

An Interview with

JEAN M. BAKER

OH 482

Conducted by Thomas J. Misa

on

7 December 2015

By Telephone

Charles Babbage Institute
Center for the History of Information Technology
University of Minnesota, Minneapolis
Copyright, Charles Babbage Institute

Jean M. Baker Interview

7 December 2015

Oral History 482

Abstract

Jean Baker attended the University of Minnesota, majoring in electrical engineering with an emphasis on digital design. The summer of 1980 she worked for Honeywell (St. Louis Park, MN) on ring laser gyroscopes. Graduating in 1981 she took a job in the defense systems division of Sperry Rand, working in Eagan, Minnesota, to develop computers for the US Navy. Her technical work focused on gate arrays for input-output cards, including the UYK-43 computer. After working part-time while raising small children, she moved to a new job at LSI Logic (1995-2009) working on ASICs for IBM, HP, Lexmark, and Seagate then moving into management.

This material is based on work funded by the Alfred P. Sloan Foundation award B2014-07 "Tripling Women's Participation in Computing (1965-1985)."

Misa: My name is Tom Misa. It's the 7th of December 2015, and I'm talking this morning with Jean Baker. We're doing an interview with Jean as part of a Sloan Foundation project that's seeking to better understand the experiences of technical and professional women in the computing industry from the 1960s through the 1990s. Jean, tell me about your interests and background when you were in grade school or in high school. Were there any hobbies or activities or things that might've inclined you toward a technically oriented career?

Baker: I don't know if I'd call it a hobby or activity, but I always liked math. It was one of my favorite subjects throughout school so I always thought I wanted to do something with math when I went on to college. I guess in high school I was lucky enough to be able to take an accounting class, because that was my first thought, well, it's math, numbers. And I was bored to tears.

Misa: Bored. [Laughs.]

Baker: Okay, so what else can I do with math? I didn't really want to be a teacher, so the next logical step was I applied to the University of Minnesota's Institute of Technology. [I] looked at their course listings and degrees, and went okay, electrical engineering requires the most math prerequisites, so let's try that. And that's how I ended up in engineering.

Misa: Can I ask, besides accounting, what other kinds of math classes might you have had in high school?

Baker: I took through calculus in high school. Started with algebra and geometry in junior high, and took the most advanced classes that my high school offered at that time.

Misa: And what high school did you go to?

Baker: South St. Paul.

Misa: Were there math teachers there that were particularly supportive or interested in being really good teachers?

Baker: Yes, I think they were pretty good teachers. They made it interesting. I enjoyed those classes.

Misa: Were there any other colleges or universities that you were considering at the time besides the University of Minnesota?

Baker: Not really. I guess, you know, family finances at the time, I couldn't really afford to go out of state. At the time I think the U was the only school in state that offered an engineering degree so that was kind of my choice.

Misa: Can you give me a sense of what the university engineering program was like when you arrived on campus? Big classes, small classes, very many women?

Baker: Oh, the core classes were fairly large, the lecture classes. And then we'd have smaller group classes maybe once a week and lecture classes three times a week. I would say the lectures were often maybe over 100, and smaller groups were in the 20-30 range. Not many women. I'd say out of the 200 or so electrical engineering students in my class there were maybe five or six women.

Misa: Five or six, so that's actually pretty small.

Baker: Yes.

Misa: Did you form something of a peer group with the other five or six women?

Baker: A little bit. We all knew each other, of course, but I had a study group of maybe a half dozen guys. Sometimes there was one of the other women, or a couple of them that joined the study group, too. But it was not a tight bond between the women in my class, anyway.

Misa: Were there any of the people who were teaching, the professors or instructors in EE that stick out in your mind?

Baker: Oh, it's been a long time. [Laughs.] I guess nobody in particular that sticks out. There were some really good professors, I thought. It's been over 30 years, I can't remember all the names.

Misa: Sure. Was there an area of EE that you were particularly attracted to, power, or communications, or other emphasis?

