was absolved of guilt.)]

Chessler: But over all, it still seemed like it was a good place for women. Back in the day, the only thing for women was teaching or nursing, so to have a company that would bring women in and offer them technical careers seemed good at the time.

Misa: Yes. How did the educational part, this STA Courtship, how did that work out for you?

Chessler: For me it worked out great. It turned out that the promotion decision was basically your director, that's the fourth level of management. Your director would decide whether you would be promoted. I happened to end up with a director who believed that the STAs on Courtship should definitely go to graduate school unless there was some problem, so most of us in his laboratory got promoted. There were other directors where the sentiment was the opposite; you had to be really good to get the promotion. It was assumed you wouldn't unless you had really shown, so some of my friends did not get that promotion.

Misa: So the STA Courtship was kind of conditional. It wasn't necessarily guaranteed that you would go to grad school.

Chessler: Right, it was essentially a one-year probationary type thing.

Misa: That's pretty strong isn't it? Compared with the men with the MTSes, my understanding, that it was an expectation that they would in fact not only do graduate

work, but then collect a graduate degree. So the sense about men and women were really not quite the same.

Chessler: There were some men STAs.

Misa: There were, okay.

Chessler: Very few, but there were some. It was not defined as a women versus men thing.

Misa: But just a level, right, where many women would be slotted into the STA role, but not exclusively women.

Chessler: Right. I think probably if you were in management with Bell Labs at the time, taking a bigger look at it, Bell Labs had scientists and engineers, and then there was this new thing called computer programming and you didn't have to be a scientist or an engineer to do programming. So how do we bring those people in and what level do we bring them in at? So it was decided if you don't have the scientific engineering credentials but you could still do this job, we would bring you on this STA Courtship program. Well it turned out that there was a great overlap between the people who could do the job of programming without the scientific and engineering credentials — and were women — but it wasn't defined as a woman's job or title.

Misa: This directly connects to this observation that I made before we started this recording. Computing at the time, was something that a lot of women preferentially went into computing as opposed to say, electrical engineering, or civil engineering, or one of the more male dominated engineering fields.

Chessler: Right.

Misa: So that new characteristic may have been a bit of a puzzle for Bell Labs management, but it sounds like that was attractive and a place where a lot of women found employment and careers.

Chessler: It was kind of a way for us to bridge into a technical career.

Misa: Yes.

Chessler: Yes. And the STA title was really, initially, STA was the standard progression route for people who came in with two-year degrees. Two-year degrees in technical fields would come in as Technical Associates and get promoted to Senior Technical Associates. But they did this kind of special purpose thing where you could come in as Senior Technical Associate, with the recognition that maybe you would quickly jump to the next level.

Misa: Would you like to say a little bit about your classroom experience with the graduate classes?

Chessler: I was always really good in school. [Laughs.] So my classroom experience was a piece of cake when I went to graduate school. It was interesting, there were two ways that Bell Labs sent people to graduate school. One was called One Year on Campus, where you would go to a school of your choice full time for a year and then come back to work, and the other was Local University Part Time. Well, STA Courtship people who got the promotion and the move to graduate school were not offered the One Year on Campus, you could only do it Local University Part Time. So my choices for schools in the Chicago area were the University of Chicago or Northwestern University. And University of Chicago had a more abstract research-y kind of program than Northwestern University did so I went to Northwestern. Many of my graduate level classes seemed to be repeats of what I had already studied in my undergraduate classes at Michigan so I was able to basically slide through much of the curriculum at Northwestern and concentrate on the few classes that were difficult. But again, it was subject matter that I really enjoyed.

Misa: It sounds like you had a really strong background then at the University of Michigan.

Chessler: Yes, the Michigan program, even though it was in its early stages, it was excellent.

Misa: Yes, they had actually some really notable faculty there, at a very high level.

Chessler: Right, they did.

Misa: You were taking classes then at Northwestern. Did you go up to Evanston from Naperville?

Chessler: Yes, two or three days a week.

Misa: Two or three days a week. Would that be in the afternoon? Would you get time off from work?

