SWE STORYCORPS INTERVIEWS

Anne Lucietto and Diane Peters Interview

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Anne Lucietto and Diane Peters

Anne Lucietto is an assistant professor of engineering technology education research at Purdue Polytechnic University. She received a mechanical engineering degree from Marquette University and began her career as a principle engineer at Commonwealth Edison in 1985, working for five organizations during the next 25 years, including Driv-Lok Inc. and Fermi National Laboratories. During this time she also taught engineering, mathematics, physics, and business as an adjunct faculty member at Waubonsee Community College and Oakton Community College. She left industry to pursue a Ph.D. in engineering education from Purdue University, which she earned in 2014. A Fellow of the Society of Women Engineers, Lucietto has been an active member locally and nationally, including serving as national treasurer.

Diane Peters is an assistant professor of mechanical engineering at Kettering University. Prior to her position at Kettering, she worked in industry and as an adjunct faculty member and instructor at Oakton Community College and Eastern Michigan University for 20 years prior to becoming an assistant professor of mechanical engineering at Kettering University. She received a bachelor's degree from the University of Notre Dame, a

master's from the University of Illinois at Chicago, and a Ph.D. from the University of Michigan, all in mechanical engineering. She is an active member of the Society of Women Engineers and a recipient of its Distinguished New Engineer Award.

In their 2007 SWE StoryCorps interview, Lucietto and Peters discussed choosing mechanical engineering; their education and work history; their involvement in SWE, including committee involvement, section presidencies, and national involvement; their friendship; and their artistic pursuits.

Diane Peters: Okay, I'm Diane Peters. I'm currently thirty-six years old. Today's date is October 26, 2007, and I'm in Nashville, Tennessee at the moment. And the other person here is my very good friend, Anne.

Anne Lucietto: My name is Anne Lucietto. I am forty-four years old. Today is October 26, 2007. And I'm in Nashville, Tennessee with my friend, Diane.

DP: So Anne, why don't we start by you just saying how you decided to choose mechanical engineering.

AL: Oh, it was kind of a roundabout way. Basically I thought that everyone telling me that I should be an engineer—I thought they were all silly. So I decided to go my own way. I was eighteen and I was going to go into biology and music. So I started down that path and about halfway through I realized that that really wasn't for me. A lot of other reasons, of course, behind that, but I ended up switching over to engineering as everyone thought and I think that's probably the very best career choice I could have made. How about you? How did you choose engineering?

DP: Well, at first I thought that I'd like to be everything under the sun as a little kid. You know how little kids are. You were probably the same way. When I started getting

to the age where you seriously start thinking about it, I was thinking maybe a scientist like my dad, maybe a mathematician like my mom, maybe I'd go into architecture because I loved building things. My closet as a kid looked like a construction set. I mean, my parents got me all these construction toys and I loved them. They had to actually tell me to please move the skyscraper so that we could have dinner. And I was like, "Mom, I'm not done yet!" But I had never thought of engineering. And then when I was thinking about colleges and majors my father said, "Diane, I know engineers at work, and I've seen what they do, and I think you might like it." So I said, "Well, I've got to put something down as what my prospective major is." So I said, maybe engineering—check that box, took a pre-engineering course, and decided, "Yep, this is it. This is fun. I'm going to be a mechanical engineer."

AL: Good deal.

DP: Yeah, it is.

AL: So what school did you go to?

DP: Which one? (laughs)

AL: Go ahead. List them all. (laughs)

Okay, I went to the University of Notre Dame for my DP: undergraduate [degree]. And then I decided that I was done with school and I was never going to go back, which later changed. And I went into the workforce, later decided, "You know, I don't know everything yet, so why don't I get a master's degree." And I chose the University of Illinois at Chicago for that. Very good school and it was conveniently located and they had a night program so that I could have the immense joy and fun of juggling work and school. Which was quite the experience, as I'm sure you know. And then I thought, "I'm done now." Uh, no, not quite. Actually, as you know, I decided to go back to school again and now I'm at the University of Michigan in Ann Arbor, working on a PhD, of all things, also in mechanical engineering. How about you?

