SWE GRASSROOTS ORAL HISTORY PROJECT

Natalie Givans Interview

November 9, 2012

Society Of Women Engineers National Conference

Houston, Texas

Reuther Library Oral History ID: LOH002111.16

This oral history interview was recorded November 9, 2012 at the Society of Women Engineers National Conference in Houston, Texas 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.

Natalie Givans is a senior vice president at Booz Allen in the company's defense business. As a child she was inspired by the television show Star Trek and originally wanted to become an astronaut. Ultimately she pursued electrical engineering and assistive technologies at MIT, where she received a bachelor's degree in 1984. She began her career at Booz Allen as an engineer designing signaling plans for the company's STU-III secure telephone project, and has remained at the company throughout her career in cryptography and system security engineering. Particularly interested in diversity and work-life integration initiatives, she serves on the Booz Allen Women's Leadership Initiative and represents the company in the Girl Scouts of America's Make the Connection program. A life member of the Society of Women Engineers, Givans received the Society's Suzanne Jenniches Upward Mobility Award in 2012 and represents Booz Allen on SWE's Corporate Partnership Council.

In her 2012 Society of Women Engineers Grassroots Oral History Project interview, Givans described her childhood and initial interest in engineering; her experience at MIT; her career at Booz Allen; career advice she has received from mentors; her work with diversity and work-life integration initiatives within the company; her involvement in SWE; and her advice for women engineers.

TROY ELLER: Today is November 9th, 2012. This is a SWE Grassroots Oral History Project interview with Natalie Givans. The interviewer is Troy Eller. We are at the Society of Women Engineers Annual Conference in Houston, Texas. Natalie is a Senior Vice President at Booz Allen Hamilton and represents her company on the Society of Women Engineers Corporate Partnership Council. She is a life member of SWE and is this year's recipient of the Suzanne Jenniches Upward Mobility Award. Thank you for joining me today.

NATALIE GIVANS: It's nice to be here, thank you.

TE: To begin with, can you tell me about where and when you were born and grew up?

NG: Sure. So, I was born in 1963 in California, a town called San Bernardino. And I grew up, though, in northern California. We moved when I was about four. So I lived in San Francisco and then the suburbs: Sacramento, Stockton, Walnut Creek, Concord, Pittsburg. (laughs) All over northern California. [00:01:00]

TE: Okay. And can you tell me about your family?

NG: So, I have a mom—who is still alive—and she was primarily a single parent throughout my childhood. She was married and divorced a number of times, so I had some very interesting different experiences with different fathers that were all wonderful in many ways. But I had my one special father, from when I was eight years old. They didn't stay together forever, but after they separated I kept him. He was great. Engineering brain, logical brain. You know, a learner, lifetime

learner, and was really one of my major encouragements and support as a young woman.

TE: Okay, and how did you become interested in science and math and engineering as a child?

NG: Well, I would blame my favorite dad, because we started watching *Star Trek* when I was eight and watched every episode. And I was really excited for some reason about going into outer space, being the first woman to leave the solar system is what I thought back then. [00:02:00] So over the years I pursued that passion, but I also enjoyed science and technology classes and thought I was good at them and good at math. So I kind of fell into it, but maybe not so much by accident.

TE: Okay, all right. Did you receive any encouragement or discouragement in school before you got to college?

NG: I felt I did. My mom sent me to some summer programs that had science— chemistry, for example, one summer at the local community college—and I just found it fascinating. So people that I would meet through those avenues were very encouraging. I would say there was the typical bias or discrimination around girls and what they should or shouldn't do. But because my mom and my stepdad were so supportive and so sure that women could do anything and I could do anything I had set my mind to do, I didn't really notice the discouragement.

TE: Okay, all right. So, can you tell me how you made the decision to study electrical engineering and why you decided to go to MIT? [00:03:00]

NG: Absolutely. So, my dad—my stepdad—had also wanted to go to MIT. And then when the war, the Korean War, came along he was an Air Force pilot—well, what happened is he wasn't an Air Force pilot. He was a young man, seventeen years old, and had a choice to go to MIT to study nuclear physics or to go in the Air Force and fly jets. And so you can imagine as a guy, perhaps, the jets won out at the moment. So, I knew that MIT was a place to go—an interesting place to go for that kind of a background. So, I did look at Berkeley, and Stanford, and Caltech, but MIT's acceptance came in last. I was getting nervous, and then I got it. And when I went there I was actually part of the Air Force ROTC program. I thought maybe I would do that to get into the space program. So I actually started out in chemical engineering, and through a series of unfortunate events the Air Force and I decided that it wasn't a very good fit. I had some issues with their discrimination, and they had issues with me being a woman. [00:04:00] Well, I guess that's related, so. (laughs)

And so I decided that I would switch and actually get loans and grants, and work full time, and still go to school. And so I actually switched majors, too, to electrical engineering. Partly because I was intrigued by the digital design technology at that point, and I was also really interested in speech processing, especially for assistive technologies. So, I felt that that would be a really interesting field to be in, and so I completely changed everything after sophomore year.

