SWE GRASSROOTS ORAL HISTORY PROJECT

Margaret Pritchard Interview

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This oral history interview was recorded October 15, 2009 at the Society of Women Engineers National Conference in Long Beach, California 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.

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Margaret Pritchard Interview

Margaret "Pritch" Pritchard began her career as an engineering clerk at Pacific Gas and Electric Company before starting her own consulting firm, specializing in the areas of wastewater treatment, pollution control, and energy conservation. She never completed an engineering degree, but rather took numerous and diverse engineering course at seven different universities throughout her career to acquire the knowledge and skills needed for her business. A Fellow of the Society of Women Engineers, served SWE in numerous capacities, including as national archives committee chair and on the board of directors. She was involved in the planning and execution of the first International Conference of Women Engineers and Scientists in 1964, and enthusiastically attended subsequent ICWES meetings across the globe.

In her 2009 Profiles of SWE Pioneers Oral History Project interview, Pritchard described how she became interested in engineering; her experiences in college; her career at Pacific Gas and Electric Company; her experiences as a consultant; and her involvement in the Society of Women Engineers.

TROY ELLER: Okay, today is October 15th, 2009. This is an oral history interview with Margaret Pritchard, better known as "Pritch," for the Society of Women Engineers Grassroots Oral History Project. Margaret is a fellow of the Society of Women Engineers, and she—

MARGARET PRITCHARD: Also a fellow of the American Society of Engineering Management.

- TE: And a fellow of the American Society of Engineering Management. She-
- **MP:** Also a member of ASME.
- TE: And a member of ASME. (laughs) And she retired from her own company, her own consulting company. The interviewer is Troy Eller and we are at the Society of Women Engineers national conference in Long Beach, California. Thank you for joining me today.
- **MP:** You're welcome.
- **TE:** To begin with, can you tell me about where you were born and lived, and what your family was like growing up? [01:00]
- **MP:** I am fifth generation Oregonian. My great, great grandparents were part of the church train, which came out of Illinois. Their church was requested by a pioneer resident of the state of Oregon to come to Oregon to form a church because he missed his religious background. He supplied, from his own pocket, \$500 and the church put in \$1500 to provide for twenty-eight wagons, which came across the

plains and arrived in Philomath, which is a suburb of Corvallis, in October. They left Illinois in April, so it's a long trek.

Anyway, and my great, great grandfather did not quite make the trip. He got mountain fever and was buried on the east slope of Mount Hood in Smock Prairie. [02:00] As a result, his children came on through to Philomath and took five—five of his sons took donation land claims of 640 acres a piece. Barbara, my great, great grandmother was only given 160 acres because he was buried in Smock Prairie, so she did not get a full donation land claim. The family lived in the Corvallis area. My mother was born in Corvallis and then they moved to Portland. I was born on what we call Pill Hill, which is the medical center in Portland. And I have lived—my residence has been in a two and a half mile circle, four different residences—my entire life in that area. [03:00]

And I am a member of the Society—Sons and Daughters of Oregon Pioneers, which is representative of the descendants from the pre-Oregon state—1859 when Oregon became a state—and we are well over a thousand people who are the heirs to those early pioneers. I respect my heritage very much because the tenacity that it took to come across the plains to a foreign land, establishing the church that they belonged to—their tradition was they started a college and a church every place they went, and they would leave a group to take care of their establishments, and then they would go to another state, another area. And as a result, they started churches all the way from the 1700s across as the U.S. was developed. [04:00] Which meant that they were very—what's a good way of

putting it? Strong willed, dedicated people. And that's my heritage. So I've got quite a bit to live up to.

- **TE:** Right. (laughs) Can you tell me about your parent's occupations?
- **MP:** Okay. My father was in construction, not an engineer. My mother was—let me back up a minute. My grandfather insisted five daughters all have professional college degrees. That's right around the turn of the century. One had it in education. One was the first certified pharmacist in the state of Oregon. One, my mother, was in banking. One was in radio electrics, which was—she was a telegrapher. [05:00] And the final daughter was killed getting her masters at the then Oregon Agricultural College, which is now Oregon State, when the laboratories exploded. And she was killed then. But my grandfather's tenacity was all five girls had a professional degree.

So then as my mother came through—I gave you the silly story about, she was working at one bank and the manager went to play golf with another bank manager, who was the manager of the Bank of California in Portland. And when they got back to the office he walked up and he says, "You've got a choice. I won you in a golf match, and you can either stay and work here or you can come to my bank." She went to work for the Bank of California. She had to use her initials because the main bank in San Francisco wouldn't admit they had a woman on the payroll. She was second in command. [06:00] She approved everything up to a million dollars—and this is 1910 to 1921—and then anything over a million

dollars she initialed before she handed it off to her boss for approval. And that was my mother.

When she had the three of us—two brothers and myself—she was widowed. And the bank wanted her to have a nanny. She refused. She says, "They're my children, I'm going to take care of them." And, that woman raised us as a single mom, baking and sewing, where she could have had a nanny and gone back to the bank, but she chose to do it the hard way. So again, tenacity is my middle name. Well, no. My middle name is Tro because I make more trouble than anything.