Baker: I gravitated more towards the digital design, that's where my interests laid. I wasn't that interested in the analog, or the power classes. I took a little bit of sampling of everything, but I gravitated more towards the digital design.

Misa: Did you have any experience with computing when you were in high school or prior to coming to the university?

Baker: None.

Misa: So it was really the sampling, you said, of the EE classes at the U that inclined you to digital design.

Baker: Yes.

Misa: Did you do any computer programming at the time, or was it really more hardware oriented?

Baker: More hardware oriented. We had a few programming classes as part of our curriculum and I took those. That was back in the day with FORTRAN and the computer punch cards, and that was a long time ago. Programming was okay, but I stuck with the engineering degree and the hardware design.

Misa: Was there something about the digital design that captured your interest?

Baker: I can't really put my finger on it but I guess it was more math-like. It was ones and zeroes, and the logic, the Boolean algebra kind of spoke to me more. It was more in my wheelhouse and what I was good at.

Misa: Some students, when they were at the U, may have had experiences working in local industry. Was that an opportunity that you may have had?

Baker: Yes, between my junior and senior year I had an internship job at Honeywell, and that was really my first experience of okay, what did I get myself into? What does an engineer do? And that was a great experience.

Misa: And that was in the summer months?

Baker: Yes, summer of 1980.

Misa: And I assume that was Honeywell somewhere here in town?

Baker: Yes, St. Louis Park. Their building isn't there anymore. It was the aviation division. I interned with the group that was working on the ring laser gyro systems, going onto the Boeing 757s.

Misa: Honeywell spent a lot of time trying to get the laser gyros to work out. Sometimes when students go into industry for the first time they think oh, what I've been studying at the university fits in, in some ways, but there's something else that I really needed to learn by having the experience in industry. Anything like that happen for you?

Baker: Yes, a little bit. While I was working in a lab setting, they asked me to solder some things on a board. I said well, I've never used a soldering iron before. I didn't take any of the electronics classes, you know, like the vo-tech kind of classes they offered in high school because at that time I didn't know that that's what I was going to go into. So I learned that, and actually one of my professors prior to that had suggested that I should get a little electronics kit and build it. [Laughs.] Get a little practical experience along those lines. That's something that we didn't do in any of the coursework at the U, but it was good experience to have some of that hands-on.

Misa: I suppose at the U they were more interested in theory, and principles, and design principles and the niceties of soldering was something that they were leaving to somebody else.

Baker: Yes, and I think they assumed that a lot of the guys had tinkered with stuff on their own, or taken electronics courses in high school. That's just something I had never done.

Misa: So you came back to the university for your senior year.

Baker: Yes.

Misa: Do you remember what plans you may have been entertaining about what you might do after graduation?

Baker: Well, I knew I wanted to get a job somewhere here in town, and didn't have a set idea of this is exactly what I want to do. I thought the job at Honeywell was very interesting and they had told me to apply when I was done and they'd find a place for me there. I applied a couple of other places, too, and ended up at Sperry Univac. So, I guess I didn't have a really good definition of this is exactly what I want to do, but I ended up falling into something that was just perfect. [Laughs.]

Misa: In the 1980s, particularly, the Twin Cities would've been an excellent place for somebody doing digital design. The computer industry as you know was very strong at the time, with Honeywell, and Univac, and Control Data, and many other smaller firms as well. There was quite a computing hot spot here. Did you have any sense of that when

you were either at Honeywell or at the university that this was a good place to be, a good city to be in, doing digital design?

Baker: Yes, we kind of knew what the big three were. Honeywell, Sperry, Control Data, those were the ones that kind of stuck out that everybody was looking at and going to work for here in town. Yes, it was a great opportunity. It was a great time for that industry here. I ended up, like I said, at Sperry Univac, working in the defense systems division. And when I went to work there it was interesting. There was a group of guys that were much older, they had probably been there 15, 20 years at least — maybe more — [laughs] and then it seemed like there was a big age gap. There were people more my age who had been working for maybe two years out of college. But there had been a big gap in hiring and so there was an older group and then there was a bunch of us who were the same age. It was a really fun place to work.