TE: Okay, all right. At that time, did you want to go—what were your career goals at the time? Is that what you wanted to pursue, those specific things, or—?

NG: Well, initially I did want to be an astronaut. My eyesight wasn't as good, though, as it needed to be for a pilot so I was actually looking already toward payload specialist, maybe doing fuel research. And so then, when I ended up leaving the Air Force program, I did basically decide that the space program might not be in my future after all. [00:05:00] But I was so intrigued by then about things you could do for, again, the assistive technology. So I was really interested in something that would help more of the human side, whether it be healthcare or environment and energy types of topics. So the speech processing seemed like a natural avenue at the time.

TE: Okay, so what was it like to be a female engineering student at MIT at that time?

NG: I would say it wasn't as good as it is now. (laughs) When I speak to young women at MIT they're very enthusiastic, much more so than I think we were. There were 30 percent women in my class, the class of '84. However, only 10 percent were in the engineering classes. So it was actually—I don't know if I'd call it lonely because I was not wired that way, to feel that somehow I was a victim or that girls were being discriminated. I just felt like, Okay, there's more guys in the class than women, but so what? You know, I'm here and I like it and I'm going to keep doing this. So it didn't discourage me, but I know there were other women, and still are, who get discouraged when they see such a low percentage of women in these courses. [00:06:00] And anyway, that's what it

was like. But I think that we could change that in the future. I think we could help

colleges describe engineering in ways that are more meaningful and help women

see the connection between engineering and health, and engineering and

energy, right? Renewables. All of the things that I think jazz women.

TE: Okay, okay. Did you have any mentors or supporters while you were in college?

NG: I definitely did. I got really lucky. The counselor they assigned me I didn't like so

much, but I found a guy named Hal Edgerton. And he's famous for the strobe

photography that he tied to physics, right? So he showed how the human body

works, how physics of milk drops or bullets work, right? Fascinating work. And I

got lucky. I walked by his lab one day and walked in and talked to him. And

here's—you know, I don't even think I realized at the time how important he was

or how special. I just liked his work. And he ended up taking me under his wing

and became a wonderful mentor. [00:07:00] And then when I went into the

speech processing area I met Victor Zue, and he ended up being the lead for the

whole computer science and AI lab there. But at the time he was a researcher

and teacher, research leader in the speech processing area. So I decided to do

my thesis with him in connected speech recognition. So, they were both probably

my best and favorite mentors at the time.

TE: Okay. You became involved in SWE while you were at MIT, right? Could you talk

about what led you to join SWE?

NG: I think it was related to that 10 percent women in engineering, and I felt that it

would be nice to have a support network and be able to talk to other people who

might be experiencing what I was. I don't have lots of memories about SWE on

campus because it was just so full, the time between working and school. What I

remember is I didn't get to go to a lot of the events, but when I did I remembered

feeling very supported and it was an interesting and nice network of people.

[00:08:00]

TE: Mm-hmm. How did you manage your studies and you're working—while you're

working full time at the same time. That's a heavy load.

NG: It was, and I'm not sure. I think what happened is I gave up sleep, and I think to

this day I suffer from—or maybe I benefit from—not needing as much sleep. At

least I don't think I do. But I did. I would work at the coffee house in the middle of

the night for a four-hour shift and do my homework, because it was pretty quiet. I

would sometimes then sleep until 7:00 or 8:00, right, and then go to class. So I

think the way I managed it was just trying to remember, Try to stay focused. I

really wanted to graduate from MIT and not end up having to leave because of

finances, so I feel like I—and I was lucky that MIT had the need-blind admissions

policy where yes, I started on scholarship from Air Force, but once that didn't

work MIT was willing to help me with Pell Grants and with scholarships. And so I

still had to earn a lot of money but it wasn't quite as bad as if I had nothing from

the school. [00:09:00] But, it was still—it was challenging. (laughs)

TE: What happened when you finished your program. Did you go on to your master's

directly or did you enter the workforce?