AL: Well, I went to Marquette. I ended up going to college at St. Theresa—Winona, Minnesota—that's actually closed.

That's where I did that biology and music stint. And then I transferred over to Marquette University in Milwaukee,

Wisconsin, where I completed my mechanical engineering degree. And then after I was working for a couple of years,

I went over and went to Lewis University in Romeoville,

Illinois and got an MBA while I was working. And that

seemed like a very long haul to me because I ended up having to get sixty credit hours. Much more so because I was a mechanical engineering major as an undergrad. And recently, at my advanced age here, I've chosen to go back and pursue a master's in mechanical engineering materials from Colorado State at a distance.

DP: That's rather challenging, isn't it?

AL: Ah, yes it is. Definitely. It takes a lot of time and effort to do that. But that seems like a worthwhile thing to do since I do teach part-time, and I'd like to continue that when I'm much older and retired, so to speak. So Diane, who's your first employer?

DP: My first employer. I assume you're talking about first employer out of college, because of course there's the usual summer jobs doing the burger thing.

AL: (laughs) Right.

DP: Which served me only to encourage you to stay in school so you don't do that your whole life. My first job out of college was with a small company called A.B. Dick Company that made printing presses. Little printing presses, the kind that you'd see in a print shop where you get your Christmas cards printed up. It was a fairly interesting

job. I was doing a lot of mechanical design there. It wasn't really a growing industry, though, because industry changes and now you can do a lot of stuff on your computer printer at home that you could not do at that time. So that was the first job, only lasted about two—maybe a little bit more, two years three months, I think.

And then I moved on to Midwest Automation Systems. Stayed there for a little over four years. They did automated assembly equipment. That was a lot of fun. I learned a lot from that job, got to know some very interesting people. It was a very challenging environment to work in. That's where I was when I did most of the work for my master's, so it was a fun juggling act. It really taught me a lot about time management.

And I moved on from there, and my third job before I went back to school was with Western Printing Machinery Company in Schiller Park [Illinois]. It was kind of interesting. It combined the original printing knowledge that I got from the first job with the automation knowledge from the second job. And I stayed there for a little over seven years as a project engineer. Did a lot of design of machinery. The company went through a number of changes so it was a very challenging place to work and I got a lot of experiences in

really a fairly short period of time. Designed a lot of machinery there. How about yourself? What have your work experiences been?

Well, when I-you know when I was a kid I worked in my dad's AL: factory. And I think that—he had the same intent. You need to stay in school so we're going to do everything we can to convince you how to stay in school. So that's what we ended up doing. So, my first employer after I had my bachelor's degree was actually Commonwealth Edison, which was an electric utility in the Chicago, northern Illinois area. It's been taken over a few times and the name's changed, but—. It was kind of fun because my first job was at a nuclear power plant, and all the kids at school were telling me how I was going to glow and they had every joke under the sun that you could imagine. So it was always—I kind of felt important when I graduated from school because I was going to go and glow somewhere, so that's kind of interesting.

And I had an interesting career there. A number of people told me that I would, I was going to be one of those lifers, or you know, at least make ten years. And that I did. I rotated around through a number of very interesting

positions within the company and ultimately did stay there for approximately ten and a half years. And I got some very, very good experience and met a lot of really fine people, so that was a good thing.

When I left there I went on and I started to work at a Japanese company, largest printed circuit board manufacturer in the world, and basically helped to put together their plant and build their maintenance department, and that sort of thing. So that was a challenge but it was also very enlightening in the process. Once I left there I went on to a small family-owned firm and built non-threaded fasteners, and had some interesting stories from that job. Learned a lot—

DP: That was the Driv-Lok Company?

