## SWE GRASSROOTS ORAL HISTORY PROJECT

**Peggy Layne Interview** 

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## **Peggy Layne Interview**

Margaret "Peggy" Layne has been the director of AdvanceVT and Faculty Projects at Virginia Tech since 2003. Layne received a bachelor's and master's degree in environmental engineering from Vanderbilt University the University of North Carolina-Chapel Hill, respectively. She spent nearly two decades as a consulting engineer on waste treatment and regulatory support projects. In 1998 and 1999 Layne served as an AAAS Science and Technology Policy Congressional Fellow, consulting on waste policy issues in the office of U.S. Senator Bob Graham. A Fellow life member of the Society of Women Engineers, Layne served as national president from 1996 to 1997. She is also an active member of the American Society of Civil Engineers and author of Women in Engineering: Pioneers and Trailblazers and Women in Engineering: Professional Life, both published by ASCE Press in 2009.

During her 2010 SWE Grassroots Oral History Project interview recorded for the SWE Baltimore/Washington Section's Diamond Anniversary Panel, Layne described how she became involved in SWE and eventually served as national president; challenges the Society faced in the 1990s; and fond memories from her time in leadership.

- July 2016

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

**PEGGY LAYNE:** I'm Peggy Layne. I was national president in 1996, '97.

**SP:** When did you first join SWE, and what was your motivation?

PL: Motivation. That's a good question. I first joined SWE in 1979 when I was a student at Vanderbilt University. And the student section was just getting started then and I was already a junior or a senior by that time. So I joined because I wanted to support women in engineering, but I was not active at all in the organization because I was already doing other things and getting ready to graduate, looking for a job, all that kind of good stuff.

SP: What was your first leadership role in SWE? How did that come about?

PL: Well, when I graduated with my bachelor's degree in 1980 I moved to San Francisco and worked for a couple of years and was a member—I worked for less than a year, actually—and was a member of the San Francisco Bay Area section and went to a couple of meetings. [01:00] And that was a very large and active section and I could successfully hide in the back of the room and not get involved in anything. And then I moved to Houston and lived there for about a year and a half, and it was the same story. I was a member. I went to a couple of meetings but it was a big group, they did a lot of things, and I could hide in the background and not get involved.

But then I moved to North Carolina to go to graduate school at the University of North Carolina-Chapel Hill. And I joined the North Carolina section, and I got on their mailing list, and got a notice of a meeting, and I called up to RSVP for the meeting. They were so friendly and excited that I was going to come to a meeting and I thought, "Oh, isn't this nice? I'm in North Carolina. Everybody's very friendly." And I got to the meeting and there were maybe half a dozen other people there. So I could no longer hide in the back of the room and escape getting involved and being an active member.

So I first moved into leadership roles as some kind of officer in the North Carolina section. I don't even remember which one. It may have been secretary or treasurer. [02:00] I think maybe I had to do the newsletter back in the days when we were still cutting and pasting and photocopying newsletters. And from then I became president of the local section and section representative. But, probably more importantly, from a perspective of getting involved at the national level, one of my fellow students in graduate school had been a very active SWE student member and member in California, and she got me involved in what was then known as the student activities committee. So she recruited me to be a student regional coordinator and keep tabs on all the student sections in the Southeast region. So that's how I started on the ladder towards national involvement in the Society.

**SP:** Do you remember how many student sections there were at the time?

- PL: I do not. I'll have to look at the famous cheat sheet and find out how many student sections there were. There were quite a few. [03:00] In fact, by the time I got up to committee chair after a couple of years, there were probably 250 or 300 student sections, and there were quite a few—30 or 40—in the Southeast region. So it was a lot to keep up with. So I was regional coordinator for a couple of years, and this was in the mid-eighties, and then I was student activities committee chair for two years in the late eighties. And then I chaired the scholarship committee for a year, which was also a big challenge, coordinating selection of a dozen scholarship recipients from several hundred scholarship applications. And then in 1990 I was elected to the board of directors as regional director for the Southeast region.
- **SP:** So, when did you first think about becoming president of SWE? [04:00]
- PL: Well, the regional director position was a two-year position, so I was regional director for two years in the early nineties, and then I was elected secretary. And so in '93, I was secretary of SWE, and at the end of that year Jill Tietjen actually suggested to me that I think about running for president-elect.
- **SP:** And what was your position in your company? What was your employment situation when you were president, running for president?
- PL: Well, I worked for a relatively small company. I was located in Tallahassee,