NG: I didn't. I entered the workforce. It was because we didn't have any more money and I didn't really know how to go about getting grants for graduate school. And so I ended up deciding I'd rather have money in my pocket and start my adult life. So when I interviewed with all the different companies, Booz Allen was what I chose. And they ended up helping me to pay for a master's degree then, later. So I started a year later and got a master's at Johns Hopkins during a four-year period at night, continuing the trend. (laughs)

TE: Right. (laughs) Why did you choose Booz Allen?

NG: It's interesting because I interviewed with the typical hardware and software companies. I interviewed with government organizations like National Security Agency, and Lincoln Labs, and others—at least semi-government, right? [00:10:00] And what I found is that Booz Allen had a different story to tell. First of all, they weren't well known on campus. I mean, I don't think anybody had heard of them, really. And I think those who had, thought of them as just management consulting. The group that interviewed me, however, was making a kind of an experimental run at MIT. They were the technology part of Booz Allen. Only one thousand people of twenty-five hundred did technical work, but those are the ones that interviewed. And what they wanted me to do was continue my speech processing work and then get in to cryptography. And what I liked about it was that it would combine technology with the fact that you would be working as a team member, and you would be meeting clients right away, and helping clients solve problems. To me, that was more appealing than just software, or just hardware, where you might be sitting in a lab. Maybe alone, even, which I had

experienced during one of my summers. And I thought, you know, this sounded really interesting. And it's turned out to be—I mean I've stayed all these years— turned out to be exactly what they said. [00:11:00]

TE: Okay, all right. What was your first position?

NG: I was an engineer. And I was actually designing programs to look at the spectrum, the HF frequency spectrum, to see how it would affect cryptos. I was designing signaling plans for the STU-III, which was a secure telephone program. And I was also analyzing crypto in general and how it behaved for one of the Navy programs. It was exciting because I was doing what I thought was real hands-on engineering: programming, and digital design review, and signaling plan design. It was fun.

TE: Okay. When you first started were there many other women in your department or in your area?

NG: Not so many. There were not any senior, senior women. So there were women who were middle managers and none of them were engineers. They were more program manager and more of the liberal arts-type background. So, there weren't a lot of role models for engineering women. [00:12:00] But they actually started hiring—my year was sort of that experimental year of hiring right out of college. And so my year, and then like five years after, there were a lot of women hired who were much more technical. So it was not lonely, but we were still sparse.

TE: Okay. Do you think that it hindered you in any way, not having women engineers in middle and upper management that you could look to?

NG: It could have. But, again, I think I was wired differently from a lot of women. My mom and dad, again, with that idea of I can do anything if I set my mind to it. What happened for me is two things. One is I was really driven to learn everything I could, even if it meant working off hours. And so I would bootstrap myself into things and learn to be an expert at something. And the second thing that happened—that was luck, but it worked out well—was that all of my management chain, from the guy who hired me all the way up to the partner, they were all engineers. They were all technical. So they actually understood me. [00:13:00] They understood what I could do in that kind of a firm. And so I actually got lucky, because I felt like they were embracing and supporting and encouraging me more than they were fighting me. In other words, I never felt that I didn't belong. The only time I would feel that way was at a client meeting where there might be thirty guys in the room, all much older. And there were times when I did feel a little insecure or uncomfortable. But again, my bosses were so amazing that they helped to boost my sense of security in what I knew and what I was doing.

TE: Okay. Can you talk about how you progressed through your career to the position you're at now?

NG: Definitely. So, you know, as a new engineer, I was mainly providing project support. But over the course of just a couple of years they started letting me

manage other people. So as more junior people were hired, I got the opportunity to take a responsibility for directing their work. And then I got more and more senior and was actually managing projects and programs, started to have client relationships that were mine, that I was actually bringing the whole firm into that client. [00:14:00] So it was a progression from very technical into more and more levels of management, but always with a technical bent until I became a partner in 2002. And as a vice president I was leading a couple of hundred people. But again, all in cyber security, or cryptos, information insurance, all that pretty technical work. So it was exciting to see that you could stay in what was classically a consulting firm and yet be technical and have that be a great thing.

TE: Okay. When you first started did you envision yourself reaching this level of management?