Chessler: Yes, and in fact, that was one thing that did not work well for me, career wise, in that my boss — the boss I told you about who had a very old fashioned attitude towards women — said when you're going to school, you can't carry a load at work and go to school at the same time so he gave me practically nothing to do at work. So I would go to my school two or three days a week and then I'd come back to work and had very little to do so I could do a lot of my homework at Bell Labs. That was great for my academic accomplishments — I mean I finished my master's degree with all As — I was the best in the class. But it was not so great for my career because he would go into performance reviews and he wouldn't have much to say about what I had accomplished.

Misa: Because he hadn't assigned you anything to accomplish.

Chessler: Correct.

Misa: So it was kind of a double edged sword there, in a way.

Chessler: Yes. I didn't get bad reviews, I just didn't get very good ones. And in fact, I had become friendly with another supervisor in our department, and I told him I didn't understand why I was getting such mediocre reviews. He said, 'Fran, we know you're pretty good, but your boss doesn't really stand up for you.'

Misa: Wow.

Chessler: Yes, life was not good for me in ESS. But I did not realize it initially. It took years for me to catch on.

Misa: How long were you taking classes at Northwestern, was that a couple years?

Chessler: Two years.

Misa: And how did your promotion situation work after you completed the two years and collected the master's degree?

Chessler: You were promoted to the Member of Technical Staff level when you started your graduate program.

Misa: At the start, not at the completion but at the start.

Chessler: Yes. I was already then at the next level when I was going to graduate school. So finishing graduate school I stayed at the same level, I just went back to work full time.

Misa: Okay.

Chessler: And as I said, my career was kind of stalled. It wasn't that I was doing badly, it's just that I wasn't doing great. I worked for that supervisor for a couple more years.

Misa: And that was still doing support for the ESS.

Chessler: Yes. But by that time, the women's movement had started and we started doing more networking, and I got to look at my career through other peoples' eyes and realized there were some biases that were affecting my progress.

Misa: Can you say a little bit about how the group of women at Bell Labs sort of found one another and how that network formed?

Chessler: Gosh, I don't remember how it formed. What I can give you is impressions I have.

Misa: Or how your experience was with the network — I'm not talking about who started it.

Chessler: There were a few things. One was as a result of that lawsuit that Lois wrote about in her book [Lois Herr, *Women, Power, and AT&T: Winning Rights in the Workplace* (Boston: Northeastern University Press, 2003)], they started to have affirmative action meetings. So we would go to the meetings and I would be asked for my opinions. They would present this data and I would be asked for my opinions, and when I would try to express my opinions there would be some pushback about the role of women, I remember that.

Misa: Can you just explain a little about the nature of the pushback? The whole point was to try to understand how to do affirmative action, but what would be the character of the pushback that you experienced?

Chessler: Our claim that there were things like it was more difficult for women to get jobs in technical fields. And the men would say no, no, no, no. [Laughs.] In some sense, I'm manufacturing this, I don't have direct memories, Tom, but there would be issues of you'd say how you were discriminated against at work, the men would deny that and would come up with other reasons that those things happened to you. At the affirmative

action meetings they had to present statistics, and present what's happening, and if you tried to defend the validity of the statistics or the programs that were being put into place, you would be pushed back on.

Misa: It sounds like the pushback was maybe in part personal but was it also kind of a bit of resistance to the affirmative action process, is that fair?

Chessler: Yes, that's fair to say.

Misa: Okay.

Chessler: Well, one thing I haven't talked about is that location of Bell Labs, the Naperville location, was very unusual. It had been started in 1966, started from scratch, and the way they brought it in, the way they built it was they brought in some transfer from New Jersey, but essentially they did a lot of hiring. So there were many of us who were around the same age, had finished college within a few years of each other, weren't married yet, didn't have children, had moved here from out of state. It was a big social group. And they had clubs. AT&T always encouraged a family atmosphere with socializing so we had clubs for bowling, and softball, and volleyball, and there was something called the Open Forum Club, which was a club to discuss topics of the day. I think it was that club that actually spawned the Working Women's Forum, which came out about the same time as all these affirmative action meetings and so on. So the Working Women's Forum was essentially to support women in the work environment.

