SWE GRASSROOTS ORAL HISTORY PROJECT

Walter McFall Interview

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This oral history interview was recorded November 4, 2010 at the Society of Women Engineers National Conference in Orlando, Florida as part of the SWE Grassroots Oral History Project. 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.

Walter McFall studied chemical engineering at the Illinois Institute of Technology in Chicago, completing his bachelor's degree after serving the in military and hiring into Argonne National Laboratory. McFall's early career at Argonne involved research in aqueous and liquid metal corrosion of nuclear reactor structural materials. In the 1970s he transitioned to a career in technical recruiting at Argonne, retiring as the laboratory's principle outreach recruiting coordinator in 2000. An active member of the Society of Women Engineers, McFall served on the Society's industrial roundtable, executive director selection committee, and 12 years on its editorial board. He received SWE's Rodney D. Chipp Award in 1997 in recognition of his service to SWE and advocacy for women in engineering. He is an active member of AIChE, NOBCChE, AAAS, ASEE, WEPAN and NAMEPA. He is also a subscriber and volunteer of the Chicago Symphony Orchestra, and an usher at St. Clement Parish in Chicago.

In his 2010 SWE Grassroots Oral History Project interview, McFall described how his mother's work as a laboratory technician led him to pursue a career in chemical engineering; his service in the U.S. Army and how he came to work at Argonne National Laboratory; how his mother's influence and a few incidents involving female staff members at Argonne led him to take an interest in advocacy for women in engineering; his support for SWE as a recruiter for Argonne; and his contributions to SWE at the national level, including successfully working to move SWE's annual conference to the fall to better align with employer recruiting schedules, and serving on the executive director selection committee in 2001.

TROY ELLER: Okay. Today is November 4, 2010. This is an interview with Walter McFall. He is retired from the Argonne National Laboratory and president of WDM Associates. He received the SWE Rodney Chipp Memorial Award in 1997 and is a member of the SWE editorial board. This interview is being conducted as part of the Society of Women Engineers Grassroots Oral History Project. We are at the SWE conference in Orlando, Florida. The interviewer is Troy Eller. Thank you for joining me today.

WALTER McFALL: It is my pleasure.

TE: To begin with, can you tell me where you were born and lived growing up?

WM: Chicago.

TE: Okay.

WM: Illinois.

TE: Okay. And can you tell me what your parents did?

WM: My dad met my mom where they worked at the same place, and it was a company that, of course, no longer exists. But it was the Chicago Towel Company. [01:00] He was the floor mechanic for keeping the machines—the mangles and presses and everything—running. And my mom happened to be one of the women that operated the manglers, which is a way of pressing large garments, sheets and so forth. And I guess the company catered to the hotel industry primarily. That is where and how they met, and—.

TE: Okay. Could you tell me what school subjects you were interested in? How did you start to get into engineering or gain that interest for engineering? [02:00]

WM: Actually, it started out with my interest in chemistry. Let me preface that by saying I lost my dad when I was very young. I was seven years old, and I was the oldest of four children. And my mom had retired after she married my dad and became a housewife. And those days, families lived together. You might have found three generations in a home. And that was the context under which I was raised.

When I lost my dad my mother had to go back out to work. It was during the early part of the World War II effort, and so women took a lot of the jobs that men were doing had they not gone off to fight the war. [03:00] She worked for a production company that was producing some kind of electrical devices for the military, for one thing. She lost that job at the latter part of World War II, just as it was ending, of course, and that was normal, I guess, for those days. Women lost all the jobs that they had gotten.

And someone knew of her plight in raising four children, and I was going to school, to grammar school, right across the street from the University of Chicago campus. [04:00] And in those days—there are a lot of reasons why I couldn't always cross the street to go over to the campus. But I did, and I would go by and see her at least twice a week before I'd then turn around and go back and go home to wait for her to come home from work. And she had not finished high

school, and that was not uncommon in those days, either. But she had a knack for being able to do things. She was good at anything she tackled. [05:00]

The job she took at the University of Chicago was with a small, quiet group at the university, which eventually evolved into Argonne National Laboratory. It was part of the project, which was initially created by Enrico Fermi and the group that initiated the first nuclear chain reaction. Her job at the time was as a dishwasher in a chemistry lab. She excelled at that, wanted to know what the dishes she was cleaning and why. Well, these are typical laboratory vessels. [06:00] And it turns out that at that time they were quietly doing some work in bioassay of people that had worked and were working with nuclear reactors. And, of course, in those early days they didn't quite know what all the hazards were and so it was not uncommon for people to be exposed to radiation, taking it in the body. And, at any rate, someone gave her the opportunity to work in the chemical lab. And the rest is sort of history.

Because she did not have a high school education—she did eventually finish her GED—but she became an excellent laboratory technician. [07:00] And her work was in the field of chemistry and her colleagues would like to come by our place. And so there was a number of people that came through were chemists, biologists, and everything from undergraduate degrees in chemistry to several PhDs. And she was sort of a fun person to be around. So that was my exposure and as I was growing up she sort of became my role model for things that I thought I wanted to do.

When my dad died, like I said, I was seven years old and I began working at the neighborhood grocery store, helping out, stocking shelves, and delivering groceries. [08:00] And as the sister right under me would tell me, “Gee, I thought you were going to grow up and own a grocery store.” But no, I was watching Mom and the kind of people she was associating with, and I kept telling myself, “Gee, these are fun people. They do important things." Chemistry was important. And so I sort of had it in the back of my head that, “Gee, I’m going to try to tackle chemistry.” So I went through grammar school, high school, with an interest in going into chemistry.