  Florida. I was in North Carolina in the eighties and in '89 I moved to Tallahassee

  and started working for a company that was then known as ABB Environmental

Services. It was about a three hundred person company. We had an office of thirty or forty people in Tallahassee doing environmental cleanup work, primarily for the Navy. And shortly after I joined the company they won the largest contract they had ever gotten, a ten-year contract to do cleanup at Navy bases in the Southeast. [05:00] And it was really as a result of that contract I moved into senior project manager and department manager roles in the company. And that also gave the company the financial ability to support me to serve on the board of directors of SWE and to support me to a certain degree as president. Now it was a small company, a professional services company, not a manufacturing company. So the way the company makes money is to bill for the hours of the employees. And so for me, as a fairly senior person in the office, to be reducing my billable hours to be able to do SWE work was a bit of a challenge. But I was able to negotiate some release time and some travel support for my SWE responsibilities.

**SP:** What experiences prepared you to be SWE president?

PL: Well, little did I know when I became chair of the student activities committee that that was actually one of the largest roles in the Society at the time. [06:00]

Because this was before email and before we really had a very significant headquarters staff. So at that point in the mid- to late eighties it was really still a very volunteer-dependent organization for those kinds of activities. And so I was SAC chair and then I was secretary, both of those being very large roles in the Society and gave me a broad perspective across the Society of how things

worked on the national level and who's doing what and how things got done. So both of those roles on a SWE preparation were good experience to become national president. And from a professional perspective my role for my employer was as a project manager. [07:00] So what I did and do is organize things, figure out how to get things done, who's got to do it, how much time you need, what's the budget, what's the schedule, and those are the kinds of skills that are very transferrable in many different types of organizations, including volunteer organizations.

**SP:** What was going on in the organization when you were president?

PL: We—it seems like an ongoing theme—have had periodic financial crises throughout the life of the organization, and we had another one in the early nineties. There was a recession nationally in the early nineties and there was a tightening of employment for engineers in the early nineties. And SWE overextended itself and ended up having to do some significant, fairly painful budget cuts, reducing headquarters staff. And so we were just coming out of that when I became president. I was on the board. I was on the board from 1990 through '98, with the exception of one year. [08:00] And it was '94 or '95 that we were having the financial squeeze. So we were still in the—sort of the rebuilding mode from that perspective, trying to get back onto a firm financial footing in order to be able to move ahead as an organization.

**SP:** So in addition to personnel, cutting personnel, what other sorts of adjustments had to be made? Were there programs being cut or—.

- **PL:** Gosh, I don't remember any exciting stories about that. I just remember the difficult board meetings where we were having those discussions.
- SP: I see. So that leads directly to my next question. What sort of leadership and management challenges did you face as president of SWE?
- PL: Well, I was actually very fortunate to follow a strong leader as president so she, I think, dealt with many of the most significant challenges, and my year was really a pretty uneventful year from that perspective. [09:00] We were able to move forward with starting to rebuild our programs and keep things moving on kind of an even keel.
- **SP:** So what was going on in the engineering community more broadly? And how did that affect SWE?
- PL: One thing that was certainly going on in the nineties, especially the mid- to late nineties, was the communications revolution and growth of information technology. Certainly when I started at the national level in SWE we were still communicating primarily by paper mail and telephone. Cell phones were pretty unusual, but over the course of the nineties we moved into the world of electronic mail and were able to—made it a lot easier as secretary. My year as secretary, in fact, in '93, we were still in transition. I remember I would get some board reports from board members on paper and some electronically. [10:00] So we were still—email was not universal the way it is today. And cell phones were not universal the way they are today. So it was quite a bit of change in the way we

communicate with each other and ways that have allowed us to really increase our cohesiveness as an organization and to do things, make decisions, communicate more effectively, move a lot faster in getting things done.