The Working Women's Forum formed in the early 1970s and it was open to men and women. I joined that and that was also a great networking methodology, or opportunity I should say. But also because there was so much social interaction in this group of young people, I met — and there so few of us women relative to the numbers of men — I met women at parties and sporting events, softball, whatever, so the women were able to meet each other and form friendships across departments. So I met some very powerful, strong women — some of whom you've interviewed — and they opened my eyes, as well. So there was that, and then those women started the Women in the Work Environment Workshop and that was really a big deal for me, that workshop.

Misa: I talked with Mary Holt, who was one of the people who launched that and had some very interesting experiences. Yvonne Shepard was also involved with that, too.

Chessler: Mary has been my closest friend for many years.

Misa: It was really interesting to speak with her.

Chessler: In fact, I think we may have been roommates when she started on that. I can't remember the exact chronology; you know, apartment roommates. But yes, I went to that workshop and that was where I really made connections with the EEO people, other women, and really got into a substantive analysis of the difficulties I didn't realize I had been facing.

Misa: Your own personal career, you're speaking of.

Chessler: Yes.

[Break in interview]

Misa: Hi Fran, sorry we got cut off there.

Chessler: Yes, I lost you. I don't know where I was when you got cut off.

Misa: I've been writing notes down, you said that the Women in the Work Environment workshops were an important experience for you, that you made connections to the EEO people, and that that was a place where you first had a substantive analysis of the individual difficulties. You could see the reasons behind your individual difficulties. That's where we were.

Chessler: That's really what it was; substantive is a good word. But also, the thing that was even more than that was the connections with people who gave me the savvy coaching on how to engineer a move out of the electronic switching [ESS] environment into a department which was more supportive of women. The electronic switching environment, as I said, I'd had that pretty un-capable, incapable boss for several years and he had moved on but I had gotten a new boss who was brand new, didn't know how

to supervise at all. Also, it was an environment where engineering was really valued and I was just a programmer.

Misa: I see.

Chessler: And at the time, Bell Labs did not have job postings. Transfers were difficult to do, you had to be politically savvy to engineer a transfer. That workshop gave me connections with people who had the savvy and advised me on how to engineer a transfer so I was successful in doing that.

Misa: Where did you get a transfer to?

Chessler: The computer department, so it was a department that arranged the computing facilities for the whole location. They ran IBM mainframes, networking services, etcetera. They ran the computer center.

Misa: What kind of technical work did that involve for you?

Chessler: For me that was systems programming; that was learning how to administer IBM mainframe operating systems; and again, how to solve bugs in those systems in our locations. But it was also assessing what equipment we needed, getting it purchased, developing our own software that was needed in our environment. I can't remember what all was involved. But you know electronic switching was a big electronic system that you

then had to modify and maintain. This other department was IBM operating systems that you had to modify and maintain and it was more general purpose. We had IBM people located with us; we had the whole operational staff for the computer center within the same department. We would do things like move in the new mainframe, get it set up, get it tested, make sure it was working, make sure it was connected, etcetera.

Misa: And so that's basically the general mainframe that people across Bell Labs facility would be using.

Chessler: Correct. And part of that position was [that] there was an organization of the computer center department from each location, so you met people from the other locations — from Holmdel, Whippany, Denver, etcetera. It was much more supportive of women; engineering degrees were not required.

Misa: Not required.

Chessler: Yes.

Misa: Did you have a male supervisor or were there women moving into supervisory roles as well?

Chessler: When I first got there I had a male supervisor. I don't remember the order of the supervisors. Another woman in my group who was a real powerhouse, and you've interviewed her, probably, became my supervisor, Dana Dunn.

Misa: Yes, Dana.

Chessler: She became my supervisor and that was the first time I had someone who was really an excellent manager and I could see what management was all about.

Misa: Sounds like you had not a very satisfying experience back at the ESS working group.

Chessler: No, not at all. There's a corporate phenomenon in Bell Labs: you were recognized for your technical skills, and promoted for your technical skills, not for your management skills. So you had many managers who were very technical and really wished they were still down in the guts of the system, designing and developing but they were stuck in this management level and didn't really know how to manage.

Misa: So they may well have been top notch engineers and did really important technical work, but then got pushed up into managerial roles, that's a frustration.

Chessler: Yes. And Dana was the first time I encountered someone who really had both facets, so she was a tremendous support for me. Tremendous learning experience for me, and she was several years younger than I was.