When I finished high school and started university things changed up a little bit. [09:00] I read an article about a great need for chemical engineers, and I wanted to know what was the difference between a chemist and a chemical engineer. Needless to say that, halfway through, I suddenly decided that engineering might be the way to go with the chemistry. So I went on and switched over, moved over to Illinois Institute of Technology and started to pursue a degree in chemical engineering. Because we were not the richest people in town (laughs) I had to drop out one semester, and I was working and going to school on a part-time basis. [10:00] And so I took a little longer than normal, but ran out of money at one point in time so I had to drop out for a semester.

And unfortunately, in those days, one had to test out to be deferred from going into the military. Because that was the time of the—must have been the Korean War because I lost some high school buddies in that endeavor. At any rate, so

the minute I dropped out for one semester the school automatically put my name in the pot to be drafted. I mean, it was like that. (snaps fingers) [00:11:00] I had taken one class that fall semester and came home and found a notice indicating that I had to report to the military in two weeks. I was disheartened. I didn't think—you know, I went in and talked to a counselor, explained to the counselor why I may have needed to drop out. I get the impression that they tossed my name in the pot ahead of someone else who they allowed, in fact, to stay out a semester and then went on. But, that's another story, and I—that's not an excuse.

At any rate, the military did, however, take advantage of the training that I had had up to that point. [00:12:00] And I took some tests. They looked at my college grades. And when they were selecting my second specific training, as I was preparing to make those choices—and they did let us make choices but, of course, they would always put a gun in your hand no matter what. (laughs) Someone walked in the room, called my name, and asked me to put a certain number down. Which I didn't understand it, but I was sort of given an order. "Put this down as number three." And I had three choices to make. So I put that down as the third number, had no idea what it meant. [13:00] Selected the chemical corps, which I realized later would have been a very bad move. (laughs) And then, I guess, I looked at—the only other thing I knew, the Army trains people to go out and fight, so an infantryman was—.

And lo and behold, I was selected to go to a special school in a barracks just outside of St. Louis, Missouri, which was the—. They did two things at this base. They made eyeglasses, one of two places in the world in which the United States military service—this is a joint service—prepared eyeglasses for the servicemen. And they also ran a small school there. And this school was to prepare people to go out in the field and be able to put together a military hospital. [14:00] And I don't know whether you remember the television program that was developed around the—

TE: *M.A.S.H.* (laughs)

WM: —yes, okay. Well, the person that would have put that hospital together—that was the training that I received. Interestingly enough, as I was going through the cycle—which, by the way, I was informed was a longer cycle than normal, particularly for someone that was drafted into the service. Instead of eight weeks, I ended up doing twelve. It's either twelve or fourteen weeks. I don't recall why. [15:00]

During the course of that time, we lost a math instructor who was teaching—it was high school math, essentially. But they placed someone else on the base in charge of the math program and he was horrible. And one day I asked permission to take the chalk out of his hand. I'm a buck private. (laughs) And so I went up, took the chalk out of his hand, continued to try to explain series and multiples of ten. Ten to the one is ten. You know, ten squared is a hundred, and so forth. This guy just—anyway. [00:16:00] So while I was straightening things

out—and people were saying, "Oh, now I understand"—this person who was a warrant officer, I think, went and got the CO [commanding officer] of the base and came back, and they stood in the doorway while I finished the class. And as I finished the class, the CO stepped in and said, “You will be the math instructor for the rest of this cycle.” And I’m saying, "But I’m a student!" (laughs) So anyway, that was sort of a boost, but I sort of fell in love with what I was doing.

I came out the top unassigned individual and was sent down to Fort Bragg, North Carolina, where the assignment was to be part of a team that installed medical equipment in the first vertical rise hospital that the military had built since World War II. [17:00] Because they always spread them out, because in most of the twentieth century wars they were always afraid of getting bombed. So they’d spread the hospital out over a wide area. Anyway, when I finished up, I did not accept their offers to go and become an officer. [18:00] I decided I was going to go home and see if I could find a job similar to the one that I had in the military, and that’s when I found out that the people that did that in hospitals were principally people that were sent out from the manufacturers of the equipment, not on staff necessarily.

And so then I said, "Well, maybe I can get a job as a chem technician or something," because I’d had training into my third year. As it turns out, the Argonne National Laboratory had moved out to a site outside of Chicago, and they bought up some thirty-five hundred acres in which they placed the site and began to build the original nuclear reactors, and they were designated as a

national laboratory. [19:00] They, however, were noted as a national laboratory, the first national laboratory. Actually, there were—two others existed, but they were secret laboratories: Los Alamos and the one in Oak Ridge, Tennessee. I had put together a resume, or filled out an application, I guess. And my mother took it in and said, “You’ve got to hire my son.” Well, it was placed in the right hands and someone says, "You know, we can use this guy if—invite him in and see where we go with him." [20:00] And so they invited me in and I answered a few simple questions, I thought, and I said, “Gee, it sounds like I can get to do some things like I’d done in the military.”

Suffice it to say that I was hired, began to work with the group doing aqueous corrosion of nuclear reactor structural materials. Little did I know how important the work I was doing. (laughs) But anyway, they also offered reimbursement for continued education. So I was able, over a period of time, to finally complete my degree. In fact, they accelerated that, giving me a little-known scholarship that had to do with the training of people for—but they gave it to me as I was probably ten or twelve hours out of finishing up my degree. (laughs) [21:00] But it did allow me to go to campus on a full-time basis for a semester to finish up.