Misa: Which one of the Sperry Univac facilities did you end up first working at? There were several in town.

Baker: In Eagan, Plant 8.

Misa: I know this is stretching your memory a little bit — but you said there were these older guys and I assume that the number of women there would be very small. You said people around your age had been hired in the last couple of years, were there more women in that latter cohort?

Baker: Not really. [Laughs.] I ended up working in a group that was developing the computers for the U.S. Navy. It was the UYK-43, or it'd be AN/UYK-43, and it was a huge project. Overall probably 100 engineers of various types working on it in one way or another, and there was one other woman in the group who I got to be really good friends with. At the time she was a technician, but she went back to school and got her electrical engineering degree while the project was going on. As I recall, we were really the only two women on the project in the development area.

Misa: Out of, you said, roughly 100 engineers.

Baker: Yes, I'm guessing. But you know, it was a huge room, lots of people.

Misa: Can you make any observations or comments about the working climate? Was it at all a stimulating experience, or what were your early memories of the Eagan plant?

Baker: It was fun. I will say, though, on my very first day of work, they were walking me in through the office where I'd be sitting and working, and one of the guys escorting me or maybe one of the guys they introduced me to on my way in, said, 'Oh, are you the new secretary?'

Misa: Oh dear.

Baker: But other than that, it was great. I felt very well accepted, treated as an equal. We had a lot of fun. There's a lot of camaraderie among the younger engineers, even some of the older guys in our group. We'd have Halloween parties or whatever, and everybody was included. It was a really fun atmosphere.

Misa: Can you say anything about how your supervisor dealt with maybe a new experience of having a woman in, I presume, his team?

Baker: I never felt like Gary treated me any differently than the guys. He gave me challenging assignments, and I never felt like I was treated special, or differently, or anything like that just because I was a woman. I was just part of the team.

Misa: Do you recall any of the early assignments that were particularly stimulating or interesting? You said you had a lot of fun; I assume there was also some enjoyment from the work itself, besides the camaraderie and the overall environment.

Baker: Yes, when I joined the team and we were in the midst of developing this computer for the Navy, and it was really . . .

Misa: The 43?

Baker: Yes, 43. And at that stage it was still a competition. The Navy had contracted both Sperry and IBM to develop this computer, and then they would award the

production contract to one of us. So we were still in the competition phase, if you will, and had to hit certain milestones. We had to demonstrate certain things to the Navy representatives that would come in and see how we were doing. It was very intense, but it was, I want to say an energizing stress. You know where everybody is pulling together as a team to get this done, to win the contract. Which we ultimately did. It was just — I don't know how to describe it — it was really neat to see everybody working together for the common goal to win this contract.

Misa: Well, and the fact that you won it, I'm sure added some sense that you really did something notable.

Baker: Yes.

Misa: I know this is again stretching back, but can you describe some of the sort of specific tasks you were working on? Was it really doing digital design for a component of the UYK-43?

Baker: Yes. The group I was in was focused on the I/O, input/output, area of the overall computer and there were certain I/O cards that we were each responsible for. For some of the components on those cards, we were designing gate arrays which were fairly new to the industry at that time. They were thousand-gate gate arrays. That's where most of my time was spent; working on the gate array development. So I got to do some of the digital design on those, and simulation and testing. When parts came in, we got to work

in the lab to bring things up and test them out. So it was nice to get full circle, not just the theoretical designing it on paper but when the parts came in actually working in the lab to get everything working.

Misa: Had you had some experience at the U with gate arrays or was that a new technical area for you?