NG: You know, yes and no. So, I had a bet with a guy who was also the same birthday as me and we both started about the same time. And I bet him that I would be the CEO first, and he bet he would. (laughs) But the no part is I was kind of kidding. I mean, who knows at that age? And I really didn't think I would stay more than two years. [00:15:00] So anyway, long story short, he left after about five years. He's doing very well elsewhere and we still keep in touch. I have decided I actually don't want to be CEO. I think it's not really something that I'm cut out for now. But, I did not really think that I would make it all the way to VP. I didn't know at the time how that would look. And as I looked up it was all these older guys, but that's changed.

TE: Can you tell me about some of your career successes and also some of your challenges and how you've dealt with them?

NG: Sure. On the success front—boy, it's also related to lessons learned that I'll bet you'll ask me about later. But the successes were hiring good people and figuring out what each of them needed differently to be managed well. In other words, every person has a different set of motivations. So part of what I find that I get good feedback about is that my style is one that basically does look for the best in each person and looks for what motivates them. And so I don't have a one-size-fits-all management approach. [00:16:00] Hiring great people was a success. Learning how to manage them well was a success. All the mentoring that I do I think is successful from the feedback I get.

On the technical side, I always threw myself into what I was doing and I got, again, great feedback from clients, that they felt like we worked quickly, the quality was there, the intellectual thought was there. And I felt good about that feedback, both for my teams and also sometimes for myself. So, I think there were successes in both of those ways. And then I would say, as I got more senior, I got to be part of the infrastructure of the firm and got to be responsible for programs that helped make the firm a better place, not just for women but really for everybody. And so I found a delight in making a difference there and having it matter. I really felt those were successes as well.

As far as the disappointments, discouragements, what was the question?

TE: Your challenges.

13

NG: Oh, challenges. Oh my goodness. [00:17:00] Well, I guess on the counterpoint of

hiring good people were that I also made mistakes. And I'm a person who

probably stays too long trying to believe in a person and see if they can make it.

So I would say that the times I have had the most trouble is when I have a blind

spot about somebody just isn't going to make it, but I'm trying to defend them,

you know, until they prove that they can't make it. So, I think that's a challenge

for me in the company at times.

I think for me growing up as a technical person, there are times I still—even

today, I still get teased after twenty-eight years about, "Natalie, you're such an

engineer." And I think what that's code for is I do tend to approach a problem

with, Alright, what's the end goal? Where am I? How do I get from, quote, A to B,

right? And I believe that there is a pattern to get there. Not necessarily a

repeatable pattern, but I believe you can always find a pattern. And the criticism I

might get would be, Gosh, you know, there just isn't always a pattern. Sometimes

you just have to trust your gut and intuition. [00:18:00] I actually feel like I can do

that, but because I'm an engineer I think people don't think I do that. They think I

always plan everything out. So that's a challenge at times, to break the

stereotype of being an engineer in a firm where it's more than engineering.

And I guess another challenge would be learning how to navigate the senior

ranks. It's not always easy and when it's a male-dominated environment. Still,

even today, we have 30 percent women in management, we have 20-some odd

percent. But it is still dominated by the older males. And I think there are times

when women don't give ourselves enough credit for what we're doing, we don't

speak up enough about how well we're doing, and we also don't always have the

confidence we need. So when you put that all together, it's not necessarily that

the guys don't think we can make it or that they're not helping us, but it

sometimes is that we're holding ourselves back. And so learning how do you

have the right conversations with the seniors at the right time with the right

amount of airtime, I think is a challenge even for me. [00:19:00] And I think I've

done well, but I definitely see some days where I think, Huh, after all these years

I haven't navigated that situation very well.

TE: Okay. Have you had any mentors or advocates who have helped—

NG: Oh, yeah.

TE: —who have helped you navigate situations like that?

NG: Absolutely I have. I mean, I was, again, very lucky with those earlier bosses. And

later in my career I would seek people who I thought did understand me and had

an affinity for what I'm trying to do in the firm. So I've had many, many mentors.

Mostly men, still, because again a lot of the firm's leadership are men. But there

are more and more women in senior ranks, and more senior than I am. And so I

have found it to be wonderful to have the support in the company. So I've had a

lot of good mentors, and sometimes for different reasons, in different ways. Not

only in the company, but outside of the company.

TE: Okay. What have the mentors taught you. What are some of the things you've

gotten from them?

