SWE GRASSROOTS ORAL HISTORY PROJECT

Naomi McAfee Interview

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This oral history interview was recorded April 17, 2010 as part of the SWE Grassroots Oral History Project during the SWE Baltimore/Washington Section's Diamond Anniversary Panel and Reception at George Mason University in Fairfax, Virginia. A copy of the audio recording of the interview has been deposited at the Walter P. Reuther Library and Archives of Labor and Urban Affairs, Wayne State University. The interview may be used for research and educational purposes only.

Naomi McAfee received a bachelor's degree in physics from Western Kentucky University in 1956 and joined Westinghouse Defense and Electronic Systems Center as a mathematician in reliability engineering. She went on to work on a variety of airborne missile control and radar systems and communication satellites. She became the first woman to hold a supervisory engineer position at the company and was responsible for the reliability, maintainability, and safety engineering activities for all Defense and Space Center Programs, and headed the group responsible for developing the television camera system used on Skylab and other U.S. space programs. McAfee is a Fellow of the Society of Women Engineers and served as its national president from 1972 to 1974. She was the first woman elected to office in the American Society for Quality Control, served as the president of the Federation of Organizations for Professional Women from 1978 to 1979, served on the board of the Engineers Joint Council from 1975 to 1979, and was involved in IEEE. McAfee has been on the advisory council of engineering schools at Princeton University, Clarkson College of Technology, and Pennsylvania State University.

In her 2010 SWE Grassroots Oral History Project interview, McAfee explains how she became involved in SWE and eventually served as national president; challenges the Society faced in the 1970s; and fond memories from her time in SWE leadership.

- July 2016

SUE PARSONS: Good afternoon. Please introduce yourself and tell us what years you were national SWE [Society of Women Engineers] president.

NAOMI McAFEE: Hi, I'm Naomi McAfee. I was national SWE president 1972 through 1974.

SP: When did you first join SWE, and what made you join?

NM: Well, I joined SWE in 1961, and you're right about what made me join SWE. We had another woman engineer who belonged to SWE and saw no reason why I shouldn't belong to SWE. So it didn't matter where I was, I got this story about how great SWE was, why I should join, and so forth. So after a while, in desperation, I gave up and joined.

SP: (laughs) What was your first leadership role in SWE?

NM: Well, I guess my first leadership role was vice president of the Baltimore-Washington Section in 1963.

SP: What other leadership roles have you held in Baltimore-Washington and the other—and SWE nationally?

NM: Well, in Baltimore-Washington I held every office except treasurer, and nationally I held every office except treasurer. (laughs) [01:00]

SP: (laughs) So I see treasurer wasn't in your plans.

NM: Treasurer wasn't in my plan, right.

SP: So when did you first think about being president of national SWE, and what motivated you to try that?

NM: Well, I was on the Council of Section Reps [Representatives] in—at the International Conference [of Women Engineers and Scientists] in ’64 and then ’65. And somebody named Alice Martin told me she thought that I was presidential material, which at that point then I thought was kind of ridiculous. But Alice stayed with it and so did Margaret Fox, who was a Baltimore-Washington member that encouraged me to go on and stay with it. And so that’s how it happened.

SP: What did you do to prepare to become president?

NM: There is nothing that you can do to prepare to become president of SWE. It doesn’t matter what leadership roles you’ve had before. When you get into that office it’s unlike any that you will ever be in. [02:00]

SP: When you were president of SWE what was your position in your corporation?

NM: I was a section manager at Westinghouse Electric Corp. And I was very fortunate. I had the complete backing of my immediate manager and completely up through the chain of command for the two years that I was there.

SP: So when you say section manager, about how many people would have worked for you at that time?

NM: Thirty-five.

SP: Thirty-five. And did you receive any support from your employer?

NM: My expenses were completely underwritten. They gave me the time off that I needed to do the job, and in fact, they encouraged it. So, unlike a lot of other people who have been in this role, I didn't have to worry about where is the funding going to come from, from the trips that I had to take, and where was the time going to be made for whatever was needed to do the job. [03:00]

SP: So what experiences would have prepared you to become SWE president?

NM: What would have prepared me to become SWE president? I honestly don't know. (laughs)

SP: (laughs) Okay, so what were some of the big national issues, and how did those affect women in engineering and SWE?

NM: Well, in the early seventies with the rolling down of the Vietnam conflict there was a thing where a lot of the industries were retracting. We were in a recession. Men were leaving the engineering profession because there were no jobs. As a result, young men were not going into college and majoring in engineering. With that, the college professors, having unfilled classrooms, went out and recruited the only source that was open or the only other pool, which were women. [04:00] And that's when the huge influx of women into engineering came. At the point when I went into became president, I think we had about 1 percent of the population in engineering schools, as women. When I went out of office, we had 10 percent, so.

SP: Quite a growth.

NM: Quite a growth.

SP: So there was a big growth in the student membership and the number of student sections. How many student sections did you charter during your two years as president?