Baker: That was a new technical area for me and like I say, kind of in its infancy, at that point. At that time the tools weren't all there to lay out the gate arrays, and route them, and do all of that design. All of that was done by hand and we had a woman who was actually an artist by background, who did the layout and routing of our gate arrays.

Misa: An artist by background.

Baker: What's that?

Misa: An artist, that's kind of interesting. You think of this as being very specific and not very artistic, but I suppose somebody with a spatial sense can put different components together and not just make it pleasing but also functional as well.

Baker: Right. She had a real knack for seeing how it all fit together to make it work. She just had a real knack for that, and it was a great fit for her. I'm sorry, I may be rambling a little bit, but this is a long time ago for me.

Misa: My final question about gate arrays is if it was a new area, how did you learn about it? Were there classes or training? Was it something that people were just simply learning and picking up as they went? You said it was a new area for the industry at the time.

Baker: Yes, I'm not sure how much of this had been done previously. Certainly I didn't work on the very first gate arrays, but it seemed like it was a fairly new leading edge thing at the time. I learned from the other guys in the group that had been working on it the previous year, and got me up to speed. Within a short time they had me working on my own designs and going from there. Eventually I got to the point where I was supervising the new grads within a couple of years, and coordinating the development of the next set of gate arrays that we were doing.

Misa: These were graduates also with electrical engineering backgrounds?

Baker: Yes.

Misa: And do you recall what colleges or universities that Sperry was hiring from?

Baker: I think one was from North Dakota, and I don't remember if it was North Dakota State or [University of] North Dakota. Then I think one came out of the military, had military background. He had an electrical engineering degree, but I don't remember

where he went to college. I don't recall some of the others. I think one was maybe from the University [of Minnesota].

Misa: Once you were part of the team that won the contract for the UYK-43, did your work change or did you become part of that team after the contract was in hand?

Baker: I was still part of that team. Once we got the contract, then there was still more development to do to clean up the final product that would go to manufacturing. I'm sure there were some changes the Navy wanted, so we were still in the development stage at the time when I was there. It was just the next phase of it.

Misa: Did people have the sense that this was going to be a really big project? I mean you had some sense because it was a big development team to put the competition together.

Baker: Oh yes. There was a sense that this was a really substantial project. It was a big deal. This computer was going onboard all of the ships and subs in the Navy. I was looking online a little bit last night and saw that they're still onboard some of the ships at this point, and it's 30-some years later.

Misa: Well you have to have some sense of satisfaction that 30 years later, one of your designs is still out there doing its work.

Baker: Yes.

Misa: In the middle of the 1980s, there were some corporate reorganizations at Sperry, this is the Unisys and Burroughs merger or takeover, it's described in different ways. Did that affect you in any notable way?

Baker: Yes, I was there. When I first was hired in, it was Sperry Univac, and then they dropped the Univac name and so then it was Sperry. And I was there when Burroughs bought it and it became Unisys. So things changed some, but not substantially for our group. We still had the same management team. It didn't really change the personnel or the atmosphere in our office too much.

Misa: Didn't change it too much.

Baker: Yes. I guess there was some; it was interesting because they took down all the Sperry logos, you know the Sperry stars? And changed all of that. And it's like yes, I guess everybody had their loyalty to that and it was kind of like, little grumbling and doing all of that and changing the name and stuff. But it wasn't as drastic as some other mergers I've been through.

Misa: Okay. Well maybe we'll have a chance to discuss that as well. So basically it sounds like your work continued pretty consistently then with this UYK-43 project well into the 1980s, correct?