AL: Yeah, Yeah. And I learned a lot about materials there. I can remember the first applications. I did applications, I did quoting, and I did manufacturing engineering, so I had a few different things I did there. But I remember that my first applications colony—I hope you don't mind I share this, it's kind of funny—got a call from a guy who was running a jail. And he was very—he was very upset because his windows were falling out of his building. Well, I sort

of freaked out because I wasn't sure what was going on either. And it turns out that they had dissimilar metals and had created some galvanic corrosion, and people that aren't engineers don't necessarily understand that, but when the two dissimilar metals are together they tend to degrade each other. And, well, you can imagine then the window fell out. So that was not a good solution. (laughs)

DP: Ah, no, not really.

AL: No, so we worked with them and that sort of piqued my interest. I had always been sort of interested in materials, and that kind of, you know, kind of took me down that path. Then I left that company and I went to work for a gum (???) manufacturer that makes some specialty gums.

And I found a position that opened up at FERMI National Accelerator Laboratory, and I had always been very interested in working there and so I went over there. And that's where I'm at right now.

DP: And you've been there for how many years now?

AL: Almost seven years, so it's been quite some time. It's been an interesting job path, so to speak.

DP: Yeah, you've done quite a few different things.

AL: So do you have any good stories?

DP: Oh, everybody has stories. You work long enough, you get a lot of stories. Some of the best stories are in dealing with customers and some of the things that they want.

Everybody, I think, in engineering has a few stories of somebody handing you a massive problem and saying, "You have plenty of time, we don't need the answer for a few hours yet." (laughs) I've had stories of customers who don't really understand various things. They'll ask questions and you just kind of have to be diplomatic.

Some of the best stories have to do with safety. It's always been a concern of mine in machinery and I had one customer once call me up and say, "You know, I'd like to know how to get these particular parts out of the machine." And I said, "Well, you can't take them out." And he said, "But I want to take them out. They keep me from getting my hands in by the cylinder with the knives." And I said, "Precisely. That is their purpose." (laughs)

AL: (laughs) Absolutely. Oh my goodness.

DP: Yeah, it was quite interesting. It took while sometimes to explain to people that, "No you really don't want to do

that. Trust me. It's not a good idea." How about you? I'm sure you've got some good ones.

AL: Well, I just told the one. I've got all kinds of good ones.

You know, I've worked in multicultural environments. That's definitely different. And I've been in the nuclear power plants. And I just told the one about the window falling out. That one is certainly is something that I keep in mind. Just lots of ones and things that happened over the years that are somewhat memorable. Some things you want to think about and some things you certainly don't.

I think the thing I've found though is I've met some really cool people along the way and established some very good friendships. And so I think at this point I'd like to take the time and maybe we can talk about SWE [Society of Women Engineers] a little bit.

DP: I think that would be a good idea. When did you first join SWE?

AL: You know, I joined SWE in college and then I got away from it, and then I came back around 1993. How about you?

DP: I joined in college, at my father's suggestion, actually.

You notice who I listen to here. Not when I was a teenager,

but when I started getting to be an adult he started getting a lot smarter, I noticed.

AL: (laughs) I think we all noticed that.

DP: Oh yeah. But I joined in college and I was active in college. And then I didn't actually step back like some people did because I moved to the Chicago area, and that's where the Chicago Section made me feel very welcome and made me want to stay active and almost instantly got me involved as committee chair. That's one way of keeping people around. So that was in '93 that I moved to the Chicago area, right about the same time you got active, and I've been active on one level or another ever since.

Obviously it's gone through its ups and downs with other commitments in life.

AL: Right, so let's think about—what committee was that you got attached to?

DP: I was first recruited to chair the publicity committee. It didn't have a chair and I said, "Yeah, I think I could do that." So I did that for about two years. And I think at the time—what were you chairing?

AL: I actually got sucked into the career guidance chair. And it's sort of funny because I teach, I've been teaching now for twenty years, and it's just sort of is my thing, to work with kids and to introduce them to different things like engineering or whatever, so it's kind of cool. But the sad thing is I'm still doing it, even though my SWE career has sort of twisted and turned and gone all sorts of ways, so that's kind of neat.

So when—let's see now, '93 we both sort of got active. '94 we got sucked into it big time, and then after that what were we looking at? And when where you president? Because you got to be president at a certain point.