Misa: Younger, okay, so there's an interesting phenomenon there.

Chessler: Very interesting when she became my supervisor I said oh, this is interesting someone so young is going to be my supervisor but I quickly realized why.

Misa: Do you have any particular anecdote or story about a way that Dana dealt effectively with a managerial situation, or challenge, or something that she did a really good job with?

Chessler: There would be things like when she gave an assignment. The only story that comes to my mind is when she'd give an assignment she would say here's what you could do minimally, but I think you would have the ability to do this much above and beyond, and that would really be excellent if you do these other things above and beyond the minimal assignment. So she would help you understand how to really go further with it.

Misa: And make that explicit, not make it a guessing game or something but give you a pathway then, and her expectations minimally, but then also if you really want to do a great job, this is really what that entails. That's a great insight.

Chessler: Yes. That's the one thing that struck me early on, and it stayed with me. But there were other things. Just the way she figured out how to assign things so people would work together, and team, and so she was just excellent. And she understood the communication upward, too. She was just terrific.

Misa: You mentioned this connection to the other computer centers at Holmdel, Whippany, and Denver. Did you have external contact with them? Did you have meetings where you'd have a chance to visit or interact with those colleagues outside of Naperville?

Chessler: When we had meetings, we would tend to go out to dinner or lunch, or whatever as a group. That's about it. You could talk to them on the phone; we would chat on the phone occasionally.

Misa: Was there any rotation of people between the different facilities? Sometimes there were rotations that people did — a temporary assignment for, it might be a year or some other length of time, at other facilities within the Bell Labs or even the AT&T network?

Chessler: I believe people would move around within the comp center; I can't remember too many details about that. My impression is — I don't remember any cases where it was done on purpose — my impression was that it was choices for career or personal reasons you'd want to move and you'd transfer to another comp center. I'm remembering

one guy who moved from Indian Hill to Denver just because he liked Denver more, which one can understand; Chicago versus Denver. I think that also there might have been a promotion from one New Jersey comp center to another comp center. There'd be things like that. I don't remember any formal program.

Misa: Okay. How did your career progress in the computer center? You said working under Dana Dunn was a very positive experience.

Chessler: Yes. And I did much [better]; my performance ratings went up in the computer center. It was also the computer center was supportive of having other strong women in the computer center. There was Dana, there was Yvonne, there was Karen Coates, there was someone I don't know if she was on your list: Mary Feay.

Misa: I talked with Mary in Chicago when I was there.

Chessler: She was my office mate when I first moved into the comp center.

Misa: Really.

Chessler: And for the most part, the men were more supportive as well, and the work was more equitably assigned. I can remember having some very enjoyable side assignments.

Misa: Would you like to recall any of those for the conversation here?

Chessler: I don't think the ones I'm thinking of are particularly technical, but they were things like, I'm remembering they wanted to put together [a video]. The computer center had a viewing room where you could walk into this little room and look through a fishbowl glass at all the big mainframes. They wanted to have a short video in the viewing room so they could bring visitors in there and show them what was in the computer center. So I had the responsibility of working with the video production team to put together the video, and the art department to build the display case that the video would be housed in.

There was a conversion of operating systems. We were converting from one, and I can't even remember the IBM systems anymore, but from one system to another, a major conversion. I was sent to the IBM training to then come back and teach it to the rest of the department. So that's what I [was] saying, I learned how to do training later on and it was very enjoyable. So there were things like that. And then there were other training opportunities. Since we were an operating system organization they sent me out to M.I.T. where the Sloan School had an operating system seminar. That was very enjoyable as well. So there were just opportunities like that that were kind of fun little desserts with the job.

Misa: The connection to the M.I.T. Sloan School, it wasn't a degree program but a short term training.

Chessler: No, it was a seminar for a few weeks, operating systems training. It was not a business degree. Although I think it was out of the Sloan Business School. I don't know why it was part of that. Maybe I'm mistaken; I'm not sure about that.

Misa: The Sloan School was early on in doing what I suppose you'd say kind of Executive MBA degrees, so it may be the case that AT&T or Bell Labs even had some specific connections, not to the electrical engineering or computer science department, but to the Sloan School. Fran, would you like to narrate your career forward?