- **TE:** (laughs) How did you first become interested in science and math and engineering? [07:00]
- MP: I was born to it.
- TE: You were born to it.
- MP: Some people paint, some people are musicians, some people are artists, some people are whatever. My mother realized what my talents were when I was three—well, three going on four—because my paternal grandmother gave me what was a common gift for a girl then, which was a miniature steamer trunk which had the dolly in one side and the wardrobe in the other. And just about the time that the exchange at the department store ran out, I convinced my mother that I didn't want that thing and I wanted a carpenter set. So she called my paternal grandmother and said, "May I exchange it for a carpenter set for

Margaret?" It wasn't a very happy grandmother, but I got my carpenter set. That was the Christmas before my 4th birthday. [08:00]

My inner talents all lead to spatial conception, mathematics, et cetera. When I started high school we had to fill out a form so they could have an idea how many classes they needed and what subjects, because it was a unionized school. We collected from nine grade schools. Anyway, I filled out my form and I wanted math and I wanted higher math, and I wanted mechanical drawing, which is now graphics, and these other courses. And they told my mother that including shop—that I couldn't take those. So my mother said, "Well, just show me in writing in the state code where she can't have these." Well, after three meetings of trying to convince mother they decided that I should be able to take the courses I wanted. And it was during the war and the interesting thing was, that when I got into my mechanical drawing class, the woman was a teacher because the men were all at war. [09:00]

So that was my high school. Then, having to be helping mother take care of the household, I could not accept a four year scholarship which was offered me. So, I went to work, and went to night school to get the courses I needed to advance myself, and went to work at PGE [Pacific Gas and Electric Company] as an engineering clerk until I discovered that the guys were getting twenty-five hundred [dollars] more than I was. So that—I scrounged around and found a scholarship with UW [University of Washington]. And I could not see taking a lot of bonehead courses, so I went into one professor who was Operations

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Research and Industrial Engineering, and I said, "If I audit till cutoff will you take a look at my capabilities, and then I'll pay my fee if you think I can go ahead and get a grade." [10:00] Well, I did this at seven different universities. I am not a degreed engineer, but I have all 4- and 500 courses that a PhD would require. But I don't have the boneheads—world history, et cetera, et cetera, et cetera. And in fact, in the Engineering Management—the American Society of Engineering Management, I have some of my male colleagues that delight in nagging my by calling me Dr. Pritchard, and I say, "Shut up!" (laughs) Because I am not degreed. But professionally, I am qualified in every essence and I have a track record to prove it.

- **TE:** When you first entered your engineering courses, what was it like to be a woman engineering student at that time, or the only one? [11:00]
- MP: One. (laughs) A funny anecdote that goes along with that. At the University of Washington, I was in a 500-series lab in civil engineering, because I wanted the broad scope. My specialty was industrial mechanical engineering, but I also was in civil and I also was in electrical and others, because I wanted a wide education. Anyway, I walked into the lab one day and the room was blue with cigar smoke. See, I was old enough to be my colleagues'—my students' mother, biologically. I walked into the classroom and it was blue with cigar smoke, and I knew one of the boys' wives was expecting and I said—because we had to use our initials, so I was "Ma." I walked in the classroom and I said, "The first one of

you guys that calls me grandma is going to have a knuckle sandwich." (laughs) [12:00] But anyway, that was—that was the way I was treated.

Now, the only times that I was degraded as a woman was by professors. My colleagues, my fellow students, as soon as they found out I that was capable of doing what they were doing it disappeared. There was no problem. But I had two professors in two different universities that were bound and determined they were going to get a woman out of their classes one way or the other. One of them lost his tenure over it. But, I still have friends that I had known in those classes. Of course, we're all getting a little bit gray around the edges because that was a long time ago. [13:00]

TE: In most of your classes, were you the only woman?

MP: Yes.

- **TE:** Did you notice an increase because you took classes over more than a decade? Did you notice any increase?
- **MP:** Not really. Not until I ran into SWE, and that was 1961. And I was at the University of Washington, and they found me, invited me to a meeting. And it was like walking into a pair of old, friendly shoes when I walked into that room. That was the first time I was really aware of women colleagues, was that SWE meeting. And they had to work with me I think over the better part of a year to get me to join, but I finally decided that it was comfort. [14:00]

- **TE:** Right, right. Was it ever disruptive to you, I guess, that you were the only woman?
- **MP:** No. The guys always made it comfortable, even with the knuckle sandwich.
- **TE**: Okay. (laughs)
- MP: The point was this: there would be—. Well again, remember, I was taking 400and 500- [level courses]. I was not taking boneheads. I would say probably through maybe the first class session there might have been a little bit of, "Hey, what the hell is she doing in here?" attitude on the guys. But as soon as they discovered I was a peer in what I was doing and I was not there chasing men or looking at anything other than my education, that stopped it. [15:00]
- TE: Okay. You worked at PGE while you were in school?
- MP: Yes. In fact, when I first went to work—well, let me back up a minute. I spent considerable time before PGE working for Dean Witter, which was a stock brokerage. And all that time I was going to night school to get enough credentials so I could hire out as an engineering clerk, which is what I did with PGE. As soon as I had that much education behind me, so that they would even look at me—. And of course, again, this was during the various and sundry war times. Not the World War, because that was grade school, but it was during the Korean episode. [16:00] So women were pretty much accepted. So that was the end of that issue, and by working at Dean Witter I was able to fund all of my education so that I could hire on as an engineering clerk at PGE.