And my counselor said, “Okay, I’ve got some things I want you to do, and this will be on a special basis. I’ve got two students that we need to get through chemical engineering and you’re going to be their mentor.” One was a lawyer who was coming back, getting a degree in chemical engineering so that he could go out and be a—what is it, to put together the legal aspects of engineering and to—you

know, signed up for those. [22:00] The other was a young fellow that was on an Air Force scholarship, and he wasn't doing so well. It turns out he was a party guy. Typical undergraduate person under a scholarship who—all he wanted to do was go out and party. So there was many a weekend where I was in fact sitting in his fraternity house doing his homework, in which he passed the course—or we passed the course. (laughs) [00:23:00] It was a repeat for me, but we passed the course, he and I together, and he was able to graduate. So I really excelled that last semester. (laughs) I came up with close to a 4.0, but when you look at my cumulative, I was just a so-so engineering student.

Anyway, I came back to the lab and there were a few things that happened. There were some budget crunches and they had to lay off a few people. [24:00] I was asked if I could train two or three technicians that they were bringing in at the time. And I was the only person of color in the division. A little sad story that would really pertain to SWE and why I suddenly took on an affinity for women engineers: there was one PhD female engineer and one person of color in the division, a three hundred-something person division at the time. And after a few years they had a big reduction in force, and the reduction in force involved a good number of PhD engineers that were being laid off. [25:00] And as these people received their notices a couple of them came in. One blessed me out and indicated I should have got fired so he could take my job, and I'm scratching my head. I'm saying, "Hey, you know, my job isn't as important as the job that you have."

Anyway, to go on, then I began to hear some strange things. One young fellow came in and said, “I’ve got a wife and two children, and there’s this damn woman whose husband works downtown at the university as a professor, and she should be fired and I should get her job.” And I quietly asked him, "Why is that? Her program is not affected by the layoffs." [26:00] He said, “Because she’s a woman, and I’m a man with—." And I’m saying, "Gee, and I thought as a young man of color I was affected by some discrimination—." And there were some things I won’t go into which tended to indicate in a number of cases that was the case. Except that I probably had mentors who were looking over me and realized that I had gotten blamed for a piece of equipment, for instance, getting wrecked, which I did not have anything to do with, but—. And eventually, they did find out who did it. [27:00]

But the anomaly here was that I had several people come in and indicate that they were going to the division office, and I was trying to figure out why they kept coming to me. And, I finally realized and understood that for some reason they were coming to me because I could—they felt I could empathize with them. And it puzzled me. I thought—the lab had a chance to interact with the woman engineer, and I thought she was a real bright person. I had met her husband and so forth. So I just thought this was strange. And then I suddenly realized that this woman was actually being discriminated against, and these men thought that she should be fired because she was a woman and they were a male that had a family at home. [28:00] She didn’t have a right to have the job if they were going

to be—. And that sort of totally confused the naïve person you're talking to, at least naïve at that point in time. So I quietly had some additional conversations with these people, and I suggested that they go back and I sent them directly to the person, the associate division director, and asked them to sit down and have the same kind of conversation with them that they had had with me. But I was puzzled as to why they came to me. I didn't have anything to do with it. I was trying to run a little lab and get some experiments done. [00:29:00]

And, anyway, that particular instance I finally had a realization that women were discriminated against just like people of color in those days. And I was puzzled as to why. I didn't understand it. Like I said, I was naïve in that respect. And so I attempted to do a few things and actually felt enough of an affinity to try to protect this woman, but I didn't have any clout, you know. And, as it turns out, management also had some inkling of what was going on. [00:30:00] And I remember several years later the associate division director that I had directed them to—we were at a holiday party, I think, and we had gone out for lunch and so forth as a division—and leaned over, he was at a table next to me and said, "By the way, thanks for your help a few years back." And I said, "My help in what?" He says, "One day, you're going to end up in human resources." And I looked at him and I laughed. And I said, "No, I enjoy the science, the engineering." And he says, "You've got a knack with people." And I said, "Okay, if you say so."

My group leader of the group that I worked for had also had a sit down with me, and he said, “The laboratory is going to become a training ground. They’re going to be training postdocs and going to have undergraduate students doing internships and so forth." [31:00] And he said, “Don’t go anywhere. Hang around. I have a feeling you’re going to be involved.” Well, little did I know. I was asked a year or two later to get involved in a project in which they were going to try to fund a program to get more people of color and women to come into the sciences and engineering, particularly engineering and material science at the time. And so I was—my division director temporarily assigned me as his advocate to interface with human resources—or personnel, as it was called in those days—and work out a program. [00:32:00] The minute we put the program together, lined up a couple of universities, the funding was cut. (laughs) Typical government bad timing. So things were sort of dropped. And they eventually started to put a program together, but then they created an entirely new area that was going to be involved with this.

In the meantime my group had cuts and I was called into the director’s—associate division director’s office—and informed that they were trying to make some decisions, and I was going to be released from the applied work that I was doing. [33:00] And I sat there like a deer in the headlights. My eyes opened, saying, “But I don’t want to lose this job.” And then I was asked, "Have you been helping out—." They had brought in an Englishman from England to do some work in solid state diffusion, and they were handling solid light metals, sodium,

lithium, and so forth. And at the time I had set up some experiments in which we were trying to do some corrosion work and liquid metals. [34:00] And so I had designed and built some equipment to get these sorts of things done, and I had helped this person—who lives not far from here last time I communicated with him. In fact, I tried to go visit him while I'm down for the conference. Anyway, John Mundy. I had helped him out. He had come into the lab, didn't really know anyone, didn't have any close colleagues, and had asked for some advice. He was told that my group was the group that handled a lot of liquid metals. And it turns out that he had appreciated the help. [00:35:00]

And he had lost his assistant and when he was asked, "Well, you're going to lose this man. Is there anyone at the laboratory that you think you would like—or that you've come in contact with that you think you could work with to assist you?" And he says, "Oh, that's an easy one, but they're not going to let him go." And as it turned out I was that person. I agreed to go over and work with him to keep a job. And it turned out it was a good match. We did a lot of work that was published in reviewed journals. So I coauthored six or eight, ten papers over about a five-year period. [36:00] In the meantime, I was on loan to act as the division director's interface with human resources. And apparently the people that were in human resources—they were looking for more people with technical backgrounds to do some recruiting.