Baker: Yes. And I should probably note here too that during this time it was full-time from 1981-85, but then I became pregnant and took a leave of absence for a while when my first child was born. I had asked and they were very gracious about extending the leave of absence because I wanted more than just the standard, I guess it was six weeks or whatever at that time. So I asked for a year off, and they granted it to me. And then I got a call saying, 'Ah, but we need you to help with this, can you do something part-time for a little while?' So I negotiated with them and did a little design work, actually working at home part-time, and determined that wasn't really working for me because I just wasn't able to get enough time to do the work while the baby was napping. And so I'd basically wait for my husband to get home and say here, you take him, and go close the door and do this for a while. And so when that little project was done I said you know, I want to go back to my leave of absence for a while and they let me do that. I think after about 10 months I was ready to come back and they allowed me to come back part-time. So I worked three days a week for the next two years. And when I was pregnant with my daughter, because I was part-time, I didn't have the benefit to take a leave of absence, anymore, so at that point I just left.

Misa: Oh, okay. So that was around 1998, if I'm doing the math.

Baker: 1988.

Misa: Oh, 1988.

Baker: Yes, and then I was home for maybe a year and I started getting phone calls saying would you entertain coming back on a contract basis for a while? So I ended up coming back for about nine months, sometime in 1989-90 on a contract basis. Again it was part-time, and I think it was about three days a week on average and it was for a specific project. [I] did that for a little bit, and then when that project was done, I quit again and I was home for five years with my kids while they were little.

Misa: Was it common at the time, either in Sperry or as Unisys for people to have part-time work in, at least for the time, relatively flexible working arrangements around having kids?

Baker: Not that I'm aware of. Again, there weren't that many women and I would think it would be mostly women who would want to do the part-time kind of arrangements. But they were very accommodating, very flexible with me and made it work so that I could still work some but not have the full-time commitment, which I really appreciated.

Misa: Did you return to — I'm not sure it would've still been Unisys at the time — but you said you were home five years when your children were young.

Baker: Yes. Well by that time they were both in grade school all day, and I was starting to kick around the idea that I should go back to work. Started looking a little bit but not real seriously. Some friends knew I was starting to think about it again and out of the blue

I got a phone call one day from LSI Logic, saying, 'Hey, would you be interested in coming in and interviewing for a position.' Turned out a couple of my friends had given her my name because they knew she was looking to hire and it worked out that I went in there and interviewed for that job. And that's where I worked for the next 13 years so it just kind of fell in my lap, if you will. But it was a perfect job. It was a company that I was aware of because we had done some work with them when I was at Sperry, Unisys at that point. So I went to work for LSI Logic then in 1995.

Misa: And you said for 13 years beyond that.

Baker: Yes. I quit in 2009, so it's a little over 13 years.

Misa: Was that work also involved with digital design, doing something similar to the EE engineering and digital work that you'd been doing at Sperry?

Baker: Yes, very similar. LSI Logic was a company that primarily did integrated circuits, so think gate arrays times 1,000, big integrated circuit development. That's what I did. I started out as a design engineer or customer engineer. Basically we supported customer's designs. They would come to LSI and say we want to have you manufacture or have you build this chip for us. And we would work with those customers to turn their designs into a physical chip that was testable and manufacture it for them. But it was a lot of fun working with all the different customers on their projects, and their designs, and making them happen.

Misa: So it was a high degree of customization. Was that something like application specific integrated circuits, is that it?

Baker: Yes, exactly.

Misa: That's it, okay.

Baker: Yes, ASICs.

Misa: Did LSI take a leading role in that?

Baker: Yes, I think they were one of the early companies. There were probably a few others, but in the early 1980s I think is when LSI got started and they did a lot of leading edge designs during the time I was there. Again, I was very fortunate to fall into a very fun working environment. It was a lot of people around the same age. Really, really talented group of engineers. Again sometimes very high levels of stress but in a way, it was still that energizing stress where everybody's pushing each other as a team to get things done and meet the challenge, and meet the deadlines.

Misa: You said you were working to make these specific designs for customers. Do you remember any of the customers or any particular products that were especially rewarding or challenging?

Baker: Initially, my customer was mostly IBM, both out of Rochester and then eventually I worked with a couple of IBM groups out of New York. I did designs for HP out of Vancouver, Washington, and then also Singapore. That was a challenge with the time difference. We did some designs for Lexmark, and also for Seagate. At least those are the ones that I was involved in. And then there were some other smaller companies, too, but those were my main customers.