- **TE:** Okay, and what did you work on? What were your duties at PGE?
- **MP:** Okay, it's rather unique in the fact that PGE is a utility company, and we were funded by various property taxes. And we have school districts and fire districts and county districts, etcetera, etcetera. And our tax base was based on wire mileage in these various and sundry taxing districts. So I had my little old scale that recorded mileage. And the formula that we used was based on wire mileage, and in that formula it included all of the support systems, the substations, the generation systems, etcetera that would support wire mileage as far as delivering electricity was concerned. [17:00] And, so that's what my duties were while I was—that was part of my duties while I was there. That was during tax season.

The rest of the time, we were recording work orders as they came in from the field. And just one interesting thing was on Columbus Day in 1962 we had a renegade typhoon that came across and destroyed everything in its track. Came in through Eugene and on up the valley, even Seattle got some of it. And our system was down. We had poles broken off at forty feet. We had trees through poles. We had everything. And I was given a headset which had a three-way connection. I had our dispatch, American Red Cross, Salvation Army, all [18:00] with radio control. So if there was a damage situation where there was need for service, we would send one of those agencies in. They would call me and say, "Yes, there's a patient here that has to be evacuated." Or, "No, this is somebody's nightmare. They just want their power back on because they're brooding chickens." Okay, I had to make that call with our dispatcher and he

would determine then if it was an emergency—a post-operative patient, etcetera. They'd go out and see what the situation was, if they could get bootleg service in, or if they had to move the patient. I spent thirty-six hours straight working that storm. That's known as the Big Blow. So, you never knew what your job was going to be when you walked in the door, except during tax season. (laughs) Then I only had one job—wire mileage. (sings) Dee-dee-dee-dee-dee. [19:00]

- **TE:** I've seen a photo of you and at least one other female employee there. Were there many women who worked with you in the same kind of jobs that you did?
- MP: During the Korean thing, in the engineering clerk department—it was a mapping department. We were mapping the jobs as they came in after they were completed. There were four other women. PGE, bless their hearts, kept them even after the men came back, but they're all retired or dead now. So, they took it—they made do with a situation that was forced on them with the Korean episode. And then when it was over, rather than cutting the women loose, they left us on board. [20:00] Then when I discovered that the guys were getting twenty-five hundred [dollars] more than I was, that's when I scrounged around and got scholarship money to go to UW and other schools.

Then after that, I hired on with a national firm as corporate engineer, and was lastly—we went for a large loan from one of the insurance companies and they said, Well, your overhead is too high. So management decided, Well, let's get rid of central engineering and go to consultants. So I was the last engineer on the

payroll and the first one hired as a consultant. And that started my consulting business.

- **TE:** You made a niche for yourself in large-scale laundry facilities and doing wastewater reclamation.
- MP: Yes.
- TE: How did that come about? [21:00] How did that become the—
- MP: Well, the corporate that I was corporate engineer for was in rental laundries, okay, and that started the laundry business. Then, one of the first jobs I had as a consultant away from that industry was wastewater for a slaughterhouse to comply with the state of Indiana's discharge codes. And that system that I designed then is still in use nationally, based on—again, how do I want to word this? In the Society of Women Engineers, we have every discipline imaginable. As a consultant, if I was looking at a geo tech, where I was concerned about the geology of a site, I can pick up the phone and call one of my buddies. And in wastewater treatment, if I had a problem I could pick up the phone can call another SWE member and say, "Hey, this is what I want to do. Is this going to work?" [22:00] And I'd get a yes or a no. So I didn't waste time reinventing the wheel a lot of times, because I could call somebody and say, "Hey, am I on the right track or not?"
- **TE:** Okay. Why did you decide to become a consultant rather than go to another company?

- **MP:** When I was cut loose, I was offered the consulting job with the company. So it was not by choice. It was by, Hey, we can't pay you as an employee, but we can hire you as a consultant. And as a result, I had—there were twelve active jobs going at that time, in various—including one which was rather ridiculous, but that's another story. [23:00] So when all the engineers were cut loose, we had twelve jobs at various stages. So I was hired to either get them off of the table or get them completed as a consultant. So becoming a consultant—but the other interesting thing is, I had an outside client before I even completed the projects that were on the table, and that was the water treatment for the meatpacking.
- TE: Okay. Okay. Were there many other women consultants in your field?
- MP: I started nosing around when I found I was going to be cut loose, and I found twelve in the entire United States that were consultants. Out of those, four were SWE members that had the shingle out as an engineering consultant. There is a technicality. [24:00] Consulting engineers is a protected title by an association, Consulting Engineers of the United States. Engineering consultant is the generic term. So you've got to be careful the way that you use those. It has to be engineering consultant. Otherwise you're going to get shot. (laughs)
- **TE:** As one of the very few women engineering consultants, did you face any difficulties with—.
- **MP:** Again, no, because track record is the bottom line when it comes to selling yourself. And I not only had the corporate track record of being the corporate

engineer reporting to the president, I also had the projects that I had to close out for the company before they could get this major loan. [25:00] With that kind of a track record, and then having somebody whom I had worked with inside on the outside calling and saying, "Hey, we've got trouble." It works. So, track record is the bottom line.