TE: Okay.

WM: And there was a suggestion that I might be able to add something. And I thought that I was being reassigned for a year. Well, it wasn't a year. It became another career. [37:00] And so I ended up on a recruiting staff at the time of—oh, I would say there were four or five recruiters besides the remainder of things like compensation and so forth. And so I moved over for a year, was set up with four division directors to go out and interview at a major university in the area—University of Wisconsin, as a matter of fact. And five on one interviews were not uncommon in those days. That is ridiculous now, except for some upper-level positions in which they go through a series of interviews with a number of people. [38:00] Halfway through the third interview, the two division directors that were sitting through this interview with me said, We're going to leave you to finish up and interview the rest of the schedule. We'll get together at the end of the day and go over what you did. The rest was history. I suddenly became a recruiter. (laughs)

And what I found was an ability to interact—since I had worked both the applied side of engineering and the basic research and solid state physics, I sort of had a knack and a feel for both sides. And believe me, there was a great divide in those days. The basic science people were given carte blanche as great thinkers and they were being funded just to create stuff. [39:00] The engineers, on the other hand, were good hands-on people and they built things. And so with this kind of background I was able to navigate, talk to faculty members, to talk to graduate students and undergraduate students, and I found myself in another career.

And, there was a point in time when there was a national concern for the number of people that would be available in the U.S. to do science and engineering, and they were making these forecasts for the turn of the century. And at the time the project was called Workforce 2000, and it was initiated by the president, the science officer in Washington. And for some reason, the laboratory selected me. [40:00] Well, I think I know why. But I went down as a member of the team that they sent to sit in on these presentations. And the subject was: How do we get more underrepresented people involved in science and engineering? And their definition of underrepresented was people of color and women. And I thought the subject was fascinating, the scope of it affecting the national economy on a national basis. I'm sitting there saying, "Boy, how did I get involved in this? I'm a peon. You know, I'm the lowest guy on the totem pole."

TE: Right.

WM: At the time. "How did I get involved in all of this?" [41:00] At any rate, I came back and made a report to the human resources people along with one or two other people. There were some suggestions made, some things were hashed out in Washington. They called a second conference about three, four years later. And I was invited to go back for the second conference. From this one, I learned a few things. They were going to create some fellowships for people of color, and they were going to develop some university organizations that would monitor and support people through. [42:00] And oh, by the way, for the women they were going to open up and have each engineering campus generate a program for

women engineers, and that was the Society of Women Engineers, which was the only organization out there supporting women engineers at the time. And I thought this was fascinating, but where was that list of schools for the women engineers? I had just left the—in fact, ran into—I don't know whether you know Beth Holloway at Purdue University?

TE: No, I don't.

WM: Okay. Beth currently runs the programs down there. At the time, there were two other women. [43:00] Both, I think, or one at least had remarried, so they got lost in my being able to track them down. But one of these women had indicated to me, "Yes, a list does exist." And I said, "Where is it?" And they said, "Well, what schools do you recruit at?" And I told them, "Most of the major engineering schools, you know, across the country." And I was told, "Gee, do you go down into the South?" And I said, "Yeah. You know, anywhere from Georgia Tech to—from MIT on the east coast to Georgia Tech in the South, and so forth." And she says, "One of those two schools you just named, the list exists there." And I finally figured out it was Georgia Tech.

So I went in and had a talk with my supervisor and said, "There's a list of schools that are going to be released in which each school is going to be required to come up with a group called the Society of Women Engineers undergraduate chapters, and they were going to help promote and get women through engineering." Oh, I knew that there were a few chapters on a few campuses at that time. They were pet projects of women engineers in areas where there were

a good number of women engineers. These turned out to be the chapters, existing chapters at that point in time. [45:00] But I wanted that list, and my supervisor had the wisdom to say "Okay, get a team of people together, go see if you can get that list." And they said, "Oh by the way, you might as well include Georgia Tech in your recruiting schedule, and that would justify your going down there." And I did.

It turned out that the person that I reached in an attempt to get the information was the associate dean of engineering at Georgia Tech. A gentleman who, in fact, was pretty good at what he did as an associate dean, was very open to what we now call diversity. And his assistant, who was a master's student, I think, at the time, turned out to be the person holding this list. [46:00] So I asked the dean if he and—I could take he and his staff out to lunch, of course. That's what we did in those days. (laughs) And they still do now, I guess, except that those monies are not that liberal anymore. And this young woman figured I was—she couldn't quite figure me out. She, "Why does he want to get close to me? I'm not interested in him." Well, it wasn't her so much as the list. And so in fact over several years later, she finally came around to me—but I can never remember her name—and told me, "I guess you're okay." [00:47:00] But this was after I had run into her at several SWE national meetings.

And in the early eighties I was invited by one of the university engineering offices to sit in on the program that they had created for a student SWE organization, as part of their advisory group. And so they were sort of a step ahead of a number

of other schools, but modeling themselves after a couple of very aggressive campuses that were involved in developing women's programs in engineering.

The rest is sort of history. I became involved with helping campuses with their women's programs as well as the minority engineering programs. [48:00] And one of the things that I had thought I had negotiated was I would not be your minority recruiter. I will be your recruiter and as I move along I would like to get involved in with some of the universities and some of those programs. They eventually downsized the recruiting effort and, lo and behold, I found myself at one point the only outreach recruiter operating out of human resources. Was given the substantial budget which was dictated by the director's office, and it was meaningful enough for me to be able to do about 45 individual campuses a year, some of the local ones a couple of times. [49:00] And travel the country.