NG: Sometimes it's been as simple as the lesson around being more confident and speaking up more. [00:20:00] One of the great lessons one of them taught me was that I'm a person that doesn't really like to take a lot of airtime in a meeting, and so I'll tend to sit back and listen, and I may speak up if I think I have something to add. But if a lot of people have said something in different ways and I think, Okay, it's already been said, I will often not speak up. And one mentor said to me, "You know, we want to know how you think. Because it's not just that you do or don't agree with the general tone of the room. It's what is it that—how did you arrive at that decision? Because the senior leader in that room—who's then going to go on to whatever their meeting is in their level of involvement in the firm—if they know here's all the tradeoffs, here's why people agree, here's why they disagree, it makes them a better leader." And it didn't occur to me until that day. And so, that's been great because I've been able to turn around and tell other people who are more quiet or more laid back or whatever, that this is important to speak up. So that's probably been one of the best pieces of advice in the recent years. [00:21:00]

TE: Okay, all right. Have you had any encouraging or discouraging situations come up during your career?

NG: I would say lots of encouraging situations. I have been blessed in this company to have them help me think about my place in the company. And for the most part it's actually been other people who've told me that I'm ready for the next role, even when I don't think I am. So, I would say that that's very positive, very encouraging.

16

The discouraging part, I guess the hardest one was one of the times—well, one of the times—was when I was out in San Diego. I had moved out there to go along with the base realignment and closure in 1995. We had a client named SPAWAR. They had moved out. I was the project manager of a big job and most of my team didn't want to move. I had fifty people. So I moved out and a few others moved out. And in the meantime I started dating the man I would end up marrying, but he was in Washington and his kids, his twins. [00:22:00] And so here we are, three thousand miles apart, realizing that we're falling in love, realizing his kids need a mom because their mom had passed away. And the company—it's like the company didn't have a sense of humor about my wanting to move back, which is completely understandable. However, the way it got handled was really challenging for me.

I was close to leaving, but one of the mentors I had in Colorado Springs— actually, I was happening to visit out there during this time frame. I was very uncomfortable and very discouraged. I had received a review I didn't appreciate because I thought, Wow, I'd had fourteen years where I had fabulous reviews and I thought I was doing so well, and this was so discouraging. But he was able to help me see the bigger picture. He was able to help me see that if I could just keep driving forward, prove myself to these new leaders that didn't know me as well and they just made assumptions, then I would be okay. And he was absolutely right. So I spent the next year proving myself to a new set of leaders and by the end of it they were my biggest supporters. [00:23:00] So the idea of

having tenacity, to be true to yourself, true to the goals, and just do your best and not give up, and not run away from the situation I think was a huge lesson for me.

TE: Because of the work that you put in, were you then able to get their approval to move back?

NG: I did move—yes, I did get their approval. I got married. Like, the weekend I moved back I got married. And not only that, but two years later I was promoted to partner, and so I actually don't really think it was a setback at all. I think we made it work.

TE: Okay, all right. Can you talk about your work with Booz Allen Hamilton on diversity initiatives?

NG: Absolutely. It's been so many different things. I was thinking about that today, or many, many times before today. I would say that there's probably four key areas that are interesting to me to think back on. The first one was the Women's Agenda. It wasn't called that, it was called the Women's Forum. [00:24:00] We had a lot of diversity forums, so African American, Hispanic, you know, a lot of gay and lesbian—you know, women's—. and I was actually stepping up to be the leader of the Women's Forum. I really enjoyed that time period because while I was in charge of it, a big issue around women needing places to nurse—well, not to nurse, but to do what they needed to do to nurse their babies—came up. And we were able to establish mothers' rooms throughout all the major offices of the company. And years later, I ended up being a user of a mothers' room so it was very cool. So, I'd say that was my first foray into that.

Another one was the career models task force. We were looking at alternative career models to sort of what we call the well-rounded triple threat, where the triple threat is somebody who's technically great, they're good at managing people, they're good at selling works, they can do everything. The hours and commitment associated with being able to do all that well is sometimes long. [00:25:00] And so what we were experimenting with while I was on that task force was the notion that women, especially who were in the middle of childrearing or elder care, they needed to be able to have a little bit slower path to the top. In other words, not be rushing, and not having to do it all, and do it all well at the same time in their life. So we were able to talk about and put on the table the notion that women needed the ability to be viewed as not failing just because they chose to slow down.

And again, I was a recipient of that because after I got married and had the twins right away as kids—they were nine—then we added a baby to the mix. And I purposely over the last—he's now twelve—over the last twelve years I have slowed down. And so I've actually watched a few of the women who got promoted at the same time, they've passed me, and I don't mind. It doesn't bother me but it's great that the firm doesn't look at that as a failure. They don't say "Well gee now, you're not moving up fast enough. You need to leave." So that was really exciting and encouraging.