DP: Yes, I did. Well, let me think. I was secretary of the section for two years. I served a term in the Council representing the Chicago section to national [SWE], then I went to treasurer, then I went to vice president, and I was president—I took office as president in the fiscal year that started on July 1, 2001.

AL: So that was '02 then, fiscal year '02.

DP: Fiscal year '02.

AL: Okay, that's interesting. Yeah, because what I did is I hopped in too as a CSR [Council of Section Representatives], which became COR, Council of Representatives, and I was there for seven years. And then after that I ran for vice president for you.

DP: I remember that well.

AL: And then I was president the year after. And that was sort of fun, because the section had gone through a number of changes, if I remember correctly, and you and I just sort of, kind of got together and really worked out all the, some of the kinks and tried to make it two-year active. And I think it worked out pretty well.

PP: Yeah, we got some interesting challenges, though. I
 remember one of the things that hit when I was president
 was that we suddenly had a lot more issues using companies'
 facilities for meeting rooms. The whole security thing
 became a much bigger deal. Gee, I wonder why?

AL: That's true. Yeah. Nine eleven [September 11, 2001]. How sad. Definitely

DP: Yes. Yes.

AL: Well, that and we had a bank go under, too.

DP: Oh yes, the bank that we had been using for our finances
 for years all of a sudden was put under FDC, FDIC
 receivership, and the treasurer called me up one day and
 told me that, and I'm thinking, "Oh, that's a challenge I
 hadn't quite expected. Well we'll have to deal with that,
 won't we."

AL: Yeah, I don't think any of us did.

DP: You don't expect that—

AL: No.

DP: —but it was really good having you as vice president, though, because it was great to have somebody to talk things over with. Because of course you come up with an idea, is it good? Is it bad? But going back and forth with somebody like you really helped to developed some of them to the point where they were actually workable.

AL: Right. That's kind of where our friendship really took off.

DP: Yeah, we had known each other for a couple of years before that, but not on nearly such a close basis. But when you work with somebody you get to know a lot about them.

AL: Yeah, all the things that go on in their work life, their personal, their dog's life. Everything! (laughs) That's absolutely true.

DP: Yeah, I think you were one of the first people who knew later that I was actually thinking of going back to school. It's not the sort of thing that you go and make a general announcement to the whole world until you've figured it out.

AL: Exactly. Exactly. Yeah, that was, that sort of challenged a lot of people, didn't it? (laughs) That are now going, Oh my goodness, you actually did it! So that's kind of cool.

DP: Yeah.

AL: Well, we can talk about that in a minute. I want to finish some of this history that we have with SWE.

DP: Okay.

AL: So it's kind of interesting. So let's see. You were president in fiscal year '02. I was fiscal year '03. And then what did I do after that? That was scary.

DP: You went and became active nationally. Actually, I believe if I remember correctly you had been active nationally all along the way, but you stepped it up, Madame Treasurer.

AL: Right. Well, the year I was president of the section, that was actually my first year as—or was it the second? I don't remember. I'll have to look it up—but as the national finance chair. And then I cruised into that position of the national treasurer in two-thousand—oh, let me think. It was fiscal year '06, '05 and '06. So, and there were some challenges with that, as well. Because on a national basis there were a lot things that we needed to do. As we all know, when we step into a position there's things that we need to do or we feel we need to do to make things roll a little bit better and that's what makes everything tick better, I think.

DP: And a lot to learn with the new position, as well.

AL: Absolutely. Big learning experience, working on the national level of SWE. So it's kind of fun. You heard all about all those stories, though. (laughs)

DP: Yeah, I never had quite that level of national involvement.

At one time I was national chair of professional development, but there's a big step between committee chair and officers, I'm sure you know.

AL: Absolutely. Yeah. Yeah, there's know question about that, so. That's kind of fun. And you've gotten to know my daughter, so that's really cool.

DP: Oh yes. She's a very nice kid.