Chessler: Okay, when I was in the computer department then the next move was — at the time, in the old AT&T, Bell Labs was the research and development arm and Western Electric was the manufacturing arm. And in fact, in Western Electric, they had an organization called network systems, and they did the development for some of the auxiliary programs for electronic switching, like installation programs or maintenance programs, things like that. And it was a different ladder, technically. It was not Member of Technical Staff positions, and so on. I knew I went on the promotable list at Bell Labs, but I had met people at network systems, including Beth Eddy, who might be another one of your interview candidates [pause]

Misa: Talked with her as well; it's great.

Chessler: Yes. Well Beth said, 'You could be a department chief at network systems.' Department chief being the management level kind of equivalent to supervisor at Bell

Labs, but half step down from that. So half step up from MTS but not all the way up to supervisor. And I said okay, and she set me up with some interviews, and I became a department chief at network systems.

Misa: That was actually moving then to Western Electric.

Chessler: Correct. Very different environment. My first assignment there was to manage a group of all men, most of whom had come up through the Technical Associate route — that kind of two-year school or installers getting promoted route up into programming. I think most of them did not have four-year degrees, I think, and they were like what? I'm going to have a woman supervisor?! [Laughs.] But in fact, my ESS experience was very relevant technically to what they were doing and it was a really good assignment for me. I did quite well. The men turned around and really got to like me as their boss. I had some really good breakthroughs there. So it was an environment in some ways less supportive, but in other ways I was able to thrive there better, less competitive.

Misa: And at that time, was Beth a colleague or was she a supervisor within the network systems? I don't recall.

Chessler: I think she might have already made it up to the next level, which was assistant manager. I'm not sure when exactly she became assistant manager. No, she was up at that level already so it was like a half step off, so Beth was the level that was a half-step above Bell Labs supervisor.

Misa: Was she your supervisor at network systems?

Chessler: No.

Misa: No, but in a different track, but just made the suggestion that Western Electric could be a good place.

Chessler: Yes, she made the suggestion to me and identified some openings. So my assistant manager was a young guy, not really my age bracket. [Laughs.] A forward thinker, so he was supportive of women. And the manager I replaced, the previous department chief, continued as my colleague, managing a different department in the same organization. He was also a super guy and mentored me quite a bit on what it's like to be a manager in network systems.

Misa: Was there mostly informal mentoring? Or at some time was there a more formalized system of mentoring?

Chessler: Through my career it was informal mentoring, but one of the things the women in Bell Labs set up was the formal mentoring program. But I was already beyond that, they set that up for new women coming in, so I was a mentor in that program but I was never a formal mentee of anyone. But my predecessor in my first management job, Tom, was just a super guy, and between him and my assistant manager and a couple of key

people in that first group who I'm still friendly with, I did well. It was a very supportive environment for me, even though there were practically no other women.

Misa: Your immediate environment makes a big difference of course, to your day-to-day work experience, and satisfaction, and performance reviews, and everything else. Would you care to make any observations about more general, either similarities between Western Electric and Bell Labs, or any differences that you might note? Not in your own immediate, personal work experience, but in the larger corporate culture, the larger environment.

Chessler: I'd say the differences were — I can think of a couple off hand. I don't know that these were the most important or the only ones, but they're just what popped into my brain. One was Bell Labs was an environment where technical excellence was *the* thing, and it was a very competitive environment; you had to be the best technically. And that would mean you had to shoot down other peoples' ideas. You wanted to be the top of the heap. As I mentioned before, your movement up the ladder was often predicated on your technical skills rather than your management skills. In network systems, the technical excellence was not as pre-eminent a consideration, management skills were also valued. That's my observation, at any rate. And that's one difference. I would also say the affirmative action movement in network systems had not had as much of an impact yet as it had in Bell Labs. There wasn't as much buy-in to it.

Misa: Less impact, less buy-in.

Chessler: Yes, that's my impression. Although that was happening. I moved in 1980 and it was coming, it was becoming more a thing. But in Western Electric network systems, it was more catching up with what Bell Labs was doing, as I recall it.

Misa: From my other interviews, it seems like affirmative action at Bell Labs was really the 1970s.

Chessler: Correct. That's when it really began, yes.