So, I was traveling about 45% of the time. I got involved with some of the divisions like nuclear engineering, to go out and set up a conference. I'd set up hotel suites for interviewing with a lot of their managers. I'd be on the floor of the exhibit hall, like the career fair I just left. And I would funnel people up that I thought were of interest and/or they would have one of their managers join me in the booth and we'd make a joint decision and so forth. [50:00] There were some restrictions, like citizenship, and they needed to know. I guess I had become an expert in that and had a person that was a—what do you call the law—people that assist lawyers but are not really lawyers?

TE: Paralegals.

WM: Paralegals, yes. So they had a paralegal and, when we would try to bring people on or have them apply for F1 visas or even translate the F1 visas into permanent visas, I would escort her down because they'd have to have a staff, and she was not assigned a staff at that point in time. [51:00] Eventually she was, because I said, "You know, why do you keep sending me down? I'm losing a day, and she's doing all the work."

TE: Right.

WM: "And the only thing I have is a staff members to sign off on these." So eventually we got her promoted to staff and I didn't have to go down to the federal building with her.

But the programs were such that I really got involved on the campuses. I would spend some of my own time, in fact, going back to the campuses on the weekend, but I was off at the office. And I had a family at home, but that's the kind of time I put in. Continued to go to SWE national meetings. [52:00] Continued to work with—in fact, my notion was if I'm on any campus and they have a women or a minority engineering program those were places that I had to go to before I left campus. I may have been looking for 10 PhDs, but I would go and collaborate with these offices and do things. I can name some SWE people. Jane Daniels, who ran the program at Purdue University for a while, was one of those people. And her opposite member for the minority engineering program was the same. And I established these kind of relationships on campuses from Berkeley on the west coast to MIT on the east coast, with Georgia Tech and, of

course, all the Illinois schools. [53:00] And the Midwest schools, the Big Ten schools. And so I had those kind of relationships with all of those.

There were a couple of entities that were created. The National Association of Minority Engineering Program Advisors, I guess, was the original. Now they've changed the name to the National Association of Multicultural Engineering Advocates. So I was in sort of at the beginning of each of these organizations. Some of them—NAMEPA celebrated its thirtieth anniversary. [54:00] Originally, the women program managers on campus were included in that program, but there was an anomaly. The minority engineering programs were run by paid staff members assigned to the engineering departments. The Society of Women Engineering people were usually the one woman faculty, and she wasn't necessarily out of the engineering department. She was a woman with a PhD, and so she was assigned to—she may have been a physics—you know, a physical scientist—but she was assigned to that task as part of her program. [55:00] And there was a little bit of an anomaly there.

So a group of women—I think this was the late eighties—developed a program and sort of split away from NAMEPA and became what's now known as WEPAN. The Women in Engineering Program Advocates Network. And I knew all the people, including the board of directors and so forth. And I simply told my office, "We have to be involved." And they said, "What do you mean we have to be involved?" I said, "I know everybody in the organization, and it is now a new

resource for your organization on campus." So I added one more organization to a bevy of organizations. [56:00]

I finally looked up and realized that I was a diversity advocate for the laboratory. Was not the diversity officer. A lot of the things I did the diversity officer got credit for, because that person sat in an office and handled some on-site problems. And I did all of the recruiting and would identify and seek people and go in and ask them, "Hey, promote this person with division X because they are looking for these kinds of people, and here is a woman with all the credentials, and she needs to come in." So I became a women's advocate quietly, although I never realized it until somebody pointed it out to me. [57:00] But my comment was, "Gee, I'm just a diversity advocate."

Along the way, SWE would run into a few hiccups. For instance, some of the student programs in the organization were—the refreshment part—were funded by women engineers. And as some of those passed away, they would suddenly come up with empty spots which they didn't have the funding for. And since it was just a few hundred dollars, I could quietly bury it in my budget and support these and put the laboratory's name on them. So the laboratory was getting some perks along with that. This was all done quietly by me. [58:00] It was, "I think I have the authority to do this. I will do this because I believe in the programs." I made sure all of the major national meetings were part of my budget and would be funded as such, just like the American Nuclear Society or the American Institute of Chemical Engineers national meeting or FASEB—F-A-S-E-

B—for the life sciences people. They were all on this list and the divisions were to understand that I needed one of their technical people or managers to join me in attending these national meetings and setting up recruiting booths and so forth. [59:00] And so I was a strong advocate for SWE and—except for the one hiccup in the early ’80s where budgets were slashed greatly. And in fact, the current recession that we’re in was second only to that, and that was in the early Reagan years when Reagan was trying to pull things back together. And it took them a lot of years to recover, but all the while Reagan was president and, of course, when he left office, that’s when they had the next one in the late ’80s. Because he had gone through, he had taken over from Jimmy Carter. [01:00:00]

The organization’s management had changed. The Atomic Energy Commission had turned into another organization, and then it eventually ended up as the Department of Energy. And as we went through those changes, the balance and the budgets changed. So there were some things I was allowed to do, and others I became restricted in doing. But at the top of the list was always SWE, NSBE. I took on the Society of Hispanic Engineers, and the American Indian Science and Engineering Society. [01:01:00] These were four musts that I would make sure that the organization was connected with on an annual basis, as well the specific national conferences, and we would attend those based on the needs in those areas. The diversity groups were—I had made an ongoing part of things in that. That existed through a good part of the eighties, certainly into the nineties.

With SWE, I found little things that I could do for them. I remember the first year that they had the conference down in Puerto Rico, which was some time in the late eighties, I don't know.