Misa: Well between Rochester, New York, Vancouver, home Twin Cities, and Singapore that's a big swath of the world. Did you do much travel during those years or was it mostly interactions through phones, or e-mail, or other electronic means?

Baker: It was some traveling, probably initial trips to help book the design, to win that business with those customers. And then a few trips during the course of the design, you know, for support and design reviews. It wasn't like every week; the majority of the work was done via phone conference calls, e-mails, and so on. But there were some face-to-face meetings so I got a few trips to Singapore out of it. My only customer that was actually here in town was Seagate.

Misa: Would you like to make any comments about how the corporate culture might've been either similar or different between LSI Logic and your earlier work with Sperry?

Baker: I think corporate culture at LSI was a little bit more open. It was a smaller company than Sperry. Sperry had many divisions and so on back then. So when I was working on the UYK-43 project at Sperry that's really all I knew about what was going on in the company, is just within that group and our focus. We didn't get a lot of corporate overview of this is what's going on at Sperry or Unisys in general; the big picture. And at LSI it was I think much more open. Wilf Corrigan, the CEO at LSI at the time, would come out to the different satellite offices periodically and give talks. [He would] talk about the corporation as a whole, and what was going on in all of the different pieces, you know, of what was happening. And we had a lot more interaction with other field offices around the country that were doing the same type of thing that we were doing here in the Twin Cities, so we got to know people from Boston, and Colorado, and Texas, and wherever.

Misa: Other divisions of LSI, then.

Baker: Yes.

Misa: Can you give me a sense of either the number or the environment for women working at LSI? You said at Sperry it was just very, very few.

Baker: Yes, it was very, very few at Sperry. At LSI there were a few more. [I] actually, worked for a woman; the woman who called me to hire me. My entire time at LSI I worked for Claudia. There was another woman — or a couple of them — that were in

sales but they had engineering backgrounds; they were very technical. There were a few other women engineers around. It was a much higher percentage than it was at Sperry.

Misa: Do you have any suggestions about why the difference might be the case? Lots of things like smaller company and different times maybe, but did anything strike you at the time that LSI was a different environment for women working? Sounds like you had more women colleagues.

Baker: Yes, and I guess I can't say why. I don't know if they targeted that more in their hiring, or if just the type of work they were doing was more attractive to women rather than working for a defense contractor. It's hard to say.

Misa: I think I've interviewed at least half a dozen women that were working for Univac or Unisys, and I was surprised, frankly, how many of them were lone women, that is to say that in a work group of 6 or 12 or more they were the only woman. A couple of them suggested that the military division of Univac had fewer women than the civilian or commercial division. Do you think that's a fair observation?

Baker: Yes, I think that's true. After I had left Unisys, I ended up actually on the golf league that was the Unisys golf league, but it was coming out of their commercial division. And so I met a lot of women that were in programming and various technical roles at Unisys in the commercial division, and there were only a couple on there that had any connection to the defense system side.

Misa: So when we're looking for Unisys women or Univac women, the commercial divisions would've been a place. When you were describing the customers for LSI Logic, it seemed to me pretty straightforward computing companies — IBM, HP, Lexmark, Seagate — that may have had military business but that's not the cluster of defense contractors. It sounds like that was more civilian or commercial market oriented, is that correct?

Baker: Yes, it was more commercial oriented, and it's interesting, I was thinking of all the customer engineers I worked with over the years, and it never occurred to me until now that I don't think I ever worked with any women on the customer side, or very peripherally, maybe, but nobody that stands out. It was all guys.

Misa: The customer engineers would've been the representatives of the customers?

Baker: Yes, the people that I knew or worked with at IBM, or HP, or Lexmark, Seagate.

Misa: You did quite a lot of work, you said, with IBM?

Baker: Yes.