And that's—you know, when I counsel these young women, some get the wrong idea about consulting. There are three premises. One, you've got to have at least a two year reserve, financial reserve, period. Two, you have to have an accepted capability, a proven capability. And three, you have to have a track record. Forget consulting unless you've got those. And I tell that to these young scats. [26:00] I did one of the technical sessions at a conference six, eight years ago, on consulting. And it shocked me the number of young kids that came into that who were just graduating who thought, Hey, I'm going to be an engineering consultant. And I had to shoot them down because, first off, they didn't have any track record. They were green as grass. Second off, they didn't have any financial reserve. And three off, they were totally unknown. And so many times, particularly when I was doing the session, these young girls, Oh, I'm going to be a—. Forget it.

- TE: When you—what were some of the other projects that you worked on as a consultant?
- **MP:** Oh, wastewater treatment, steam plants, sewer plants, I've done some structural work. [27:00] Not much because that's not my—. Lots of times when you get into

a project, alright, you get a phone call, "I've got this piece of equipment and it's not working right," or, "I've got a boiler and the floor is sinking," or, "I've got a church"—this is a different one. Anyway, you get a phone call and they're trying—corporate, number one, is trying to explain to you what his problem is. You accept the job on his phone call. You get there—I only work under contract. It's all in writing ahead of time. And you get there and you're trying to detail what has to go into that contract to take care of this man's problem. Lots of times, what he's told you on the phone and what you find when you get there are North Pole and South Pole. [28:00] So, it's put it all together and get it solved in the shortest time possible. Because that's one of the reasons I never had to advertise, because when I had that contract it had specified time frames, specified result, etcetera. It was itemized.

- **TE:** You worked over a large portion of the United States and internationally.
- MP: Yes. Twenty-five countries, all fifty states.
- TE: Wow. (laughs) How long would you be away during-?
- **MP:** At the height of my career, I was home in bits and pieces two months out of the year. Ten months on the road.
- **TE:** That's a lot of travel. How did you manage that? [29:00]
- **MP:** Well, I again put my think cap on, and in that point in time I had an aging mother in a household. So, I took a look, three doors down the street was a grade

school. So I went down there and I talked to the secretary, and I said, "Have you got some teachers that either practice teaching or have their preliminary credential that want a place to live, utilities only, no rent?" So I started my house sitting. I've had fourteen house sitters over the period of time, all young starting teachers, which meant that they had a time to make some money, to pay off their student loans, to get their lives started. The other issue of course, was they were already bonded, although I had separate bond for my household. [30:00] But, using that as a jumping off place, I never had a bit of problem as far as house sitting, and my house was such that I could divide it into my mother's quarters, my quarters, and the teacher's quarters. So, out of the fourteen, eight of them got married while they were in my house, so I don't know what the atmosphere was. (laughs)

- **TE:** I think I read that you would stay with SWE members, such as Arminta Harness while you were traveling?
- MP: I tried to keep that because—now remember, I worked under contract, and the only time was possibly on a weekend or when there was a timeframe when I was going from one job to another in the same area. Imposing on friendship is a no-no. [31:00] Although, Arminta would argue with you to this day because if she found out I was in the area and I didn't call her, I was in deep doo-doo. But basically, it was kind of like a recharge. And again, I kept it pretty limited because I was under contract and the contract included my housing, my costs, my out-of-pocket costs.

- **TE:** Did you ever take any business classes to help support—to help you run your business?
- **MP:** Not with my mother around. Remember, she was a banker. (laughs) And I didn't lose her until 1992, so I had a good support right at home.
- TE: Okay. Okay. Was it difficult for you to transition from being an employee to being self-employed? [32:00]
- **MP:** No, because of the way it happened, Troy. Because the fact that, you see, I was given the job as an employee of taking care of what was on the board. And then, all of a sudden, the ones that were able to close out and turn over to me as a consultant, it was a paint brush(??). Just like, Hey, today she's on our payroll, tomorrow she's not. We're paying her under contract.
- **TE:** Right, okay. Let's step back and talk about your involvement in SWE. You said that you had first joined in 1961?
- **MP:** Right.
- TE: How did you first get involved with SWE?
- MP: It was while I was at the university taking my 400-series in industrial engineering, and Irene Peden, Dr. Peden was on the campus, and she was the moral support for the women students that were there. [33:00] We called her our crying towel. (laughs) Anyway, there was another SWE member who—she and her husband lived out in Magnolia. Anyway, in Alice's case it was a question of, if you get in

over your head and you want to get away from the campus, call me and we'll put an extra shrimp on the barbie and come on over. That was my first introduction to SWE, was that way. Of course, when I first went on campus there was a SWE section there. But it was funny because I was older than all my—. (laughs)