**SP:** How did that change how SWE reached out to the broader engineering community?

PL: We were just—the worldwide web was just coming into place in the nineties. And Gloria Montano, who was in the information technology industry in northern California, was really instrumental in pushing SWE to start to develop a web presence and put up the first website for the Society. [11:00] We were actually, at the national level, in a sense trailing our student sections at that time. The student sections were starting to put up websites, and we were really struggling to figure out how to come to grips with that and develop some identity guidelines for the Society so that we could have some sort of consistency across the organization. As well as give our professional members help in establishing websites when they weren't necessarily all prepared to do that. They were coming from different kinds of professional backgrounds. They weren't in the IT industry at that time. It was a totally new thing.

SP: Did your background in working with the student sections help you to understand or be more in touch with where they were going and help them to lead the Society in generally in this, sort of, electronic revolution?

PL: Yeah, that's a good question, but I don't really know that it did. [12:00]

**SP:** What were some of the big national issues going on when you were president? How did they affect SWE?

PL: Well, in the early nineties there was an economic downturn and that certainly, I think, affected us financially as well as membership-wise. Our membership numbers were fairly steady through the nineties, between fourteen and sixteen thousand members. But actually that sort of hides the trend that we had of declining professional membership and an increasing student membership. And at some points in the late nineties, about the time I was president, we actually had almost twice as many student members as we had professional members. So we really had to focus on providing programs for those students and communicating to them that there was life in SWE after they graduated and encouraging them to upgrade their membership and continue involvement with the organization.

**SP:** What were some of the memorable things from your year as president?

PL: Well, I was fortunate to be president and to participate in an International Conference of Women Engineers and Scientists, ICWES X in Budapest, Hungary. [13:00] So in the fall of my year as president I traveled to Budapest with several other—about half a dozen SWE members, I think, attended that conference. And so, that was a fabulous experience to be able to meet women engineers from around the world and to talk about what we were doing in the Society of Women Engineers in the U.S.

**SP:** And did you find that SWE was in the leadership of women's organizations in the world, or was there a lot to learn?

PL: It was—no, people looked up to us. People looked to us for information. It was interesting to see the similarities in the challenges that women engineers face in different countries and to make some connections that we have subsequently built on—and that Michelle [Tortolani] will talk about some more—in the next decade. And we had, of course—SWE members had been involved in the ICWES conferences since the very beginning. [14:00] SWE had hosted the first one in 1964 in New York, and again in 1984 in Washington. And there have been some pioneer members who have attended many of the ICWES conferences, which occur every three or four years ever since. So we had quite a history of involvement with that group, which has subsequently become more formalized as an international organization connecting women engineers and scientists.

SP: And SWE has a history with ICWES, maybe both growing together?

PL: Yes, very much so. And I also want to talk about the national survey that SWE did in the nineties, starting out in the early nineties that Patricia Eng put together, a pilot survey to collect data on women and men engineers and their career experiences. SWE had a statistics committee from very early days and published little brochures called *A Profile of the Woman Engineer* that you can find in the archives. [15:00] Had put those out every couple of years, which were primarily data on SWE's members. We would survey the membership and do some compiling and correlating and, say that the—"Okay, the average woman engineer

in the US is thirty-two years old and married with one and a half children and works in the defense industry." Or something like that. So we started to get curious about what does this kind of information tell us? And in order to really draw some conclusions we wanted to collect similar data on men. So we collaborated with the National Society of Professional Engineers and did a pilot in the Midwest with SWE's Region H, Midwestern region, and a similar geographic area with the National Society of Professional Engineers. And as a result of that pilot survey were then able to get funding to do a national survey. And we collected data on about a thousand women and a thousand men across the U.S. and worked with the American Association of Engineering Societies Engineering Workforce Commission to do a data analysis and prepare a report that actually came out in '93, the year I was secretary. [16:00]