We then had the Board Diversity Initiative, by our board of directors. [00:26:00] I was a leader for an entire team of people for our board's diversity initiative and we accomplished so many interesting things during that time period that I thought

were really valuable to the company. And then finally we now have the Women's

Agenda, and I lead the development work stream. And the development work

stream includes outreach to Society of Women Engineers, and to Girl Scouts,

and lots of other external organizations. But it also includes bringing programs in,

like the SWE webinars, into the company to then teach the women and men, you

know, all the different topics, whether it's technical or management.

TE: Okay. What programs have been particularly effective, do you think?

NG: We have so many things going on right now, but I would say everything from the

mentoring circles—which I should have mentioned under the board's diversity

initiative. I got to lead the defense senior women's mentoring circle. What that

was about was partners then turning around and helping women at the next level

to understand how to navigate the culture and be stronger than they may have

been. [00:27:00] So, I think that all of the stuff we do around mentoring, around

leadership training and development has been very successful. When I started

there were no women partners, and there are 150, probably, partners across the

firm. We then—we divested ourselves of the commercial business a few years

ago, so the numbers are going to sound funny but we were down to one hundred

partners in that new model, but of those, 23 were women. And so, I would say it's

been an incredible success at the very senior levels. We have women on the

board of directors now. We have women in the leadership team. And we never

had that before, you know, about eight years ago, so I'd say it's been very

successful. At the very junior levels we're 33 percent women, which is also very

exciting.

Where we're having a little difficulty in still focusing our effort now is that middle

management, where women are in fact getting married, choosing to have

children. They still worry about that work-life integration. And so a big push for us

now is to figure out how to take that middle tier of management and help them

navigate and stay, and realize they can do it in a way that's comfortable for their

families as well as for the firm. [00:28:00] But I think those programs have

generally been very successful. We do a lot where we have men as part of the

conversation, so that men understand their role in mentoring and helping women

to succeed. We have, again, these outreach programs where we do a lot of

recruiting and a lot of professional programs that we bring into the firm. All of

those have really been successful. We've been rated at the top of the list for

Working Mother magazine awards. We get awards for our training and

development. We're recognized in the diversity journals. And that wasn't

happening ten years ago so I do think it's been very successful. We sure have a

long way to go but I think we've come so far.

TE: Why do you think—why is a diverse workforce so important to the company?

How does the company benefit from putting in this much effort?

NG: I think in a lot of ways. If you think about the science and technology workforce

out there, it's just common knowledge that we don't have enough in the U.S.,

right? [00:29:00] So that's a big conversation. And so our company, needing

many, many system engineers, cyber security professionals, you name it—we

have so many needs in science, technology, and engineering—we benefit by

ensuring that this is a workforce that encourages women and minorities to feel a

part of the company. If we didn't tap that pool, we would have a much smaller pool of people from which to select. That's one reason. It's kind of obvious, maybe.

But another one is that we've really learned that the diversity of thought, how women in general tend to arrive at answers to things and how they collaborate, is somewhat different from how men, in general—I realize it's gross generalization—but there's a lot of overlap in men and women's styles, but there's a lot that aren't. And so, what we've realized is that you are so much more powerful as an organization if you can tap in to what tends to be more collaborative teamwork style of women, and tends to be more authoritative and directive style of the men. [00:30:00] You need both, and we're finding it to be really powerful on our teams to have both.

TE: Okay. Can you talk about how your company joined the SWE Corporate Partnership Council and why they wanted to do that?

NG: Definitely. So I got involved in SWE, again, because I had a passion around connecting Girl Scouts with the badge program that SWE had around engineering. So it was a perfect fit. I got involved in the Baltimore Washington Section first, and as we delivered that Girl Scout program I learned more and more about SWE today as opposed to SWE of my college years and found that it was an incredible network, wonderful courses, lots of great information that the CPC generates as a result of its member companies and the investment they make. So there were all these wonderful studies about what's going on with

women in engineering and why are they staying or not staying in industry. So I wanted to tap into all of that, as well as have the benefit of the regional and national conference, the recruiting opportunities. [00:31:00] All of those were such a great value proposition so I brought that forward to the senior leaders and it was really not a hard sell. And so we've been a member ever since. And every year we have to justify it. So we have a leadership team, people who work for me on it, who work with diversity and inclusion, we work with recruiting, and we basically piece together every year what our goals are, what we've achieved in the past, why we think we should continue. And, every year we get approved, which has been phenomenal.

TE: What do you think your company receives from its partnership?