- **TE:** You attended the first ICWES conference. [34:00]
- **MP:** Yes, in 1964.
- **TE:** And you were the delegate from the state of Oregon in the Parade of States.
- **MP:** That's right.
- **TE:** Can you tell me about that experience?
- **MP:** Or-i-gun. [corrects pronunciation] We carry guns in Oregon.
- **TE:** Oregon. (laughs)
- MP: You Midwesterner, you. (laughs)
- TE: I apologize. (laughs) Can you tell me about your experience on ICWES?
- **MP:** Well, I think the one you're fishing for is, I had volunteered with the New York section for airport duty, meeting the international delegates. And we had one Japanese lady that was getting in very late with her flight, and when we got her to the hotel, the person she was to room with was not feeling well. And the desk clerk was being an ass, and I realized the woman didn't understand what he was saying to her because of the language barrier. [35:00] So, I just stepped in front

and I said, "I've got a double. Put her in and we'll resolve this in the morning," because he was just being a—. And so she didn't understand what was going on, and I said, "You're going to room with me tonight and we'll work this out in the morning." She knew there was a conflict. I mean, the tone of voice clued her in. Anyway, it was Dr. Saruhashi from Tokyo, University of Tokyo. Anyway, the fun part was that she'd never slept in a western bed. She'd always used a floor futon. We'd just gotten settled down and I heard this noise and she'd fallen out of bed and was down between two twin beds. Can you imagine, trying to fish somebody out who doesn't understand your language? I had, I think, four words in Japanese that I had heard over the years. Tried to fish her out, embarrassed, put her back in bed. (laughs). [36:00]

Then, the other thing was, the telephone rang about twenty minutes later. And I answered it and they said, "Well, we can't get through on your trans-Pacific call. We'll call you in twenty minutes." "Okay." Well, I realized then that the call was for her, and I told the operator, I said, "Well, you're going to need a Japanese—." She said, "Oh, we already have the Japanese operator on the line." So, twenty minutes later the phone rang, and I told Saruhashi—. Every twenty minutes for the next three hours, that phone rang. Saruhashi had not explained that she was calling the head of her department from New York instead of being on campus. That's the reason the secretary wouldn't interrupt him, because he was lecturing. Long story short, we got a total of an hour and twenty minutes sleep after they finally got a hold of her dean. [37:00]

So, the next morning we went down to straighten out the room situation, and we—by that time, the SWE people were there to help. And, they were trying to get her straightened away to put her in with one of our officers, so that she was being properly—not "Pritch, Pritch, Pritch!" That's all I need, a roommate for eight days. And then when she came to Oregon as a guest lecturer, about a month later, the university called me and said, would you mind hosting her—meeting her at the airport and hosting her until our dean can get up to Portland from the university. So I got to see her again after that. But she was a fabulous lady. But we laughed.

I think one of the other funny stories was that there were five Japanese women there, and one day I came back to the room, and it was about the third or fourth day of the conference, and I could hear them talking, so I knew there was a bunch of them in there. [38:00] And then, all of a sudden, I smell something. So I dropped my papers on the floor and fumbled with my key and made a lot of noise out in the hall, and I hear "jit-jit-jit" and (claps) the bathroom door. And so I went in and I said, "Okay, ladies. Something's going on in here that I need to know about." And giggle, giggle, giggle. Finally, one of the women, she says—zip your mouth, you know, the signal. Don't tell anybody. And she opened the bathroom door. And they had found a hibachi that was about a half meter—it was very small—in the bathtub. And their complaint was they'd gotten tired of New York food and they wanted something they liked. (laughs) And they had a found an

A&P that had an international market section, so they were cooking in our bathtub. [39:00] But that was Dr. Saruhashi. Katsuko Saruhashi.

That was a week. That was 1964. And I met a lot of crazy New Yorkers on that trip that are still good friends, plus a lot of other good friends. Plus I made the acquaintance of a very lovely lady from Iran, who was at that time, under the Shah, Secretary of Transportation. And when the Shah fell, she went back. The university is an enclave, almost like a separate city inside of Tehran. And so when the Shah fell she went back to teaching engineering at the university because she was protected. And I got to see her four years ago in Ottawa. She still comes. I don't know whether she was at last year's ICWES or not. I doubt it, because she and I are both getting a little grayer around the edges. [40:00] Of course, telling an Irani that she's getting gray hair is like spitting in the ocean. (laughs) They don't have gray hair.

- TE: What other activities and events did you work on with SWE?
- **MP:** I think the most interesting thing was—actually, this was ASME rather than SWE, but it's still—. We had a joint engineering management conference, which was eleven of the societies: civils, structurals, electricals, etc. And we had a management conference once a year, and each year it was a different society was the chair. Well, the year they asked me to the chair, I was the person that was in line to be on the committee—on the ASME committee to chair for the conference, the general chairman. [41:00] Well, it was decided that we were going to Mexico City. Well, we got down there. We had two planning meetings in

New York and one planning meeting, pre-conference, in Mexico City. Well, when we got down there in Mexico City, I walked into the conference room where we were having the committee meeting, you know, setting up the conference. All of a sudden there's a dead silence. They didn't know—because all of my papers to that point had been with my initials—that I was a woman.

So, we had to have ground rules. Well, one, ASME stood by me. They said, "We are not replacing her. You've got her. Forget it." Well, we had ground rules. The basic thing was protecting the conference from the citizens of Mexico who had ethnic, cultural stigmas about women. [42:00] So, I couldn't go outside the hotel unless I was escorted. As long as I was in the hotel, I was the chairman of the conference, but the minute I stepped out the front door, I had to be escorted. And then, the funny thing—that went on for the three days of the conference.