Misa: And so you're suggesting the practice shifted more to embrace affirmative action in network systems, at least that part of Western Electric, really in the 1980s.

Chessler: I think they had to have the meetings at the same time we did because it was an AT&T requirement but I don't think the discussions at the meetings, the efforts were as substantive. Afterwards, they weren't doing things — I don't think — like setting up mentoring programs, and workshops, etcetera, in the 1970s at Western Electric. But they still had to have the meetings, I believe. You have to qualify all this; my memory is rusty. [Laughs.]

Misa: Right, and remember what we said when we started, this is really not only your experience but it's also your memories. If we wanted to prove this or prove any of these dates, Fran, we'd actually go through the AT&T archives and poke through documents

there and pin down that it was 1978 versus 1979. And that's not really what we're trying to do today. It's really trying to understand your own experiences. That's fine.

Chessler: So anyway, I thrived. I was promoted to the assistant manager level that Beth was, in the computer systems organization. That's when AT&T started a computer business. That first Bell Labs supervisor of mine, the up-and-comer, became the head of the computer system organization and I got a job there. I had known Jo Anne Miller for years, she was my colleague there on that job. I was enjoying that job, doing well, but then the computer business in AT&T was dying and they had a massive shrinking so I had to take a demotion.

Misa: That was within the AT&T computer systems.

Chessler: Yes, that was like in 1986, I think. 1984, 1986; I think it had to be 1986. I'm vague on that. Mid-1980s.

Misa: Mid-1980s. It was a time of a lot of turmoil within the AT&T organization, of course, the breakup and reorganization, and a lot of moving pieces to say the least.

Chessler: Yes. That was a very difficult time for me. I had to take the demotion, it was very difficult, and my poor boss. My boss at the time was a lovely guy, very much into people, and he was in tears when he had to tell me that he had to demote me. But fortunately it was a demotion rather than a layoff, and I was offered an opportunity as

another assistant manager position in my old network systems organization. The position that they were going to give me sounded like a real impossible job to me, so instead what I did was I managed to get myself a Bell Labs supervisor position, so I was back in Bell Labs.

Misa: Fran, did you do all this more or less without leaving Chicago?

Chessler: Correct.

Misa: I mean you had contacts, and you said you were at IBM doing training, and that's not saying you never left Chicago but in terms of your career, you were able to stay within the Naperville facility.

Chessler: Yes, definitely. We had a big complex up there. I'm not there right now, but you're talking about, it had to be — I know the Indian Hill facility, the Bell Labs facility alone was like 11,000 people. So we're kind of tight on time here; let me try to give you a brief summary for the rest of what I did.

Misa: Okay.

Chessler: I became a Bell Labs supervisor and I did that for probably another several years. Bell Labs was not an environment I thrived in, and I had to take another demotion there in the downsizing in Bell Labs. So at that point, I went into the business side of

AT&T. At that time it wasn't AT&T anymore, it was Lucent, and realized I should

probably have been in business all along. [Laughs.] And I went back for another master's

degree; I got an Executive MBA at Northwestern. I did really well in that kind of a senior

product/business manager position. I was there until my retirement.

Misa: And your retirement was when?

Chessler: 2001 when we had a major retirement package.

Misa: 2001, okay.

Chessler: So I had worked for 31 years in the AT&T/Bell Labs/Lucent world.

Misa: Fran, I had a couple more reflective type questions. You already mentioned the

influence of the women's movement, and that was one of my questions, and my other one

[is] just any observations you might be able to offer about the changing environment, the

climate for women in the 1980s or 1990s. There was a lot of tumultuous environment that

the entire AT&T system was undergoing, that may well have trumped any other

influences but do you have any thoughts on why this odd reversal of women going into

the computing industry, doing computer science degrees, might have occurred?

Chessler: I don't know why the entry rate changed so much. I think the environment by

the 1980s and 1990s, the environment was more supportive than it was in the 1970s when

we got there. So that's, to me, that's not an explanation of why the number of women entering the field dropped so much. I don't think it's the environment that they're going into, from my perspective, the company that I was in. What I don't know is what the environment would've been in other fields that were maybe drawing the women away; what was more attractive elsewhere. I can't speak to that.