NG: I think several things. So, we receive great resumes, for one thing, when we come to the conferences. That's sort of easy. But we also are helping our own branding. Booz Allen, even to this day, is still viewed as consulting, where people don't really always know what that even means. And yet we have thousands of system engineers and other kinds of engineers, and thousands of scientists and PhDs and all. And I don't think women know that. It's just not known. The company doesn't have that reputation yet, even after all these years. [00:32:00] So I think what we gain also as a brand and a reputation working with SWE that we are, in fact, one of the companies that is very involved in engineering and it's a great place to mix your technical and your people skills.

TE: Why have you chosen to maintain your membership in SWE? You said that you first got involved, again, because of the Girl Scout program. But what do you get out of it still?

NG: So on a personal level, I get the networking. I have made so many for life friends, everybody from Betty [Shanahan] and Karen [Horting] to lots of other people that I've met. I just can't imagine life without my network of women friends, and they're great. So sort of personal level, I would never want to give that up. On a more business level, I would say that I really enjoy the notion of helping the next generation of women, of being able to give back. [00:33:00] And so whether my company is involved or not, my view—and maybe that is still a personal wish—is that it makes me feel good about being able to help women make decisions about their careers, understand how do you kind of have it all, so to speak—or maybe you don't do it all at the same time, but you do it throughout your life. So I find it just really remarkable. When I walked through the halls today of the conference and go through the exhibit hall and go to the interview section, just the enthusiasm and excitement from the women that are there is just incredible. It's not like other conferences that I go to. It always makes me feel happy and warm and I just love the experience. So to me it would just not be even a question.

TE: Okay. What programs and activities within SWE do you participate in and why do you choose to do so?

NG: That's a great question. So we, as a company, we are very heavily engaged with the webinars, meaning that we subscribe to probably every webinar and we actually help deliver some of them at times. [00:34:00] I've personally been able to do that, which is fun. The conferences—regional, but especially national— have been a very important place for us. We participate in a big way. We have two panel sessions this year which we feel very fortunate about. We have a hospitality or networking event every year. We've got over thirty men and women here from Booz Allen, and they get a lot out of just being at the sessions and participating. I was blessed to be the keynote speaker last year, and so that was an incredible way to participate with SWE. On the local level, I used to go to a lot of the lunches. I have a little bit less time available right now to do that. But when I go to the lunches I find that to be, again, wonderful. And then the CPC meetings are very valuable because we talk about issues that all the companies see, and that SWE sees, and what we're able to do is talk about solutions for engagement of women, retention, you know, networks. I find it to be very beneficial.

TE: Okay. What do you think diversity societies like SWE provide that technical societies don't? [00:35:00]

NG: I think that networking among people who are more like yourself—the ability to look up and see women who are senior and who are successful—is something that, yes, you can find in a technical society. But a diversity and technical society—which I think of SWE as both—I think it gives you that richness that you might not get otherwise in an area where there might be 80 percent men, or even 60 percent men, right? In an environment like this it's 80 percent women, and

the women have so much opportunity to look up and get mentoring and see the success stories. So I think that's one of the biggest advantages. I also think it's great for the job opportunities and the job searches. But the most important thing that I learned without realizing it in my earlier years is this notion that it is important to have people around you who are more like you. [00:36:00] In the early days at Booz Allen I thought, I don't need that, it doesn't matter if I'm a woman or a man, just work hard and you'll do well. And I did, but listening to many women's stories I realized that even I, but especially most women, feel much more empowered and secure when they can talk to other women who are going through the same thing at the same time.

TE: Okay. How do you think SWE has changed since you first joined as a student, and then again?

NG: This was hard for me to answer, because as a student I only saw SWE from the standpoint of delivery on college campuses programming, and then I was not active for quite a while, so I think I'm less qualified to answer that.

TE: Fair enough. (laughs)

NG: Okay, that may be one that you can't use, yeah. (laughs)

TE: What do you think that SWE should focus on or strengthen on in the future? [00:37:00]

NG: So I thought a lot about this one, and I had trouble at first with it. But I think what SWE should focus on in the future is continuing to invest in understanding what

works for women in engineering—and science and all these fields that are connected—and what doesn't work and make that information available as quickly as possible to both companies, corporate members, but more importantly, or most importantly, the universities. When I talk to people at MIT and Johns Hopkins—and I'm active with both—about what's going on for women and why women still aren't choosing engineering in the first place as their undergrad or graduate program, I'm convinced that it's because we're not connecting the dots for women—young women—and telling them how engineering supports the passions they may have that are called different things, like the healthcare and environment, right? [00:38:00] So, I think SWE could focus on connecting that corporate brain trust and brain power of the women in corporations and academia, and then bring that back into the academic circles and into the K-12 programs to really create that whole pipeline effect, from K through 12 through collegiate and into professional. I think we could be doing even more than we already do to build that bridge for their whole life.