AL: And she thinks of you as an aunt. So, I mean, that sort of tells you how close we are. And even our dogs know each other intimately. (laughs)

DP: Yeah, last time I came to visit Igloo was so happy to see his doggy friends.

AL: Yeah, and they were so happy to see him, so they're looking forward to meeting their new friend, Kerry. (laughs) So even our dogs got to know each other. My husband will drive you anywhere, so that's a good thing, too. I think that's the good part of SWE, too. Because whenever we need help we can basically—someone's always there to offer a hand or is able to work with us. And that's really, that's really a good thing, I think.

DP: Yes. Definitely. I've made some wonderful friends through SWE. You're of course the best of them but there are many other wonderful people.

AL: Yeah. And it's really great to go to the conferences, too, because you can see all these people and get to know them. I mean, my mother comes with me to the conferences just about every year and she's gotten to know folks, too. So that's kind of fun for her and fun for me as well. And somebody today suggested she become a member, so I think we're going to have a chat with her about that.

DP: Hey, why not? She's spends enough time at the conference.

Why not join? (laughs)

AL: (laughs) Absolutely. Let's get a little bit more on track here. So let's talk about what you're doing now, because what you're doing now is very, very different. It's a very different career path, and I think it's worth noting.

DP: Yeah. Well, you know that I did a little bit of teaching at community college. You're the one who encouraged me to do that when the opportunity came up—

AL: Yeah. (laughs)

DP: Without that encouragement I might not have even given it a try. But you told me you thought that I would be good at it and it would be a good experience. So when the opportunity came up at Oakton Community College I started teaching a

CAD class there. You actually wrote one of the recommendation letters for me, as I recall.

AL: Yeah. (laughs)

DP: And I enjoy that, and I think you knew I would.

AL: Yeah, that's why I suggested it. (laughs)

DP: And I enjoyed it enough that when it came time to make some decisions about what direction my career was going for the future and what I wanted to do with the rest of my career, that between that and the parts of my job that I enjoyed—being the more research and development new projects area—I decided that I wanted to become a professor at a university. And I told a few people about that at the time. The almost universal reaction was, Are you sure about that? You're reaction was, "Hey! Great idea!" as I recall.

AL: Well, that's because I think it suits you very well.

DP: Yeah, and then of course there was the whole issue of figuring out the logistics—where do I want to go?—and it was really great having somebody to talk to. You heard all about all the schools. You probably know as much about some of them as I do from all the stuff I was telling you. "Well this school offers this, and this school offers that." So I

made my visits to various schools, narrowed down the list, applied, and ended up at University of Michigan in the Ph.D. program in mechanical engineering and you're one of the people who did not tell me how crazy I was.

AL: No, because it's not crazy. That's definitely you. That's something that you needed to do and I think the career path is going to be really cool for you.

DP: I think it is. It did take me away from the Chicago area so we don't live as close together anymore, but the wonderful thing about modern life is that we have all the methods of communicating with each other: e-mail, cell phone, and it's only about a four and a half hour train ride from Chicago to Ann Arbor.

AL: That's right, and we both have speed dial on all our phones. (laughs)

DP: (laughs) Absolutely.

AL: So that's really important. So, where do you see yourself in the future?

DP: Well, I see myself as a member of the engineering faculty at some university, on the tenure track, getting tenure, and becoming one of the respected professors. I do intend

to stay involved with SWE. I think that I've gotten a lot from the organization. There's a lot I can give back. And of course there's the motivation of seeing all the friends every year at conference. And maybe do a little consulting on the side, keep my hand in industry, but the academic field is going to be my focus. How about you? What are your plans for the future?

AL: Well, I'm not really sure. Sort of depends on what happens over the next few years. As you know I'm going to school too, and kind of have some interesting career goals. I mean, I've taught at the community college level for twenty years now and I think I'd like to move on to a four-year university and the way to do that is with a Ph.D., so—

DP: Oh yes, you need that.