And then the last day was a Sunday, and there was a note under my door saying, would I please be available for an interview, and it didn't say whom or what. We had two other American conferences going on. I think one was the American Society of Tire Manufacturers, and I forget what the other one was. And we were told to be in the foyer of the ballroom at such-and-such a time, after a breakfast. And we got there. [43:00] Well, what the deal was, was it was an election year and President Padilla, who was running for reelection, was at this breakfast. It was a fundraiser. Guess what? I have a photograph with the president of ASME Mexico, the President of Mexico, and SWE—not SWE,

ASME. A woman. (laughs) After all of these ground rules, I end up with the president of the country in a photograph. Which you have, by the way.

- **TE:** I believe I've seen it, yes.
- MP: Anyway, President Padilla. But that was so funny, you know. They were so careful with me. I had the presidential suite with my own swimming pool, but I couldn't go outside the building alone. (laughs)
- **TE:** You also helped to establish the Center for Information on Women in Engineering at the Georgia Institute of Technology, is that correct? [44:00]
- MP: That was a fiasco. I don't know whether you found that out in reviewing it or not. The woman who was at the university was their head librarian—she had an ulterior motive in the fact that she wanted the [Lillian Moller] Gilbreth Papers, which had already been deeded to Purdue. And she used this grand and glorious idea on an information center to acquire those. And I was used. I didn't appreciate it when I found out, when it all boiled up that all she wanted was the Gilbreth Papers. Anyhow, we finally got that resolved when the light dawned, and I said, "SWE, get the hell out. We don't want any part of this woman. She's—." [45:00] Now, unfortunately, Helen Grenga was president [of SWE] at that point in time, [was] at the university, at Georgia Tech. And there was a little bit of conflict there, but I just planted my foot and said, "We can't afford this. We can't afford to alienate Purdue. We can't afford to alienate our president of our Society." And as far as I'm concerned, it's—.

Margaret Pritchard Interview

- TE: Okay. Okay.
- **MP:** But, unfortunately, it left a stink. But Georgia Tech, I think Helen probably was quietly instrumental in that, but she soon lost her credentials, or left the university. I don't know whether she left under a cloud or not, but she—and her only gain was she wanted those Gilbreth Papers. [46:00]
- **TE:** Can you tell me about some of the other activities and events that you worked on within SWE? Some of the—.
- MP: Well, I've been chairman of the archives committee when we first—we had a cage in the basement of the Engineering Center which was chockablock of things and stuff. (laughs) We had one room upstairs. We had dear Winnie White, who was our executive secretary, and whenever anything came in she would just chuck it into one of these places. (laughs) Carolyn Phillips was another one of the archives chairs, and Amy was the one that got us to Wayne State. Amy Spear. [47:00] We had to fight long and loud because one, there wasn't any budget. Two, we'd go over there when any of us were in New York City and work until we were smelly, dirty, and nobody wanted us around for dinner.

But that was what happened and we finally—. And then of course we got dear B.J. [Harrod] and bless his heart, he helped us get organized before Amy started looking for a repository, and that's when Wayne State bid us in. I remember Radcliffe was one of the schools that looked at us, and there was somebody else. I don't recall who it was. I'm glad we went to Wayne State because—well Amy, I think she would have hung all of us on the committee if it hadn't been Wayne State because one, you had the vaults. Two, you had the people. Three, you had everything that we needed and you were able to take over our mess and make sense out of it. [48:00] Because, it was—we did our best with what we had, but it wasn't good archiving.

- TE: Why did you join the archives committee? Why was that important to you?
- MP: History has always been important because of my own personal heritage. And seeing things lost, like the photograph of the first international conference was in the bottom of a box that had been submitted to weather. Things like that hurt. So heritage is part of it, and heritage is part of me. So that's the reason I got involved.
- **TE:** And you did the Time Capsule in the SWE magazines, where you would pull information from the archives. [49:00]
- MP: Yes. That was just a spur of the moment thing. It didn't last. I passed. I have a horrible habit. I get an idea—just like downstairs a few minutes ago, I get an idea and I, "You can have it." (laughs) I love being—having a straw man in front of me for my ideas. Getting rid of them.
- TE: Can you tell me about the Over-the-Hill suite?
- **MP:** (laughs) We were just talking to the sales manager here down in the lobby for the hotel that we're in right now, and one of my colleagues was saying, "Saturday

night I hope you have a sound barrier on the 17th floor." [50:00] He wanted to know why, so we had to tell him about the Over-the-Hill suite. Cherry Hill, we had five white-haired ladies, including the two Parker sisters and Winnie White, etcetera. [Editor's note: likely referring to 1982 national convention in Dearborn, Michigan, rather than 1980 convention in Cherry Hill, New Jersey.] And they had gone across the street to the shopping mall to get their hair done before the banquet. Anyway, when they got back to my suite—they had come to my suite for some reason, maybe just to give me a bad time. But anyway, they brought a bottle of scotch and a bottle of seltzer, and we had the Over-the-Hill gang. I was the only one in the gang that wasn't white-haired. Anyway, that was Cherry Hill. Next year was Seattle, and Minta and I were rooming together and the hotel had screwed up our reservation. And so it we ended up we had a very lovely suite which included a wet bar. [51:00] So that became the Over-the-Hill suite. Last year it was Over-the-Hill gang, then it was Over-the-Hill suite.