TE: Okay, okay. What is your advice for aspiring women engineers?

NG: So, aspiring meant to mean more young, you know, age. But I also have ideas for the women who've already been in it. For women who are younger I think part of what they need to do is think about what they love to do and pick something that they will be passionate about. I hear a lot of stories from people where they got into something but then they didn't really like it, but then they weren't sure how to get out. So I think choosing something where it grabs your attention and grabs your passion is critical. I think understanding that your life can be filled with

multiple careers. [00:39:00] In the old days we used to think about, What are you going to be when you grow up? I'm going to be this, I'm going to be that, and you think of it as one thing, one-dimensional. But that's not true anymore.

People can have multiple careers, so women looking ahead at their careers shouldn't be afraid to try something the first time and have it not be the right thing. It would be okay to make a mistake in that first job or two or three. It would be okay to try the small business startup. It's okay to try the large business, the academic, all of the different facets, government careers, right? And understand what appeals to you and build that set of networks. The people you meet along the way will always be in your life if you choose that to be. And then know that ten years into it you can actually start defining more what you really like and narrowing down your choices. But I think keeping your options open, experimenting, taking the risk, being open to experiences and following your passion are the things that I would advise the most.

TE: Okay. [00:40:00] This isn't on the list of questions I gave you, but do you have any recollections on or thoughts about work-life integration as, you know, advancing in your career while raising children?

NG: Definitely, I do. I think there are a lot of lessons learned. One of the biggest ones is to know your limits and to ask for help. And that's not only at work, but in your home life. There are many lessons learned that I won't describe about not knowing how to ask my husband and my kids for help, and thinking that I had to do it all because I was used to running the household, taking care of all the

housekeeping things, whether I hired someone or did it myself, cooking the meals from scratch, working my full-time job, right? Going to all the school programs for my kids. There were times I would drive myself crazy thinking I had to do all of that and not recognizing the need to stop and breathe and realize, Well, maybe the kids could do more. [00:41:00] Maybe my husband could do more. Maybe I could ask for some time off to go work out or do my hobbies.

Those are things I didn't do well, and in the corporate environment it's just as telling. The notion that you have it all on your shoulders and that you don't think that you could actually ask other people or tell your managers that you can't take on that extra assignment. Those are all things that are really hard early in the career to think about. So I think the secret to work-life integration is staying focused on what really matters to both your company and to yourself, but also your family, and figuring out where the priorities are. And then design the job and what you take on in life around how much time you have and how much energy you have.

So, I think the work-life integration is something you revisit as well. Every six to twelve months I realize I'm not as integrated as I wish. But even simple things like SWE and Girl Scouts, all the things that I do, people say "How do you do all that?" I don't think of it as doing all that. [00:42:00] What I think of it is I have this compass, and my compass is pointing toward passion around making a difference in the environment and in peoples' lives. At the same time, helping young women succeed, getting them into STEM, keeping them in STEM. So if you think about it everything I'm involved in, there's always—the part that I'm

working on is always about connection to the younger women, and it's the connection to the STEM aspect, even in Girl Scouts. So, that's how I can do it all, because it all ties together to what I care about.

TE: Okay, all right. Is there anything else that you would like to share today?

NG: I would say that, you know—I think I said it already but I'll say it again—life is long, assuming we're lucky and we're blessed. And it's important to realize that famous saying about life is not a race, it's a journey. So I think learning to breathe and relax, learning to take stock and see what your strengths and weaknesses are, willingness to take care of your own health. [00:43:00] There's a great book called *Younger Next Year* for women that I would highly recommend to women just starting out, because it talks all about not only exercise and nutrition that we always hear about, but it talks about this notion of your circle of friends and your networks, and how important that is to your mental well-being. It just talks about all these great pieces to taking care of yourself. And I think you have to take care of yourself to then be good at life, and be good at engineering, and good at managing other people. And, I think asking for help. I said that already, but that's really important to balance. Have your priorities straight, and enjoy the ride.

TE: Okay. Well, thank you very much, I've greatly enjoyed this.

NG: Thank you.

TE: This is the end of the interview.

END OF INTERVIEW