AL: Yeah, so I'm looking at doing this part-time, thinking I've actually lost my mind, which I probably have, but I'm looking at what options do I have? Where's my career going? You know, I'm at the point in my life where I need to be in upper-middle management or senior management of an organization. Obviously if I do something like that I have other goals that I would satisfy. But I think that ultimately with the master's that I'm working on now and

possibly a Ph.D. down the road we might find ourselves in the same career path.

DP: That would be an interesting twist.

AL: That would be very interesting. I don't know. I keep telling my husband that I picture myself with a small house somewhere with a little white fence and I walk to work to teach once or twice a week in our retirement. So, he thinks I'm crazy, but I don't.

DP: Crazy is all a matter of perspective.

AL: This is true.

DP: One person's insanity is another person's heaven.

AL: (laughs) That's absolutely true. So what are your other thoughts?

DP: Oh, that's kind of a broad question. Other thoughts? Well, as far as engineering careers, I think it is an absolutely wonderful career for anything, for anyone, including women.

And I think that's something that you would agree with. I know that you encouraged a lot of young women to go into engineering. You have more fun there than in any other job that I can imagine.

AL: (laughs)

DP: There's actual jobs available, which is a nice thing. I

mean you get to basically build the world's largest Erector

Set, play with it, and get paid for it.

AL: That is true. That is true. But not everybody likes Erector Sets.

DP: Well-

AL: See, we're a little focused on mechanical. I think that's the problem.

DP: Well, there's other areas of engineering that people can play with, too. I mean some people like to play with circuits—

AL: Some people like to blow things up.

DP: Oh yeah.

AL: Those are the chemical engineers.

DP: Well you know the old joke about mechanical and civil
 engineers, don't you?

AL: Yeah. We blow it up, they build it.

DP: (laughs) Yup. We build weapons. They build targets.

AL: I have to be very careful. My husband is a civil engineer, as you know.

DP: He does have a good sense of humor, though.

AL: Yes he does. We can say that to him and he would actually probably laugh.

DP: I think so.

AL: Yeah. All the different engineering disciplines are actually kind of interesting. Do you have any other engineers in your family?

DP: None that I'm aware of. If you go far back enough you might find one but in my family there's a lot of science. Like I said, my dad's a chemist, my mom, who you've met, is a mathematician. I've got a sister who's in the chemistry-biology area in water treatment, a brother in statistics, one brother who studied English. He's a little bit different from the rest of us.

AL: I see that. But that's okay.

DP: And my youngest sister is studying to be a veterinarian.

How about you? Do you have any other engineers in the family?

AL: Actually, I have some heavyweights and I have some lightweights. I have a sister who has an engineering degree who decided to be a doctor, so I always use that as an example to show people that you can do anything with an engineering degree. Yeah, I have an uncle who's got a Ph.D. in chemical engineering, and he tours around the world doing things. And I have a cousin who's, I believe he got his degree in computer engineering, so that's like even another facet that, you know, that we look at. And I have a cousin in Canada who's a mechanical engineer who, you know, he's gone on and gotten an MBA like I did and he's actually growing trees in a nursery. He's got some specialized patents and things like that.

So you know, you can really do anything you want with an engineering degree. I don't think a lot of people realize that. But as far as you go, when you sit back and you look at your past history and you look at all the things that you've done and where you're at right now, what are your thoughts? I know that we had a discussion the other day and I guess this is sort of what I wanted to bring into this. I know, I mean we were talking about some people who were dissatisfied with their positions and some people that

aren't happy, and then you kind of said, "This is where I'm at."

DP: Yeah. Well, a lot of people thought I was crazy but when I look around it seems to me that of all the people I know, the people like me who do what they want, do what their heart tells them is right for them, are the happiest. Even if it's not what somebody else would want. Other people who do what they think they should really are not that happy. I'm happier than a lot of people I know, and you can't really ask for much more than that, can you?

AL: No, no. We find a lot of people trying to live vicariously through others and trying to tell you what to do. I remember when you drove down to Birmingham [Alabama]. That was funny. (laughs)

DP: (laughs) The 2003 [SWE] conference.