TE: Eighty-eight, I believe.

WM: It was '88?

TE: I think so.

WM: And I was negotiating with the person who was conference manager at the time. [01:02:00] I know it was a woman out on the west coast. And I asked her how things were going. Oh, yes, if it was '88 then yes, we were just coming out of that '87 recession. And she said, "Well, we've negotiated taking the Society off the continent to Puerto Rico." She says, "But we have an embarrassing situation. We don't have any person who is Puerto Rican giving a technical presentation." And I said, "Oh, is that a fact?" They said—she said, "Yes, and we're sort of in a quandary." [01:03:00] And I said, "Maybe I can help you out. Let me give a certain person a call. This person is the management staff somewhere within the building that I worked in, and I'll see if they might be interested in joining the team that I would like to bring down to Puerto Rico." And I said, "But there's one catch." I said, "This person is not a female. It's a male." They said, "If you can get that person to me, we'll take that." It turned out that this person had some personal problems, and this played right into a need he had. [01:04:00] His parents were both very ill. He had used up all of his vacation, all of his sick leave,

and was in a quandary as to how he was going to get back to check up on his parents. They accepted him. He submitted a paper. They accepted the paper, and he came down with us. Didn't see him for half the conference. (laughs) He came in and made his presentation, and—. But, the bottom line was that I helped out someone internally in management, but did later have an effect on me, a very positive effect. I quietly assisted the organization of SWE, and I thought it was that—you know, that was sort of a no brainer. [01:05:00] I had an answer for a need.

And, things sort of went on from there. I picked up one or two, like I said, projects that I embedded in my budget and made sure they were part of the registration fee, and was able to help SWE out. This just continued over a good number of years. I was invited at one point to sit on what, in those days, was the corporate committee for—advisory committee for the national meetings. [01:06:00] And there were a few of us recruiters who couldn't understand why SWE's national meetings were always in June or July, which was the end of the recruiting season for most of us who were out doing college and corporate recruiting. You know, that was done in the spring and in the fall and, in some cases, winter meetings. So, we attempted to suggest to SWE that it would really be nice, and there might be more people that in fact would be willing to commit to the career fair. [01:07:00]

One of the things that bothered me particularly was the other organizations that had been created and—at the end of 1979 and '80, the National Society of Black

Engineers, which was taken from this very small student groups to national prominence and became—their scope was, We will always be a student organization, and they have stuck to that to this day. That created some problems with industry. They actually locked out all of the companies that had come down to a national meeting that they were holding in Boston on the MIT campus, as an example. And this same associate dean, by the way, from Georgia Tech turned out to be the person who negotiated between the Society and the corporate people that were there. [01:08:00] And I remember staying up all night—at 3 or 4 o'clock in the morning there was finally a settlement and they were going to let us come in, but only with the understanding that they would not cater to the corporate world and would remain a student organization and not a professional organization that happened to have a student component. In fact, they are one of the few student—the largest student organization in the country that has an alumni—. (laughs)

TE: Oh, okay.

WM: They turned things around, and it held. SWE, in the meantime, I thought that—. NSBE was able to go out and hold national meetings in which they would have 6-8,000 people attending the conference. SWE was only doing about 2,000 people at a conference. [01:09:00] And myself and one other person were big advocates. George [Brewster] from Corning.

TE: Yeah.

WM: He and I were the same, along with two other people, large organizations that made large contributions. I was with a national lab. We didn't have the kind of money to throw around like Exxon or Corning or some of these organizations could toss at, you know. So there were little things that I thought I could do that wouldn't necessarily disturb the small budget that I had. [01:10:00] Because these folks would throw that kind of money at a chapter. (laughs) You know, and I had this for national programs, plus the campus work that I did. So, I was able to do these things on an ongoing basis. Was invited to sit on this committee. I remember the conference was coming up in Chicago. I think it was 1983. [1993]

TE: Okay.

WM: And the question was, what kind of a commitment our top management would make to supporting SWE. And it was suggested by someone—someone you know, as a matter of fact—who happened to be the person that was put in charge of this committee. [01:11:00] It was '83 through '84 or '85. [1993 through 1994 or 1995] And she understood what the corporate people were trying to tell the organization. And she had the foresight and, as head of this committee, was willing to take this back to the Society of Women Engineers board. And, lo and behold, SWE's national meetings were moved from the summer. By the way, in summer, most of the students were out on internships, you know. [01:12:00] And those students that we had with us on our sites, they were only with us for, what? Six to eight weeks? And I'm going to ask a manager to give up somebody that he's got on a temporary basis for four or five days and have them support this

person going out? Guess? (laughs) I did it. And on occasion they would say, "Okay, we will support this person. This person is good. In fact, if we can hone this person, you know, we may even make the person an offer if they continue on into graduate school." So those kinds of little negotiations within the organization worked out. Was able to do that. For SWE national meetings it was always my philosophy that if I'm going to the meeting, I'm going to take one person to work the career fair. [01:13:00] The person didn't necessarily have to be a staff member. The person could be a student or an intern and so forth. And that worked for me for a good number of years. Anyway, we got the change in '84, '85, [2002] somewhere in there. You probably have that information somewhere, when they—.

TE: It's definitely at my desk.