Misa: It's a puzzle to me because some people have said that IBM was something of a model company in terms of hiring women nationally, and I wonder was that also the case

that the customer representatives, at least that you dealt with from IBM, mostly were all men.

Baker: Yes, I don't recall working with any women from IBM. They may have had some women on their teams, they just weren't involved in the customer interface in the meetings that I was at. But I wasn't aware of any.

Misa: A comment for years was that sales was an area that was soundly dominated by men. Although service engineers and field engineers, there were large numbers of women in IBM that were involved with that. You said that with LSI there were a couple of technical women who were in sales?

Baker: Yes. And one of them was the one who did all of the IBM accounts, and she was a go-getter. She brought in all of those IBM designs.

Misa: This is a question I don't expect you to have an exact answer to, but it's a puzzle that a lot of people are trying to wrestle with. In the history of things, the 1980s, looking across the United States, was a peak high water mark for women in the computing industry and also gaining computing degrees. And something happened in the 1980s and 1990s, that for some reason made technical work and computing work less attractive for women, so the proportions have dropped dramatically since the mid-1980s. Do you have any thoughts or observations about something you might have seen that would bear on that puzzle?

Baker: No, not really, and I guess I had lost touch with how many women were going through and getting degrees. After I went through I guess I always assumed it would increase, but the fact that it dropped off, I have no idea why.

Misa: In engineering, not computer science but in engineering, *per se* the proportion of women was historically quite low and it's just creeping up very, very, very slowly. With computing in the 1970s and 1980s, in the mid-1980s there's this peak; there's an unusual openness to women, or women were finding the computing professions to be particularly attractive. Well Jean, this has been a really interesting conversation. Are there any other questions that I might've asked, or topics, or aspects of your career that you'd like to include a bit more about?

Baker: I guess as I said at LSI, I went from being a design engineer, to a manager, to a senior manager, so I did get the promotions and the progression there. I don't know if there's anything else that you want to cover.

Misa: In your managerial roles you must have been involved in hiring people.

Baker: Yes.

Misa: Were there any characteristics of the engineering or computer people that you were hiring that you looked out for? Things that you would say, 'Oh that really is going to be an outstanding candidate,' that we should go after him or her?

Baker: I guess we looked at the skill level was the first thing, did they have the skills that we were looking for, for the job. But then after that, say you had three or four people that were all equal technically, you looked at the personalities and how would they fit in with the group because what we did required a lot of teamwork and people working well together. And I felt like we always built a really good, cohesive team. That's part of what would differentiate a candidate, too.

Misa: Was there anything that you would look for to suggest that the person would do well in this kind of teamwork? So much of academic work, of course, you're taking exams by yourself, etcetera, but I appreciate this is quite different. Anything that you would look for particularly?

Baker: To help with the teamwork?

Misa: Yes.

Baker: Well, something that we found that engineering programs were doing that was different than when I was going to school is a lot of times they'd have senior projects often done as a team. So we'd probe into that area with the new grads that we were

interviewing, interested in just how that went, you know, what made a good team for them. If they ran into working with difficult people how did they handle it? Questions around that to try to glean some information around how would they fit in with the team that we had. It was different with people that we were hiring that had industry experience, different kinds of questions, but again getting at how do you work with other people?

Misa: Did you notice any difference in the ability for men or women that you were considering as effective team members?

Baker: Honestly, I don't recall interviewing as many women as men, there just weren't the candidates out there. But I don't recall any specific differences in how they would work with the team.

Misa: Well Jean, thanks so much for your time this morning. I learned a lot and I hope I didn't probe too closely with gate arrays, or whatever, it's just interesting to find out the character of your work. Sounds like you actually had quite an enjoyable, and varied, and notable career.

Baker: Thank you. Yes, I felt very fortunate in the projects that I was involved in, and the work I did, and still have a lot of good friends from the years that I worked at Sperry and LSI.

Misa: Yes. Well great, thank you so much.