And the idea is—Minta has documented this in the magazine. And the idea was it was a place to just come kick off your shoes. In fact, that was the game—I won't give you her name, but we had one of our senior members who is now an Achievement Award recipient—everybody would step out of their shoes and be comfortable when they came into the suite. One of our dear achievement awards discovered that it was more fun than a barrel of monkeys to take that pile of shoes, particularly after the banquet when ninety-five percent of the shoes were black, stir them up. (laughs) So when it came time for you to get your shoes, you

had to go through the whole—. Anyway, that was the first Over-the-Hill suite, and that happened by accident because Minta and I were housing together and we ended up with a wet bar. [52:00]

We discovered that the suite served a very, very important purpose. And that was—in fact, this word that I invented with the story in the current magazine—intergenerational support. Because, as a student, you can walk in and talk to anybody who was recognized in the industry that you want—the discipline that you wanted to participate in. As a student, you could talk to the number one [person] on a one-on-one basis. And, whether a student or a young woman engineer, you had the opportunity to meet the peers of your profession. And that's very important to our younger engineers. That was the start of the suite, and this is its twenty-sixth year. [53:00]

The one problem we have is that we started—I don't remember if we started that year or the following year. I think it was the following year. Anyway, of inviting no, we did it that year—inviting the recipient of the awards—at that point, we had just the three important ones—to the suite after they received their honors. That meant that over the period of the twenty-six years, that now it's a question if you can get both feet on the floor, consider yourself—. And if you're claustrophobic, don't go near the suite on awards night. But again, like last night, we had several people in the suite, and again, it was peers and would-be's. I won't put it "wannabe's," but "would-be's". [54:00] And that has happened consistently, and in the article I quoted three different anecdotal situations that involved peer and

prodigy. So, that's the Over-the-Hill suite. The only thing is, I've retired now. I show up once and leave (laughs).

So, anyway, it turned out to be something that has served its purpose very, very well. Of course now we have the Lava Lounge, which is an-oh, shoot. One year, the first year we started having large corporations show up, we had to put our foot down because the corporations were not—when having hospitality suites, were not aware of our juniors, our students, and liquor laws. [55:00] And so at that point in time, the exhibitors had to be told. You either have a screening mechanism or don't serve alcohol. Or send them to the Over-the-Hill suite. The Over-the-Hill suite has always been very, very conscientious. Our students come in, they get the word. That year was pretty messy. I think it was in Kansas City. Some of the kids had gotten just a little carried away, and gotten—. Well, the thing was, they had their [name] tags on them when they got stopped, so they [the police] brought them back to the hotel and said, What's going on here? And then when we got to talking with the students, we discovered they'd been in a hospitality suite with a corporation and that's where they'd gotten it. [56:00] Those are some of our unfortunate circumstances.

- **TE:** Can you tell me how SWE has changed over the years? Since you've been a member since 1961?
- **MP:** We are still trying to keep the camaraderie going. With this many members—it's just like breakfast this morning. When you're sitting in a room of well over a thousand people, when we used to sit six tables with ten to a table for breakfast,

it's quite a bit different. [57:00] And I do find that the collegiate attitude is not what it used to be. Not what it used to be. They were—it used to be, they were here to learn. Of course, with the—you figure, back in the sixties we had twelve degrees in engineering. We've got over 125 now. Plus the technological advances. Just like our keynoter this morning. Of course, she was talking in nanoseconds and that was one of Grace Hopper—Admiral Hopper's favorite stories, was she'd bring a "nanosecond" out of her purse. And everybody there who ever took any of her courses was given one when they finished the course.

Technology has changed the attitude, I'm afraid. Just like this morning, I was looking across the table, and a green tag—which is a student—completely oblivious as to what our keynoter was saying because she was—I don't know who she was talking to. [58:00] In fact, we were talking later. We said, You know, maybe we ought to collect cell phones and iPods at the door to make sure they're paying attention. (laughs) Because what she had to give was marvelous, but when somebody is sitting there text messaging to who knows whom— boyfriend, girlfriend, somebody in their own whatever—and I don't know how we're going to handle it because I can't see us—you know, freedom of speech, we can't collect them all at the door. But, at the same token, one of our senior members was sitting a table over and telephone went off. Okay, now, we have had a past president who, in her corporation, had to have the phone with her, but she—as soon as she got involved at that level in corporate, she got a vibrating—. [59:00] Then she would excuse herself and leave the room, unless she was on

the podium. So there are manners, and I'm afraid our younger collegiates are not—. Etiquette is—.

- TE: Do you think that is something they will learn once they begin their careers?
- MP: I hope. Otherwise, they're going to get swatted. Not by us, but by their peer group. It's just like this—several years ago, I was asked to talk to our school board about where education had gone in the last double decades, and where I thought, as an engineer, it was going to go in the next double decade. [1:00:00] And they were expecting this big expanse on technology, blah, blah, blah. I said, "Nope." I said, "We have three things that we have to teach from K through 12, and that's reading, writing and arithmetic." I said, "Now you're going to add two more to that curriculum: logic and ethics." And I said, "If you teach those five, K through 12, you're going to have what this country needs as far as technical students and professionals." And I sat down. That was the end of my speech (laughts). I was laughing because here is this whole room full of teachers all expecting to make all these notes.
- **TE:** Right. (laughs) Can you tell me some of the other organizations, outside of SWE, that you have been involved in? You mentioned ASME.
- **MP:** In the professional world or totally? [1:01:00]
- **TE:** Totally. The ones that have meant the most to you.