And you haven't asked this but I'm going to tell you anyway that the first time I ran for president-elect of the Society, I was not elected. So I was on the ballot in '93 for president-elect and was not elected. And to keep me involved in the organization the president asked me to chair the statistics committee, which had just published this report called the National Survey of Women and Men Engineers. So part of my responsibility that year that I was off the board as chair of the statistics committee was I put together a presentation of charts and graphs of the results of this national survey and took it on the road. [17:00] And gave at least a dozen presentations to different SWE conferences, to the American Association of Engineering Societies, to different groups across the country

about what we found, about the similarities and differences of women and men engineers. And that was really another good experience that prepared me to be president later on when I ran the next time because it gave me a chance to hone my public speaking skills and get used to talking in front of an audience.

**SP:** What was your—what's a favorite memory from your year as president?

PL: Well, it's hard to pick any one but the things that really stand out in my mind were going to the region conferences. And I got to go to Grand Forks, North Dakota to a region H conference at the University of North Dakota. And I got to go to Montana State University in Bozeman and make a little side trip to Yellowstone National Park for the region J conference. So those were some of the memorable occasions from my year. [18:00]

**SP:** What was your—what were your most and least favorite parts of being president?

PL: Well, my favorite part was meeting people. Although that's been a challenge in subsequent years because people will still come up to me occasionally at conferences and say, "Oh, I remember meeting you, blah, blah, blah, blah." And I'm like, "Huh?" (laughs) Because I'm terrible with names, and I can sometimes remember their faces, but I can certainly never connect the names with the faces. But the opportunity to go to different parts of the country where I've never been before and wouldn't have had an opportunity to travel to and meet SWE members who were doing interesting things and having fabulous careers all over

the place. And one of my favorite experiences in SWE in general, not specific to my year as president, is the intergenerational aspect of the Society and the opportunities that I've had over my almost thirty years, over thirty years of involvement with SWE, is the opportunity to meet some of the pioneer members and the older members, and now the younger members who are coming after us to start on their own careers. [19:00]

**SP:** What kind of message would you have for future SWE leaders?

PL: Future SWE leaders. It's an opportunity not to be missed that opens doors and gives you opportunities that you never could have imagined to expand your horizons and do different things. It's hard not to sound sappy when you answer a question like that, but—. And the challenges that you face, that we all face in volunteer organizations and in our careers are complementary, and they give us experience that we can take with us for the rest of our lives.

SP: How have you stayed involved with SWE since you were president?

PL: I've been actually very active in SWE over the last thirteen years. In fact, near the end of my year as immediate past president I was asked to chair a search committee to hire a new executive director, which I did. And subsequently served on the editorial board for SWE magazine and chaired that. [20:00] So I spent about six years working very closely with Anne Perusek and various other staff and volunteers on the SWE Magazine. And I served on the—what do we call it?

Oh yeah, I did nominating committee. I try to forget about that. (laughs) I've

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actually served on the nominating committee twice as a representative from

Region D and from Region E. And I chaired the Achievement Award selection

committee, so that's actually a fun thing to do. But I've also been involved in

government relations and public policy for SWE, and I'm currently the chair elect

of the government relations and public policy committee.

**SP:** What's the biggest change you've seen in SWE since you were president?

**PL:** We're so much more professional now. [21:00] We have a very professional

headquarters staff that frees up our volunteers to do a lot more of the fun stuff

and less of the nitty gritty stuff than when I was first getting involved with the

Society. And our reach has expanded greatly with all of the new communication

technologies that we're taking advantage of. I think we're able to provide a lot

more for our membership than we have ever before.

**SP:** Thank you for sharing your time with us today, Peggy.

**PL:** My pleasure.

**END OF INTERVIEW**