WM: Oh. Okay. Well, if you can go back and look that up, that's a point that I would like to make. I sat on this committee for SWE. We did assist SWE in making that change. They did draw more corporate entities into their programs. [01:14:00] Somewhere along the line, someone made a proposal that I should be nominated for the Rodney Chipp award. I said, "For what? I haven't done anything." I had not done anything worthy because I looked at the people. I know I had sat on John White who was, at the time, was dean of engineering at Georgia Tech. I had sat on the executive board when he was president of the fellowship program for graduate engineers for minorities in engineering. He had promoted a lot of women, brought a lot of women into his department. I didn't

have that kind of—I would go out and hire as many women as I could identify with graduate degrees, but I—. (laughs) [01:15:00]

And somewhere along the line, I managed to mentor a few people who—. There were a couple that I thought I had lost. There was one woman that I brought from the NSBE program that, in fact, had dropped out of university. And one day, she called me up or I ran into her at a conference, and she said, "Thanks to you, I always had it in my head even though I had to drop out for that short period of time that if you had enough belief in me that I could come back and get a graduate degree—." [01:16:00] She went on and got a PhD and was teaching at—last time I saw her at one of the Florida schools up north. In Florida, northern part of Florida. And I think they run the schools up there—it's joint campuses. Florida State, Florida A&M, and so forth are sort of joint campuses. They share faculty and so forth. And this young woman had completed her PhD. Gone back to school, was accepted on the faculty up there. That's the last I've heard. I don't know where she is now. She probably got married. The minute they get married, I—I'm not always invited to the wedding, so I lose track of people that way.

But it's a number of little things like that. There's another woman out on a campus who is—last time I heard about her, she was head of a department. [01:17:00] I recruited her out of a midwest university. She had come over from a country under strife at the time in an eastern European country. Spoke the language, English, enough to be able to get by, get through her academic work. Recruited her, brought her into the organization. They loved her. She made some

good contributions. We had brought her in, got her transferred from an F1 visa to a permanent resident visa. [01:18:00] Her major professor had answered an inquiry made by another university out on the west coast as to who the best person that they had had in this particular narrow-fit area. They had recommended this young woman and she was suddenly hit with an offer to go out and join this university program. And she was in a quandary. She came into my office. She felt comfortable because I had accepted a person who was struggling to speak enough English to handle technical things, didn't have any problem with her. I had found a position for her husband with another close-by organization. [01:19:00]

It's little things like that that seem to contribute to what I consider as a big picture of my contribution to women in engineering, but it was nothing I thought worthy of any great honor. Like I said, I knew about some of the people that were Rodney Chipp awardees in the past. They didn't make those every year. But I was invited to accept the nomination. In fact, I was reminded of that as I went through the hall just before I came over here by a person [Jill Tietjen] who, at the time, was a former president of SWE but who called me up on the telephone and—I love this person because they were so, they're always so aggressive. And she threatened me, "You'd better get this done and help us get this nomination!" [01:20:00] I said, "What?" (laughs) You know. You're going to call me up and threaten me to get an award from you? To help you give me an award? I scratched my head, and I said, "I give up. Okay, I'll go, but I don't deserve this." Anyway, that's

always been something fun, and we tease each other about this. And so that's sort of my history.

I can say a few other things. My budget was taken away from me in 1997. It was the week that I came back after receiving the SWE award. [01:21:00] And I was told, effectively, right then and there, my travel budget was cut to zero. I had enough contacts out there, and I should make these contacts from my office. Well. After being a major recruiting coordinator for the entire laboratory for over a 10-year period, I'm sitting here doing nothing in my office. I didn't like that office. Things were changing. Until one day, I opened my TIAA-CREF account and I said, "I don't need this job. I see seven figures worth of retirement." [01:22:00] Yeah, but then the market started going back and, by the time I retired, that number had dropped below the seven to the six—the seven figures. (laughs) But no, I had made my decision and at that point in time—. I just never thought about what I would do if I retired.

So I had made a commitment to show up at 2000, year 2000 SWE national meeting, and so I funded myself. And as I was going through the hall I was met by a group of people who said, "Walter, we understand you retired from Argonne." And I said, "Yes." And they said, "We would like for you to continue working with the Society of Women Engineers and we have a spot that we'd like for you to accept with us." [01:23:00] And I said, "And what might that be?" They said, "We'd like to invite you to join the editorial board." And I said, "That's—that is amusing. You've got to remember, I'm an engineer. Engineers don't write that

well." (laughs) And they said, "We'd still like for you to think about it, accepting this offer." And so I did. Ten years into my retirement, where am I?

TE: On the editorial board.

WM: And at a SWE national meeting. That's more or less my story of my experience with SWE. [01:24:00] There are always little things that I can try to put together. I could suggest a couple of other things. SWE made a move from—national headquarters made a move from New York to Chicago. The local chapter said, "Walter, you need to help out the executive director [Gina Ryan] and help them to socialize. Get them involved with your involvement with the symphony orchestra or see that they get to concerts and so forth, and the opera." And I said, "I can do that. I can do that." (laughs) By that time I was divorced and with my own personal problems, and so I could do that without escort to—. [01:25:00] And so that became a little bit of an enjoyable situation, personally on my part. But as it turns out, I was helping SWE again and didn't really realize it that much. The person was comfortable enough in having a little bit of a social life other than SWE and occasionally would have the opportunity to be escorted to an opera or to the symphony. And I had enough clout certainly with the symphony to come up with tickets, and I could do that with some of the contributions I was making there.

And then, I got wind of the fact that this person's contract was running out and they might not renew it. [01:26:00] And I said, "Why aren't they going to renew? The person just gave up their life to help the organization move the entire

headquarters to Chicago and set up some other interface with another organization, with Bostrom [association management company] as it turned out. And the response was, "We would like to get a woman engineer to take on the responsibility as executive director and CEO." And so I sat back and I says, "Oh boy, it's going to be fun watching to see who that person is that is going to emerge." [01:27:00] And along the way I got a telephone call. "Walter, would you be able to sit on the selection committee? And we know you as a recruiter, and we know that you've recruited executives and sat on their committees within your organization, so there isn't an excuse. You can't buy your way out of this one." So, I said, "Well, okay. There are going to be some people that I'm going to know. And I just hope I won't be biased by that."