MP: Alright. ASME of course is technical support, okay. Engineering Management—of course, when I'm dealing one-on-one with CEOs, you have to have your management skills at your fingertips. Society of Women Engineers— camaraderie, totally. That's the technical side, alright. Now, I have been a member of the Chamber of Commerce. I have been involved, as I say, with my community and education.

My school teacher house sitters love to have me come teach their classes because I was always challenging the kids. [1:02:00] When you take a fourth grader and ask him how tall a flagpole is, or a fifth grader, and he offers to go shimmy up the pole to measure it, and I say, "No. We find a five-foot student, and we put him—. Okay, and then we're going to put another student over here so they can just see the top of the flagpole. Then you measure this, and he's five foot tall. You've got a triangulation, and you measure from him to the flagpole, and you can tell how tall the flag pole is. Strictly triangulation." Kids love that. Kids love that, and if you can get them interested in math and science with those little gimmicks—and I've got a whole hat full of them that I play on them. That's my activity at the education level. Alright.

I've since—this is the end of my third year of being in an assisted living community, and we emphasize the word "community." [1:03:00] And right now I am on the administrative council, the executive council at Rose Villa. I am the treasurer of the Welsh Society, which is my father's heritage. I'm a board member for the pioneer—Sons and Daughters of Oregon Pioneers. And I am

also on the master plan for sewer district. I keep busy. I haven't learned how to say no yet.

- TE: Right. (laughs) Why has it been important to you to volunteer for these things? I know you said that your heritage was important to you, which would explain—.
 [1:04:00]
- MP: I have an overactive brain. I see a problem, and I'm immediately into it to solve it. That problem may be community, it may be residential, it may be whatever. But my gray matter goes into gear. And hopefully I'm still doing that when I leave this Earth. Challenge is my—well, I have two middle names. One is Trouble and one is Challenge. If I'm challenged, I'm gung-ho. And I make trouble. (laughs) In fact, our executive director, as she was going through the lobby, she said, "Hi, Trouble!"
- **TE:** She knows. (laughs) [1:05:00]
- **MP:** Yeah. So anyway, that's the reason for that.
- **TE:** Okay. Well, I think we have gone over an hour. That was pretty much the end of my questions. Is there anything else that you would like to share?
- **MP:** I think it's marvelous that we're getting this. We've tried so many times to get the orals off the ground. In fact, I set up the first six that you did, and since then I think you said over thirty now?
- TE: Yes.

- **MP:** So we've gone quite a ways. We still have a lot of ways to go, because now your predecessor came to Portland and we had Elizabeth Plunkett, we had Dr. Peden, we had Bonnie Dunbar for that set. That was interesting, because we had three specific age levels in that group. [1:06:00] Oh, and we had Joe Webb, who is past 90, in that group. Anyway, that was an excellent, excellent cross-section. Bonnie was an ex-astronaut, or was she still active at that time?
- **TE:** I think she was at the museum at that point.
- MP: Yeah, okay. Anyway, of course we had Joe Webb, who—she and her husband had their own consulting firm. And Pete Plunkett who—Boeing. She was the one woman in Boeing that was—they had tie clasps made for all the men engineers who had been through all—the 707, 7—all the sevens. It was a cluster of sevens in a pewter tie clasp, and she got a broach because she was the only woman that was entitled to the seven sevens. That was one of the ones that we interviewed for that first set. And of course Dr. Peden, who was at that point, that was when she was dean pro tempore. [1:07:00] Unfortunately, she was not selected at UW, but she was pro tempore for that period of time. So, it was an excellent cross-section, age, experience, the whole thing, that first set that we did. And you've had your hands full since then, haven't you?
- **TE:** Yes. (laughs)
- **MP:** Since you came on board. Now, I'm going to ask you a question, which you may or may not want to answer.

TE: Okay.

- **MP:** Out of the ones that you've done, excluding this idiot, which is to you the most revealing into the engineering world?
- **TE:** Of the ones I've done—let's see. You were the fourth interview I've done this week.
- **MP:** I mean, total.
- **TE:** This is the fourth one I've done for SWE. [1:08:00] I would say Sharon Cascadden, I think.
- MP: Yeah, Sharon is excellent. And of course, one of the ones that we did was we had Irene Sharp and Y.Y. Clark together. The black women. Of course, that was the year that we were in Houston and the first year that Y.Y. was in Houston, she got practically—well, she had to be escorted. There was a big hoo-rah with the hotel. And then, when she—we did the oral history with her, that was the year that they gave her the keys to the city and apologized for the mess they had made previously. (laughs) Y.Y. ate that up, because here she'd been ostracized and excluded, then all of a sudden they give her the keys to the city. (laughter) [1:09:00] [Editor's note: the hotel for the 1957 national convention in Houston would not honor SWE member Yvonne Young Clark's reservation when she arrived because she was African-American. SWE leadership threatened to cancel the convention immediately; however, Clark insisted that she stay with a local relative instead. When SWE held its 1998 national conference in Houston,

local SWE members arranged for city officials to issue Clark an official apology,

plaque, and keys to the city.]

- TE: Right. (laughs) Several years later.
- MP: Those are the kinds of people you meet in SWE.

END OF INTERVIEW