Misa: In the 1960s and 1970s, medicine for instance was really tough for a woman, and in the 1980s that changed. I think law schools, too. There were different options that women might've been exercising. It's still a question, you remember when we began, it's trying to understand what attracted women like yourself into computing and you mentioned puzzle solving, intellectual exercise, putting things together and solving problems, and fixing puzzles; those were all intellectual activities that you found really stimulating and interesting, and then got paid for it. That's great.

Chessler: Yes. And I think, looking back on my career, the shortcoming I had for the field, and why I was better off on the business side was yes, I was interested in the puzzle solving, that intellectual exercise, I was not so interested in the hardware. The physical nature didn't get to me. Making a machine work wasn't as attractive to me as figuring out how to make the pieces of this programming puzzle fit together. I wanted to be able to sit in a room and be able to solve puzzles, and not have to be somewhere and see something. So whether that's just a male versus female tendency, or just Fran Chessler, I don't know. That's what's attractive to me.

Misa: [Laughs.] Yes.

Chessler: My husband's an electrical engineer. We met in my first week at Bell Labs because he was in my group. And he would try to get me interested in that stuff, you know, he would buy me Healthkit electronics kits. I would do the stuff, try to learn some electrical engineering, but quite frankly, I just was not that interested in it.

Misa: Did you have any luck in helping him understand software?

Chessler: Oh he understands software too.

Misa: Oh, okay.

Chessler: He has just remained technical whereas my interests will switch more quickly, he's still very technical. It's interesting.

Misa: When you were in this senior product manager role, did you find that also involved some puzzle solving or was that a different line of work?

Chessler: Yes. I would still be able to do some programming. It was financial puzzles, of course, figuring out okay, what would our sales be? What would the costs be? Have we considered all these costs? So I liked that, but also I would do things like putting together presentations, or putting together studies I'd realize hey, we could use a better Excel

spreadsheet here so I'd go off and learn how to do Macro programming in Excel and set

up programmed Excel spreadsheets that our clerk could use to do some of the legwork for

us. It was things like that. But I had the application in mind, I could design the whole

system and it was all still very much on a computer. I didn't have to go anywhere and

turn screws or turn machines on, or anything. So I was still using my software skills

there.

Misa: Fran, this has been really an interesting conversation, thanks so much. Any other

topics that you'd like to include or observations you'd like to include in our interview?

Chessler: You know I can't really think of anything offhand. Should have made a list for

myself ahead of time.

Misa: We covered a lot of territory, I must say. And I'm not asking if there's something

else, but just in the case that there's something in your head.

Chessler: The only thing I can say is just a general comment overall. I went through

some difficult times, I went through some great times, I have no regrets at all about the

career. It gave me that financial security that I was looking for. It gave me a lot of

personal growth. As I said, I was a very naïve, young, shy, scared young girl who didn't

understand the corporate world at all. The corporate world was nothing in our family. We

had no experience with that. I learned so much about people, and managing people,

managing tasks, organizing. It gave me so much growth that I'm totally thankful for the choices I made.

Misa: Yes, you had a remarkable experience. Looking back, it must be satisfying.

Chessler: And the lasting friendships, too.

Misa: That's right. I understand I missed a get-together in August. It must have been a notable experience. I don't know whether you were there but it sounds like the Bell Labs network got together.

Chessler: Oh, yes, Mary and I were two of the three organizers of it.

Misa: Okay, so you know all about this.

Chessler: Mary's the primary source. I live like one block from Mary.

Misa: Oh really? [Laughs.] Okay.

Chessler: Like I say, we're best friends. We've been best friends for many, many years. So myself and there's one other lady who helped organize it, so yes, I was definitely there.

Misa: I hope this set of interviews have helped shed light on the work that you did and so many other women in AT&T, Bell Labs, and Western Electric system. I think it's really an interesting story and as I mentioned before, I think you really changed Bell Labs, you changed a tiny part of a huge corporation and that's something that's worth trying to understand how that happened. It was a lot of work and trying to figure out the strategies and what seemed to work, and how that all went, is something that's a valuable result from that set of interviews, so appreciate your contribution to that.

Chessler: Good things.

Misa: Thanks so much.

Chessler: Thank you, Tom, this was very enjoyable.