NM: I think I chartered seventeen, so. And I remember that—oh, and the other thing was that I presented every one of those charters, and they were from all over the country. And that tells you how much my employer backed what I was doing.

SP: So when you were SWE president what sort of leadership or management issues did you encounter? [05:00]

NM: Well, the leadership issues you always face when you have a volunteer organization. You have those people who work very, very hard. There are others who try very, very hard, and then there are some who say, “Well gee, I will do this,” and nothing happens. So the question is, how can you gracefully get those people who are doing nothing to retire? And that is difficult.

SP: So did you have any specific motivational approaches to people?

NM: Not really. I guess one of the things I did was, for those people who were doing a good job was to let them do their job and not get in their way. For the others it was sort of like, “Why don’t you look and see what they’re doing, and go do that.”

SP: So what was going on in the engineering community more broadly when you were SWE president, and around that time?

NM: Well, of course, at that point in time, as I say, all the engineering societies were having troubles. [06:00] Men were dropping out, women were coming in, but that was a four-year gap that you had to fill. And as a result, the engineering profession was being basically looked down on from the outside world because accountants could get jobs, lawyers could get jobs, doctors always had jobs. But engineers were sort of like—there was just nothing there. So until that recession ended it was very difficult. So the thing was to try to continue to motivate young people that it was a good field, it was a place where you really should be, and there was a lot of reward in it.

SP: And how did SWE help to fill that gap or provide that motivation?

NM: Well, for the student sections that were coming along SWE provided a lot of the help because they had counselors from the professional communities that were on campus. [07:00] They also had, hopefully, in each one of those universities at least one professor, hopefully female, that would work with them. So the students began to see what was happening in the outside world, began to do some interacting, and understand that there are other things to do besides just study.

SP: Were there other big national issues going on when you were president, and what sort of impact did the national issues have on SWE?

NM: Well, one of the big national issues at that point in time was the Equal Rights Amendment, which Congress passed out in 1972 to the states to ratify. And there was a big division within SWE as to whether we should endorse or stay away from it. And in fact, that division was almost big enough it almost split the Society because of the differing viewpoints. Some people were very concerned that if we endorsed it, we would lose our tax-exempt status. Well, endorsing had nothing to do with that. [08:00] Others were saying, "Well gee, we're not going to join those militants out there that are marching in the streets and doing all these strange things," when that wasn't the case at all. All we were doing was stating that yes, indeed, this is a good thing, women should have equal rights, and we're for it. And in 1973, I think it was, that we actually passed a proclamation or a motion, endorsing it. And that's all it did, was endorse it, said, "Yep, we're for it." And that was it.

SP: So in 1973, the states were still voting whether they would ratify the amendment or not. Did SWE's endorsement make any difference on a national scale?

NM: Doubtful. In the first place, SWE wasn't active in that arena. That was really would have been considered lobbying, which we were not doing. [09:00] We probably could have to a certain extent, but the fear was so great that nobody was willing to do that. Now, they did pass a vote. They had a vote that said that, "Gee, we will not hold any future conventions in unratified states." That created another huge firestorm and—well, firestorm is probably not a good word, but created another huge debate. Especially since there were at least one

convention and possibly two that had already been approved for unratified states. So they made an exception for those two.

SP: So the year that you were president, where was the convention?

NM: Well, one was in Boston. Well, I came into office in Boston, then we went to San Diego—no, San Francisco. And I think I went out of office in Dallas, so. [10:00]

SP: So, to come to a more personal level of your memory of your years as president, what were the most memorable things to you about your years as president of the Society?

NM: Well, you said most memorable, so I don't have to restrict it to one?

SP: No, you can—as many as you want.

NM: Well, one of the most memorable was in 1973 we held the first, quote, "Henniker Conference." That was a conference that we co-sponsored with the Engineers Joint Council. And it was called—I'm going to cheat (looks at notes)—"Career Guidance for Women in Engineering."

Recording Technician: Go ahead and start the thought over again.

NM: Okay, okay. Well, one of the most memorable events was holding the Henniker Conference. Now the Henniker Conference was known as the Henniker Conference because that's where it was held, in Henniker, New Hampshire. We co-sponsored that with the Engineers Joint Council. And the title was "Career Guidance for Women Entering Engineering." [11:00] And Nancy Fitzroy, who was

the Achievement Award recipient that year, chaired that conference. And she went out and she got something like fifty female role models who came in and told their story to something like fifty students who attended. So it was a great way to communicate with the kids that were coming along, let them know that hey, these old fogies were really real, and go back and talk about what was really happening in the community after college.

SP: And what year was that?

NM: Nineteen seventy-three.

SP: Nineteen seventy-three. What other memorable things?

NM: Well, we chartered the first—and I'm going to have to be careful of how I say this, so let me try this. (laughs) We chartered the first black school during that year. It was North Carolina A&T University. [12:00]

SP: Historically black—

Off Camera: HBSC—?

SP: H—historically black colleges and universities.