Anyway, so we were—I think you folks hired an outside recruitment organization who went out and did the recruitment, and all I had to do was sit in on the interviews with them and give my gut feeling, you know, as an interviewer and a recruiter on what I thought about the person. [01:28:00] And a couple of names came up that I knew. So I said, "Gee, I have a feeling that it's going to come from any one of three people." And so an interview session was set up and I attended that. And just at the cutoff date, they came up with one additional name. We were not told who that person would be until we were assembled in a closed room, and we were about to begin interviews. [01:29:00] One of the people on the list I knew of because she was one of the officers in the technical organization that I belonged to with my particular discipline, organization. I'm an emeritus member

of that organization. I still send them out a little bit of dues after close to 40 years. (laughs) So anyway, this person was put on the list, and my eyes opened and I looked over at one of the other people on the committee—and I knew just about everybody on the selection committee. That came as a surprise to me also. A lot of colleagues, a number of people in SWE that I knew were sort of movers and shakers, if you will. [01:30:00] And I guess they had been involved in my selection, being on the committee.

At any rate, I accepted the challenge. We began interviewing people and were given the credentials of this one person [Betty Shanahan], and I looked. And I said, "Oh my goodness. I've got a little bit of a problem." (laughs) You know. I had promised that I would not be biased by someone, but I had every reason to be biased by this person because I had worked with this person in other capacities of SWE. We had been successful in doing some things with SWE and as my part as a volunteer on SWE matters. [01:31:00] And they were the last interview for the night. And we were going to do interviews for the next morning, so we were staying over at the hotel. I went home and came back since I live in Chicago. That's—it was nothing for me to fly down the expressway and then come back the next morning.

But this person came in and made a presentation that blew everyone out of the water that we had talked to. And, as I said, one of the people was even an executive in one of the technical engineering professional organizations. [01:32:00] And I sat there and I said, "Am I just biased or is my work done?" And

that was it. I looked up at someone else across the corridor as that interview ended and looked into their eyes, and I saw the same thing I knew was coming out of my eyes. And I turned to someone else and they said, "Wasn't that a great presentation?" And I said, "Yes, it was." We interviewed everyone else. To most of us, we had a hands down decision on—and I will stop right there. (laughs) I don't want to say anything more than the fact that this person came to me, the executive director. [01:33:00] I had worked with this person. They had the capability of pulling groups within the organization together to make some decisions. I could see them in the bigger role. And all of the things that I thought and expectations that I had have been, in fact, over. She's gone far beyond those thoughts.

So I feel good about continuing to be a member of SWE. I don't know whether—what I've said about my SWE experiences over the years have been meaningful and are worthy of going into your archives, but—. [01:34:00]

TE: Absolutely.

WM: There, you have my story.

TE: Absolutely. I greatly appreciate it.

WM: That's—it's amazing. And, these are all things I feel very proud about. My interactions and small, very small contributions to SWE have been given from the heart. I have absolutely no ulterior motives. I did not want an award or anything, but I was told that (laughs)—you know, I was told that I had to assist with this

nomination for this award, and that—I don't know. And I still laugh at that because it was funny, the way it happened. As it turned out, when I got this call I was told to list a large number of people that I thought might have some things to say about my contributions to their successes as women engineers and et cetera. [01:35:00] And much of my feeling about this was the fact that, again, my mom was sort of a role model for me in science. So I've sort of tagged onto her experience in the field of chemistry. [01:36:00]

And she, as a technician in doing bioassay samples when the major catastrophes happened in the nuclear industry, and samples were distributed to all the national labs for some of the bioassays because they would then take all of the results and bring them together, even multiple labs doing bioassays of the same person or persons. They would bring all of this information together and then lay it out and look at the effects and try to predict the effects of—and then watch these people through the rest of their lives. And her results were always consistent and even became some benchmarks. And I thought this was astounding for a woman that only had a high school education. I was very proud of her and so my contributions to women in science and women in engineering have always come from that as a core. [01:37:00]

The personal experience that I went through watching another woman engineer being discriminated against simply because she was a woman—and I still shudder at that. But these are the things that motivated me to be active with women's programs. As a minority, of course, it's natural that I would support

programs involving people of color, Native Americans, Hispanics, and African Americans. But women as a gender group—no, that sort of surprised even me. But I was very disturbed at the things that I heard, the thoughts that people had, and I didn't understand where these extremely bright people had these horrible thoughts. [01:38:00] But I guess that's what some basic prejudices are. And I understand that these people were fighting for survival, which is why they took these tactics. But that brings out the inner self in a person, and if you act that way under duress that says something about you. So, whatever I've done to assist SWE, I've been very proud of. I've enjoyed doing it. I still enjoy—I enjoy the camaraderie and so forth. That is my SWE story.

TE: I thank you for sharing it.

WM: Thank you for having me and inviting me to do this. Again, it's something I—what do I have to contribute? (laughs) [01:39:00] I don't know whether her workshop is today or tomorrow, but the imposter syndrome. The presenter of that says I am a classical case of the imposter syndrome, and I said, "Why?" She says, "Because you won't take ownership of things that you've done, of contributions that you've made, and you say, 'Who, me? I'm just poor little me.'" I see people that need help and programs that I believe in and if I can, I will help out. And that's it. But it brings me back to—yes, I'm going through the imposter syndrome right now. But that's me. I'm a—I do that. It's part of a defense mechanism, I guess. [01:40:00] In fact, that's how it's—the person that does the program explains it. "This is part of a defense mechanism you have." So thank you for inviting me.

TE: I thank you very much.

WM: Good luck with the project.

[END OF INTERVIEW]