AL: Yes, in Birmingham. You drove down and everyone thought you were crazy. And all I had to do is to tell them we stopped at Disney World on the way there, which was definitely an out-of-the-way visit, and they thought that was okay.

(laughs)

DP: It was a beautiful drive, actually. We actually drove through Nashville on the way. I remember passing through the city on the way down to Birmingham.

AL: Same thing with us. It was a nice, quick trip. It worked well. So, see, you can drive these things. You don't have to fly everywhere, and that's always fun too.

DP: Well, some people get their minds set on one particular idea and they can't change it. That's actually one of the things that I think engineers are really good at not doing. Simply because our whole mindset is, How can we make this better? What can we do that's different? What can we do that nobody has done before?

AL: Well, I think a lot of it is the creative solutions that we come up with, too. They say that we're not artistic, but most of the engineers that I know are either artistic or they're musically-inclined or something. They have some bent in that regard. Because you think about doing a design and you think about doing all of the things that we do, you have to have a creative solution.

I just talked to someone earlier today and they were telling me, "Oh, you know we're looking for someone to fill this position who can come up with ideas and who can help

the younger engineers come up with good ideas and solve the problems that we have." And that's where the creativity comes in, wouldn't you agree?

DP: I would agree. You know, I do know that you have an artistic side. Why don't you say a little bit about your artistic side?

AL: Well it's that music side that comes out every now and then. Actually where I work at Fermilab, we have a choir and I sing in it. And we have a blast because we sing every international thing we possibly can get our hands on. And that's really a good time. I am classically trained in opera. And as you can tell I certainly don't sing soprano. (laughs) But it's a good thing, and I have to be careful, especially like even with this microphone here. I have to watch because I just want to blast it off the table. (laughs)

DP: Yeah, I've heard you sing. You're actually quite good. I hit the cracks between the piano keys. (laughs)

AL: Oops. (laughs)

DP: Now that one isn't one of my artistic talents.

AL: Well what is your artistic talent?

DP: Well, I do a certain amount of quilting. I started out when I was about ten or eleven years old and it first was not very well done because you never are when you start something new. But I got better, I did some designs that other people had done, and now I've progressed to the point where I design some of my own. And recently I've also started getting into a little bit of woodworking, which is something that my dad taught me. And that's something that's a lot of fun where you can use a lot of creativity. And now I know you know how to use tools from that job with your father when you were growing up.

AL: Absolutely. Yeah, and I'm the one who does all the fixer-up projects around the place, too. My husband does some, but I tend to do all the goofy ones. So yeah, that's kind of fun. All the different things that I've done, too, and I also quilt. You know that because we've gone to some of the quilting shows together. We've had a good time with that.

DP: Oh, that's been a tremendous amount of fun, getting to see all the stuff.

AL: And your mother quilts, which is always fun seeing the stuff she's working on too.

DP: Yes. Odd thing is she didn't start that and pass it on to
 me. It went the other way in generations.

AL: Well that's funny because my mother has done some handwork over the years and prior to that my grandmother probably didn't have that much time to do that sort of thing. I do remember my great-grandmother, she was all bent on when I was five years old she was going to show me how to sew. And she gave me a couple pieces of fabric and said, "Here you go. We're going to start some quilting with you." And I said, "Oh my goodness. Okay." So there I was, five years old, and I'm sewing and every stitch I made was totally uneven and every stitch I made she took out. So she really did dissuade me. But I did, I got very excited later on in life because I like the mixture of colors and that sort of thing, and sort of took off with it again. So that was kind of fun.

DP: Yeah, and being a mechanical engineer like me you can probably open up the sewing machine and do the cleaning and oiling yourself.

AL: I've done that many times. That and the serger and every other machine I have in the house. That takes me back to when I was a kid, when I took everything apart and put it back together again.

DP: Now did you learn how to put things back together before or after you started taking them apart? Were there a few years there when you didn't put them back together?

AL: Well, you know, I'll tell you where that kind of started.