Off Camera: Yeah.

SP: HBCU is the—

Off Camera: HBCU.

NM: Yeah. Okay, let me go—so.

SP: All right, start over again.

NM: Okay. Well, another event was that we chartered our first historically black university as a student section that year. That was North Carolina A&T. And I remember one of the students saying that they weren't sure who was the proudest: me or them. Because I thought it was a historic event. We hadn't made—SWE had never made any outreach to those colleges before, and it was nice that all of a sudden we were now moving across that line.

SP: That sounds like a favorite memory. Do you have other favorite memories of—

NM: Well, you know—

SP: —your years as president?

NM: There were many of them. It's hard to pick out which would have been the best, but those were two of the most significant. [13:00]

SP: What was your least favorite part about being the president? (laughs)

NM: Fighting the day-to-day battle just to keep the Society solvent. Getting up every morning and wondering what we had to do to get the money in to keep us from going out of business. Trying to set things up so that it would become financially responsible. The fiscal aspects of the job were really the toughest.

SP: So what was your experience at your national convention? You had two as president, having been president for two years.

NM: Well the conventions were always—after all the work was over it was a lot of fun. And at least the banquet at the end typically was a highlight, and you could recount all the strange things that had gone wrong that nobody knew about while all of this stuff was happening. [14:00] It was a great time for camaraderie, getting to know new people, seeing new people come into the Society, and becoming active in the Society.

SP: What would your message be to future SWE leaders based on your years as president and since then?

NM: Well, SWE is a great place for any young woman to join. And it would be one of those things where if you're looking for ways to network, communicate, learn to have speaking skills, feel comfortable in front of an audience, it's a great place to be. But probably the most important thing is—particularly for graduates, people who are in the industrial environment—is the networking. If something comes up you can pick up the phone and call one of your friends and say, "Gee, I've got this going on. You have any suggestions about how I might work it better, or what might be an improvement, or something that I should do?" [15:00]

SP: So, after you were president for two years, how did you stay involved with SWE?

NM: Well, for the next two years it was one of those things. We had another controversial issue, and that was male membership in SWE. Now, it always struck me as very strange that you had a group of people who were working and screaming about being equal that refused equal treatment to somebody else. Now, we wanted to be equal in membership in all the professional societies. We

wanted to have a student section on every campus. And yet we excluded males from our own organization. And there was a tremendous debate about allowing men to join SWE. And that happened in 1975, the year I went out of office. I think Carolyn Phillips was very happy that she had me on the side to do that. [16:00] And we did that and the Society didn't go under. There wasn't a drove of men or a herd of men to come join the Society. So all our fears about them coming in and taking over never existed.

Another thing that we did during that same time period was students. Students had become a huge portion of the Society, and proportionally were about 2-to-1 or maybe even 3-to-1 greater than the professional members. And yet they had no voice in any running of the Council of the Society. So, we did things like we voted to have student representation on the executive committee. Well no, I guess it was student representation on the Council of Section Reps. It never happened before. This is another place where, "Oh, they will come in. They will take over. They will change everything." [17:00] Didn't happen. They came in very orderly, they brought some very good ideas, it was great to see them actually join and give very professional advice to, quote, "the old fogies."

SP: (laughs) How has SWE changed since you were president?

NM: Well, hopefully SWE has changed to become financially responsible and solvent. (laughs) It's grown. When I was president—went out of office as president, we had not quite two thousand members. What's the membership today? Twenty thousand? Twenty-one thousand?

SP: Over twenty thousand.

NM: Yeah. And so there has to be a complete change in how you figure to govern it, how you organize for it, and how you run it. The thing about it was when I was president, I knew all the section presidents—which we called chairs, chairmen at that point in time—personally. [18:00] I would dare say that the president today doesn't have that luxury.

SP: Do you have any other thoughts you'd like to share on your years as SWE president? Your value to SWE? The value of SWE to you?

NM: Well, it's hard to put a value on that. During my years as president I met a lot of people. I made a lot of tremendously good contacts that helped me out professionally once I went out of office. The breadth of the people that are in it, the number of diverse professions, you know, all of the disciplines. My field was reliability engineering and was always seeing strange problems, but whenever that happened there was always somebody in SWE who was in those fields that I could call and they could give me advice. [19:00] So it was one of the best things that ever happened.

SP: I think on that note I will say thank you for sharing your thoughts and your time.

NM: Okay.

[Break in recording]

SP: So Naomi, you were president of the Society for two years. The current term now is one year. You have a president-elect year, and then a year that you're actually the president of the Society. What do you think the major differences are between the two approaches? Strengths and weaknesses?

NM: Well actually, I think the ideal term for a president would be eighteen months. I think it takes you six months to get in and figure out what's going on, then you get six months to get things started and going, and then you should have six months to wind down and hand it off. I would think today, with all the stuff that's happening with the Society and as big as it is, a one-year president really has a huge bunch on her plate and it would be very, very difficult to handle.

END OF INTERVIEW