My dad, when we were little, he decided that he would, you know, every morning, every week we would have a "How Is That Made" session. And that was before we got going for the day. So we would say, "Daddy, you know, how do we make that?" And daddy would tell us. So after a while daddy wasn't home and I wanted to see how the thing was put together so I just took it apart. (laughs). And after a while, it was very simple things and I sort of graduated up to some bigger stuff. But some things they were happy about, some things they weren't. How about you? Did you ever take anything apart?

DP: As much as I could. My parents kind of kept an eye on me.

My mother had had—

AL: (laughs) Smart woman.

DP: (laughs) My mother had three younger brothers. And one of her younger brothers had a lot of mechanical talent, my uncle Bill. And mom had a lot of stories that she told me about how he would take things apart and about how there was a time period when he would take things apart but he couldn't figure out how to put them back together. And she had stories about him taking apart grandma's toaster and not knowing how to put it back together so they needed a new toaster.

AL: Okay, so now I understand why you asked the question you did. (laughs)

DP: Yes, exactly. So mom kept a very close eye on her children to make sure that we did not do anything, in terms of taking things apart, that we didn't know how to put back together.

AL: There you go.

DP: Or of course there's always giving us broken things to play with and take apart.

AL: Well that's the problem, too. But I've got one last thing I wanted to ask you, and then you're probably going to ask me the same thing. How are your parents with regard to gender and equity and that sort of thing in your house?

DP: Well, the fact that my mother went to study math in college in the sixties coming out of a blue collar family tells you a lot about her outlook. My grandfather on that side was a

milkman, so it's not like it was an intellectually based family, although he was a very intelligent man, very shrewd, and I had a lot of respect for him. But my mother took her own path. She wanted to go to college. Her father was very supportive in spite of the opposition of other relatives. He said, "It's my daughter, and she's just as good as any man's son. In fact, better."

And one of the things that attracted her to my father was the fact that he did not think that women were stupid or incapable. He was just fine with women doing anything. And my mother encouraged her sons and daughters to do whatever we wanted without regard to gender stereotypes. And my father, like I said, is the one who encouraged me to study engineering and he thinks that it's absolutely great that his kids went into nontraditional fields such as me in engineering. He's just fine with it and he thinks it's wonderful. How about you?

AL: Well, my parents always said we could do whatever the guys could do. We probably could do it better. So we were encouraged to do whatever we wanted to do and it didn't matter what it was. So I think that's probably the reason why my sister and I both initially went into engineering. Definitely.

As far as the rest of my family goes my mother, too, was the first to go to college in her family. Both of my grandparents were raised in Europe and they, you know, they didn't go very far in school. One of them had a fourth grade education, the other one had eighth.

On the other side of the family, though, there was more university experience, definitely. I'm not actually sure one hundred percent how far back that goes. They actually immigrated to the United States the same year that my mother's family came. And one of the things that they did, too, is they encouraged their kids to do whatever they were good at. You know, I have an aunt who is a linguist and she has a Ph.D. in that. And I have an uncle who's done some work as well. So, you know, both my father and my mother have a [college] background, and my sister and I do, too. So it's pretty cool.

DP: And for you I'm sure that your parents didn't regard college as being optional.

AL: No, that's actually a funny story. I'll tell it real quick because I know we're coming to the end of this. One day when I was sixteen I came home from high school and I told my father that these kids were dropping out. And I didn't understand that, and understand that high school was now

optional. And he turned to me and he said, "No, high school's not optional for you." (laughs)

DP: And neither was college for you, I'm sure.

AL: Ah, no. College was in the works. And that was fine, because as long as I finished high school I might as well go on and do something with my life, and then it was just the way I went. There's a lot of people that that's not the right thing for, but that was definitely the right thing for me.

DP: Same here. My parents had the attitude that it wasn't, Would you go to college?, but, Where?

AL: Right.

DP: And it's worked out quite well.

AL: Exactly. Great. Thank you.

DP: Thank you Anne. It was good doing this with you.

AL: Yeah. You too.

END OF INTERVIEW